



Information Resources Acquisition and Utilisation as Correlates of Enhanced Learning Ability of Secondary School Students with Autism Spectrum Disorder (ASD) In North-Central, Nigeria

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Abstract

The study investigated information resources acquisition and utilisation as correlates of enhanced learning ability of secondary school students with Autism Spectrum Disorder (ASD) in North-central, Nigeria. The research was guided by three (3) research questions and four (4) research hypotheses. Total enumeration research design was adopted for the study. The target population of the study was one hundred and one (101) teachers as the respondents from nine (9) Autistic schools in North-central, Nigeria. Split half Pilot study was conducted in three (3) different Autistic schools with thirty (30) copies of questionnaire being administered for reliability test, Cronbach Alpha formular was used to validate the research instrument and 0.87 was obtained depicting that the instrument was reliable to be used. The data collection instrument used for this study was structured questionnaire. One hundred and one (101) copies of the questionnaire were distributed in nine (9) Autistic schools but only eighty five (85) copies of the questionnaire were filled correctly, returned and were found useable for the analysis. Descriptive statistic, inferential statistics of Pearson Product Moment Correlation (PPMC) and multiple regressions were used to analyse the data. The null hypotheses formulated to guide the study were tested at 0.05 level of significance. The result showed significant relationship between acquisition of information resources and enhanced learning ability of students with ASD ($r = 0.397$, $P < 0.05$) was positively skewed, indicating a very low relationship and the hypotheses were rejected. The result showed significant relationship between information resources utilisation and enhanced learning ability of students with

ASD ($r = 0.189$, $P < 0.05$) was positively skewed, indicating a very low relationship and the hypotheses were rejected. The study concluded that information resources acquisition and utilisation improves the learning ability of ASD students. The study recommended that government, educational institutions, school libraries and non-governmental organisation should regularly collaborate to create awareness about autism and support autistic students morally and financially to ensure the children with autism reach their full potentials because some of the autistic children could possess savant skills.

Keywords: Acquisition of Information resources, Utilisation, Learning Ability, Cognitive skills, School Library

Introduction

Learning begins when a child is born and continues all through the child's life time in a given environment which often sharpens and determines the behaviour and character of the child as the child grows. Learning could be carried out either unintentionally or incidentally in conventional and unusual situations of life (Dharmaraj, 2016). It is also essential in the mental development process of human beings in the society. Certain traits are inherent through learning such as thinking ability, social interaction, communication ability etc. Dharmaraj (2016) defined learning ability as the ability to comprehend, to understand what is being taught in formal or informal learning settings. The ability to learn can get better if the learner understands what his/her goals are in life. According to Knight et al. (2015) cognitive skills determine learning ability such skills are concentration, logical thinking, memory

and perception. People learn lots of things from different sources which influence people's ways of life and decision making. Understanding in core content areas is a challenging ability for many students, especially students with autism spectrum disorder (Knight et al., 2015). During learning process, to have enhanced learning ability in a learner's life is important. This is mostly common among learners that are without any form of neurological disability. Human beings are born equal in an ideal society and all have rights to knowledge equal opportunities and to participate in the affairs of the society. Most parts of the present world, there are some groups of people that do not have these privileges due to their physical, mental, and social conditions.

Autism Spectrum Disorder (ASD) is one of the most common childhood neurological disorders that is

characterised by problems in communication, social development, ritualistic behaviour and resistance to change (Thwala, 2018). Autism Spectrum Disorder (ASD) is a neuro-developmental disorder defined by persistent deficits in social communication and social interaction, accompanied by restricted, repetitive patterns of behaviour, interests, or activities. The signs of ASD are usually evident in early childhood. Although it is still considered a lifelong diagnosis, with appropriate early intervention, individuals with ASD can live productive, inclusive, and fulfilling lives (Autism Navigator, 2015). Many children with ASD do well in school, participate in activities they enjoy, go on to college, are employed in adulthood and live an independent life. Although ASD differs significantly in nature and difficulty based on its categories, it affects all ethnic and socioeconomic groups and spares not any group of people. This means, ASD has no regard to cultural background and social status of individuals. There are factors that are attributed to produce ASD, basically, it is assumed that genetics (heredity), metabolic or neurological factors, certain types of infections that sometimes may result to wat birth and possible ecological influence factors also play a great role to cause ASD according to other researches (Anderson, 2018; Shea & Derry, 2019; Tumlin, 2019). Some studies suggest the possibility of a disruption of very early brain development before birth. There are extensive past and on-going researches intending to present the precise causes of autism. The common distinctive behaviours of ASD can or cannot be obvious during infancy, but mostly turn out to be obvious during early childhood (2 to 6 years) (Thwala, 2018).

School library must provide specialised trainings to its staff on library services to assist ASD students. This unique effort will be very helpful to the ASD students as the school librarians engage and provide information services to this category of library users. School librarians are supposed to have adequate knowledge on this spectrum and this can be an added advantage to enhancing the learning ability of this category of students (Reagan, 2012). School Library is an integral part of post-primary educational system that has to be established and maintained in schools to promote learning (Ode, 2013). Robust education at secondary level cannot be completed without the involvement of the school library, it is believed that educational services are to facilitate the implementation of educational planning, objectives and promote the efficiency of education in a country (Lawal-Solarin, 2016). The availability of trained and knowledgeable librarians that know how to arrange information resources for ASD students for easy accessibility and use is germane. According to Iroeze et al. (2018) Library information resources are central to the provision of services to users in libraries and information centres, without it, it would be impossible to meet the information needs of the users. Library information resources can be defined as materials that are available in the library and made ready for use. All other information

bearing materials that can be found in a modern library which are provided in response to the information needs of users also called library resources. Information resources are very important in achieving the aim of education for the challenged or ASD students. Some of the information resources are talking books, audio descriptive videos, computers, Large print books, e-books, scanners with software, digital audio, visual, audio-visual, CCTV magnifying aid, human resources etc.

According to Baru (2018) acquisition is one of the aspects of collection development that logically succeeds the selection process of information resources in the library. It is the bedrock upon which stock development of information resources is based upon. Poor funding of library has resulted to the inadequate acquisition of library materials. Acquisition procedure usually begins with stock checking and ends when the materials ordered for are received and certified by the acquisition staff (Nwosu and Udo-Anyanwu, 2015). According to Mondal and Maity (2017) asserted that acquisitions work begins with planning and selection of materials in school library including special schools. Quadri and Onaolapo (2018) opined that acquisition of information resources is an essential activity which is crucial to the satisfaction of the information needs of library users (ASD students) and the attainment of library objectives. It is an essential activity which is done continuously in libraries due to the dynamic nature of knowledge and the need for libraries to meet the diverse information needs of their patrons especially the medically challenged.

Ntui and Udah (2017) defined Information utilisation is the practical and maximum use of library resources identified and acquired by a user for the purpose of solving a problem or achieving a set goal. The teachers to ASD students in secondary schools are expected to use library resources for teaching and learning. Effective teaching and learning can be achieved if library information resources are correctly utilised for teaching and learning purposes by both teachers and ASD students. Library resources are of no value to the teachers and ASD students until it has been utilised. The quality of teaching and community services of teachers in any special secondary school depends to some extent on acquisition and utilisation of library resources in the special school library. Utilisation is the act of making use of certain things for a purpose. Library which is being used for teaching, learning and research purposes is said to be adequately utilised and indispensable if the library facilities have the materials needed in the library to facilitate learning. It is also seen as making use of library facilities for the purpose of attaining educational goals. The library is not just a reservoir of knowledge, information and human experience but it also creates an avenue for accessing the information materials. People make use of the library for academic resources, equipment, assistance and guidance (Obiano, et al. 2020). According to Obiano et al. (2020) utilisation of library resources stimulates excitement and instills

confidence in the users to develop their talents, potentials and capabilities both academically and socially.

Statement of the Research Problem

Acquisition and utilisation of information resources is essential to the learning ability and academic performances of ASD students especially in secondary schools. The school library plays the central role in acquiring information resources and making it available to be easily utilised by ASD students for optimal academic performance. Government and individuals often spend substantial amount of money to buy information resources, it is appropriate and cost-effective that these information resources are optimally utilised to contribute immensely to learning ability and the academic performance of ASD students in secondary schools (Agyekummr and Filson, 2012). Little is known about the information resources suitable for ASD students and their learning ability and also how the type of information resources used by ASD children can impact on their academic engagement or performance. Another issue about the autistics students is the problems they encounter in using information resources (Thwala, 2018).

There is usually unimpressive learning ability of ASD students from the researcher's preliminary investigations. Could it be as a result of underfunding of school libraries that makes it difficult to acquire information resources to enhance the learning ability of ASD students? Could it be as a result of non-utilisation of the information resources available in the school libraries of schools with ASD students? There could be inadequate acquisition and utilisation of information resources in school libraries, which often affect the learning ability of ASD students. If nothing is done to solve these problems there is going to be continuous unimpressive learning ability and performances among ASD students. The question that clamour in one's mind is; what could be these problems militating against adequate utilisation of information resources in school libraries for the ASD students. The answers to this question constitute a gap in knowledge. In order to fill this gap, this study was conducted. It is against this background that the researcher embarked on this study to find out how information resources acquisition and utilisation could correlates the learning ability of ASD students in North Central, Nigeria.

Aim and Objectives of the Study

The main purpose of this study was to determine the effect of acquisition and utilisation of information resources on learning ability of ASD students.

The specific objectives are to:

1. determine learning ability of students with ASD in North-central, Nigeria;

2. find out the influence of information resources acquisition on enhanced learning ability of ASD students in North-central, Nigeria;
3. ascertain the influence of utilisation of information resources acquired by school libraries to enhance the learning ability of ASD students in North-central, Nigeria;

Research Questions

This study noted to answer the following research questions:

1. What is the learning ability of students with ASD in North-central, Nigeria?
2. What is the influence of information resources acquisition on enhanced learning ability of ASD students in North-central, Nigeria?
3. How does information resources utilisation influence the learning abilities of ASD students in North-central, Nigeria?

Research Hypotheses

This study noted to answer the following research hypotheses:

1. There is no significant relationship between acquisition of information resources and enhanced learning ability of students with ASD in North-central, Nigeria.
2. There is no significant relationship between utilisation of information resources and enhanced learning ability of students with ASD in North-central, Nigeria.
3. There is no significant composite contribution of acquisition and utilisation of Information resources to enhanced learning ability of students with ASD in North-central, Nigeria.
4. There is no significant relative contribution of acquisition and utilisation of Information resources to enhance learning ability of students with ASD in North-central, Nigeria.

Empirical Review of the Related Literature

Chidaka (2017) assessed the utilisation of school library resources in teaching in secondary schools in Obio/Apor Local Government Area of Rivers State. Effort, to achieve this; five research questions were raised. Four hundred and ten (410) teachers were used as sample out of eight hundred and twenty (820) that forms the population of the study from the fourteen (14) secondary schools in Obio/Apkor Local Government Area of Rivers State. Questionnaire and observation checklist were used to collect data. Tables, percentages and mean were used for data analysis. It was found that most of the relevant materials were not available in all the schools. Some problems such as lack of convenient accommodation, lack of funds, lack of reading tables and

chairs, non-involvement of library staff in collection development, lack of qualified librarians were among the problems of these libraries.

The major recommendations are : that there is need to increase full allocation of the school libraries, the state branch of Nigerian Library Association (NLA) should organise development and training courses for school librarians and media specialists to enhance their efficiency in the running of the school libraries; the Post Primary School Board (PPSB) should see to it that every secondary school established should have a library, new books and other educational resource materials should be provided including audio-visual equipment, principals of various schools should encourage both teachers and students to maximise the use of few resources at their disposal, among others. The reviewed study used both questionnaire and checklist as instruments for collection of data and the current study will also use questionnaire as instrument of data collection. The reviewed study covered just a local government (Obio/Apkor Local Government Area of Rivers State) while the current study will cover North Central States, Nigeria. While the study reviewed has teachers who are not the actual users of the school libraries as respondents, the present study will use secondary school teachers as respondents to provide the needed data for the justification of extent of information resources utilisation by ASD students.

Iroeze et al. (2018) conducted a study on availability and utilisation of Information resources and services in the Special Education Centre Libraries in Southeast, Nigeria. The study was prompted due to the problems encountered by physically challenged student in the use of normal library services. Six research questions were posed to guide the study, while two hypotheses were formulated and tested at 0.05 level of significance. The study adopted survey research design, and used observational checklist and rating scale as data collection instruments. The sample size for the study was 430 comprising five special education staff and 425 special education pupils/students. Two-stage sampling simple random sampling was made. Cronbach Alpha technique was used to ascertain reliability coefficient of .85. Frequency count, standard deviation and mean score were used to address the research questions while the hypotheses were tested using t-test of difference.

Results revealed that the number of available information resources for the blind and partially sighted is significantly less than expected in this context. The number of available information resources for the deaf and hard of hearing is also significantly less than expected. The study also revealed that the available information services for the blind and partially sighted is significantly less than expected. The available information services for the deaf and hard of hearing is also significantly less than expected. The available information resources for the blind and partially sighted are not fully utilised, and the available information resources for the deaf and hard of

hearing are not fully utilised. The study concluded that the provision of information resources and services is less than expected.

Furthermore, the available information resources and services are not fully utilised by the physically challenged groups studied for any significant impact in learning. It was recommended that, there should be provision of information resources, such as Braille resources; tactile or raised surface; sign language books; adaptive or electronic devices. Services like: on-sight support; guided tours; facilities, etc. Every such library should employ librarians who are clearly aware of the nature of work they do. Adequate funding for proper management of the special education centre libraries in Nigeria in such a way as to meet the present day educational demand for these classes of pupils/students studied, among others. This study reviewed was concerned with the physically challenged students while this study will concentrate on ASD students. The area of coverage differs. The study reviewed covered Southeast, Nigeria while this study will cover North Central, Nigeria

Thwala (2018) conducted a study on Teachers' Strategies of Including Learners with Autism Spectrum Disorders in Mainstream Classrooms in Swaziland. The purpose of the study was to explore the strategies that teachers use in including learners with autism spectrum disorders in the mainstream classrooms. The qualitative study draws on a purposive sample of thirty six (36) teachers who have experienced teaching children with ASD within three (3) primary schools that practice inclusive education and have rich cases of learners with ASD in Eswatini. Through the use of focus group discussions, individual interviews and observations data was collected on teachers strategies they employ in their teaching. Conventional content analysis were used to analyse data and thematically presented.

Teachers reported several strategies including: pictography, learner fixations, routine, motivation, and sitting arrangement. Conclusions were made that teachers in the mainstream classrooms have knowledge on some of the strategies for including learners with ASD. They are not well capacitated to implement these strategies. Teachers recommended frequent workshops for teachers on strategies to employ in teaching children with ASD in the mainstream classrooms. The introducing of viable assessment tools that are realistic to our society in terms of development and inclusive education programmes would yield positive results. The reviewed study was carried out in Swaziland and used a quantitative case study approach; the present study will be using total enumeration research approach and will be conducted in North Central, Nigeria, with six (6) study objectives guide and four (4) hypotheses.

Research Design

The research design adopted for the study was Census population or total enumeration research design (Canonizado, 2021). The design intends to examine the entire

population. The choice was based on the nature and objectives of the study. The reason was to allow the researcher to investigate what was already in existence by observing what others have studied before. This method was adopted because it deals with quantifying and analysing variables in order to get results and allows for sample population to be used as representation of the entire population through questionnaire. This design is expected to be most suitable for this work because the instrument mentioned would be used for the study. This sample was drawn using the appropriate sampling techniques and procedures. Census research design or total enumeration would be used to gather data from all the teachers.

Procedure for Data Collection

The one hundred and one (101) copies of questionnaire were distributed to the Autistic students' teachers to form as input for data analysis. The researcher personally distributed the copies of the questionnaire and collected the expected data.

Method of Data Analysis

Descriptive statistics of frequency counts, percentage, accumulative, mean and standard deviation were used to analyse the research questions. Inferential statistics of Pearson Product Moment Correlation (PPMC) was used for different purposes at 0.05 level of significance. PPMC was used to determine the relationship between the variables and multiple regressions was used to predict or determine the effect of the independent variable on the dependent variable.

Analysis of Data and Discussion of the Findings

The result of data analysis are presented and discussed below:

Research Question 4.1.1: what is the learning ability of students with ASD in North-central, Nigeria?

Table 1: Learning ability of Students with ASD

Statements	SD	D	A	SA	MEAN	STD	Decision
Your ASD students have the ability to think logically.	7	25	34	19	2.76	0.90	Agreed
Your ASD students have the ability to be engaged in effective communication.	23	2	26	34	2.84	1.22	Agreed
Your ASD students always have adequate understanding of what you teach them.	13	18	18	36	2.91	1.12	Agreed
Your ASD students have efficient cognitive ability on tasks you give them.	22	17	33	13	2.67	2.36	Agreed
Your ASD students provide the needed concentration or attention to your lessons.	9	14	36	26	2.93	0.95	Agreed

The perception and memory capabilities of your ASD students towards your teaching are flawless	17	34	26	8	2.29	0.90	Disagreed
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Key: SA: Strongly Agreed=4, A: Agreed=3, D: Disagreed=2, SD: Strongly Disagreed=1

Source: Author's Field Data 2023

Table 1 showed the learning ability of students with ASD in North-central, Nigeria. Decision point was determined using $\bar{x} = 2.5$. The mean value of any of the item less than 2.5 will be rejected, while any item whose mean value is equal or greater than 2.5 will be accepted.

The table revealed that 34 respondents agreed that ASD students have the ability to think logically since the mean value is 2.76 with the standard deviation of 0.90 also aligning to the submission. Table 1 showed that 34 respondents strongly agreed that ASD students have the ability to engage in effective communication while the mean value is 2.84 with the standard deviation of 1.22 indicating it agreed to the submission. Table 1 also revealed that 36 respondents strongly agreed that ASD students always have adequate understanding of what you teach them and the mean value is 2.91 with the standard deviation of 1.12 indicating it agreed to the submission. The table further revealed that 33 of the respondents agreed that ASD students have efficient cognitive ability on tasks given to them since the mean value is 2.67 with the standard deviation of 2.36 indicating it agreed to the submission. The table showed that 36 of the respondents agreed that ASD students provide the needed concentration or attention to their lessons since the mean value is 2.93 with the standard deviation of 0.95 indicating it agreed to the submission. Table 1 indicated that 34 respondents disagreed that perception and memory capabilities of ASD students towards their lessons' teaching are flawless since the mean value is 2.29 with the standard deviation of .90 indicating it disagreed with the submission.

Research Question 4.1.2: What is the influence of information resources acquisition on enhanced learning ability of ASD students in North-central, Nigeria?

Table 2: Influence of Information Resources Acquisition

Statements	SD	D	A	SA	MEAN	STD	Decision
Information resources acquisition enhances learning ability of ASD students.	7	7	60	11	2.88	0.73	Positive
Information resources acquisition enhances social interaction life of ASD students.	6	11	50	18	2.94	0.79	Positive

Information resources acquisition enhances communication ability of ASD students.	0	0	53	32	3.38	0.49	Positive
Information resources acquisition enhances the educational background of ASD students.	0	0	39	46	3.54	0.50	Positive
Information resources acquisition enhances ASD students' behaviours.	0	0	76	9	3.11	0.31	Positive
Information resources acquisition enhances the language expressions of ASD students.	0	1	52	32	3.36	0.51	Positive

Key: SA: Strongly Agreed, A: Agreed, D: Disagreed, SD: Strongly Disagreed

Source: Author's Field Data 2023

Table 2 revealed that 60 respondents agreed that information resources acquisition enhances learning ability of ASD students since the mean value is 2.88 with the standard deviation of 0.73 indicating it agreed to the submission and the influence is positive. The table showed that 50 respondents agreed that information resources acquisition enhances social interaction life of ASD students and the mean value is 2.94 with the standard deviation of 0.79 indicating it agreed to the submission and the influence is positive. Table 2 indicated that 53 respondents agreed that information resources acquisition enhances communication ability of ASD students since the mean value is 3.38 with the standard information of 0.49 indicating it agreed to the submission and the influence is positive.

Research Question 4.1.3: How does the utilisation of information resources acquired by school libraries enhance the learning ability of ASD students in North-central, Nigeria?

Table 3: Influence of Utilisation of Information Resources

Statements	SD	D	A	SA	MEAN	STD	Decision
Information resources utilisation enhances the logical thinking of ASD students.	0	0	41	44	3.52	0.50	Positive
Information resources utilisation enhances the communication ability of ASD students.	0	0	66	19	3.22	0.42	Positive
Information resources utilisation enhances the understanding of ASD students.	0	14	51	20	3.07	0.63	Positive

Information resources utilisation enhances the cognitive skills of ASD students.	0	0	75	10	3.12	0.32	Positive
Information resources utilisation enhances the concentration of ASD students.	0	24	17	44	3.24	0.87	Positive
Information resources utilisation enhances the perception of ASD students.	0	27	10	48	3.25	0.91	Positive
Information resources utilisation enhances the memory of ASD students.	0	15	44	26	3.13	0.69	Positive

Key: SA: Strongly Agreed, A: Agreed, D: Disagreed, SD: Strongly Disagreed

Source: Author's Field Data 2023

Table 3 showed that 44 respondents strongly agreed that information resources utilisation enhances the logical thinking of ASD students and since the mean value is 3.52 with the standard deviation of 0.50 indicating it strongly agreed to the submission and the influence is positive. The table also indicated that 66 respondents agreed that information resources utilisation enhances the communication ability of ASD students and the mean value is 3.22 with the standard deviation of 0.42 indicating it agreed to the submission and the influence is positive. Table 3 indicated that 51 respondents agreed that information resources utilisation enhances the understanding of ASD students and the mean value is 3.07 with the standard deviation of 0.62 indicating it agreed to the submission and the influence is positive. The table indicated also that 75 respondents agreed that information resources utilisation enhances the cognitive skills of ASD students and the mean value is 3.12 with the standard deviation of 0.32 indicating it agreed to the submission and the influence is positive. The table revealed that 44 respondents strongly agreed that information resources utilisation enhances the concentration of ASD students and the mean value is 3.24 with the standard value of 0.87 indicating it agreed to the submission and the influence is positive. The opinions of the teachers on information resources utilisation enhances the perception of ASD students, indicated on the table showed that 48 respondents strongly agreed with the statement and the mean value is 3.25 with the standard deviation of 0.9 indicating it agreed to the submission and the influence is positive. 44 respondents agreed that information resources utilisation enhances the memory of ASD students and since the mean value is 3.13 and the standard deviation of 0.69 indicating it agreed to the submission and the influence is positive.

Test of Hypotheses

H₀₁: There is no significant relationship between acquisition of information resources and the enhanced learning ability of students with ASD in North-central, Nigeria.

Table 4: Relationship between acquisition of information resources and the enhanced learning ability of students with ASD in North-central, Nigeria

Variables	N	Mea n	Std	D f	R	P- value
Learning ability of students with ASD	8	2.89	0.408	8	0.3	0.001
	5	41	93	3	79	
Influence of information resources acquisition on enhancing the learning ability of your ASD students.	8	3.04	0.213			
	5	71	02			

**p is significant at $p \leq 0.05$

Source: Author's Field Data 2023

Table 4 showed the relationship between acquisition of information resources and the enhanced learning ability of students with ASD in North-central, Nigeria. The table showed that there is a significant relationship between acquisition of information resources and learning ability of students with ASD. R is the correlation coefficient. It is the value that shows the degree of relationship between two variables. From the table, it can be observed that $R = 0.397$, meaning that the correlation between acquisition of information resources and the enhanced learning ability of students with ASD is positively skewed. This infers that, acquisition of information resources has $(0.397 \times 100) = 39.7\%$ positive and very low relationship with learning ability of ASD students in North Central Nigeria. Thus, null hypothesis is rejected in favour of alternative hypothesis and conclude that there is significant relationship between acquisition of information resources and the enhanced learning ability of students with ASD in North Central Nigeria.

4.2.2 H₀₂: There is no significant relationship between utilisation of information resources and the enhanced learning ability of students with ASD in North-central, Nigeria

Table 5: Relationship between utilisation of information resources and the enhanced learning ability of students with ASD in North-central, Nigeria

Variables	N	MEAN	STD	DF	R	P-Value
utilisation of information resources	85	2.8941	0.40893	83	0.189	0.004
learning ability of students with ASD	85	3.0000	0.15430			

**p is significant at $p \leq 0.05$

Source: Author's Field Data 2023

Table 5 showed the relationship between utilisation of information resources and the enhanced learning ability of students with ASD in North-central, Nigeria. The table showed that there is a significant relationship between utilisation of information resources and learning ability of students with ASD. R is the correlation coefficient. It is the value that shows the degree of relationship between two variables. From the table, it can be observed that $R = 0.189$, meaning that the correlation between utilisation of information resources and the enhanced learning ability of students with ASD is positively skewed. This infers that, utilisation of information resources has $(0.189 \times 100) = 18.9\%$ positive and very low relationship with learning ability of ASD students in North Central Nigeria. Thus, null hypothesis is rejected in favour of alternative hypothesis and conclude that there is significant relationship between utilisation of information resources and the enhanced learning ability of students with ASD in North Central Nigeria.

4.2.3 H₀₃: There is no significant composite contribution of acquisition and utilisation of Information resources to enhanced learning ability of students with ASD in North-central, Nigeria.

Table 6: Composite contribution of acquisition and utilisation of Information resources to enhanced learning ability of students with ASD in North-central, Nigeria

Coefficients ^a		Unstandardized		Standardized		T	Sig.
		Coefficients		Coefficients			
1	learning ability of students with ASD (Constant)	B	Std. Error	Beta	Rank		
				4.430	0.930		
	acquisition of Information resources	-0.023	0.223	-0.012	2 nd	-0.103	0.001
	utilisation of Information resources	-0.488	0.308	-0.184	1 st	-1.584	0.017

**p is significant at $p \leq 0.05$

Source: Author's Field Data 2023

Table 6 showed the coefficients of the predictor variables with p-value (sig value) less than 0.05 infers a significant influence learning ability of students with ASD in North Central Nigeria. The result in the table showed that acquisition and utilisation of

Information resources to enhanced learning ability of students with ASD in North-central, Nigeria. The composite contribution of each independent variable to the dependent variable (learning ability of ASD students) in the model is evaluated using standardized regression coefficient. From the table Beta = -0.012; t = -and p = 0.001 have the highest potent contribution to the dependent variable (learning ability of ASD students). The result of Beta = -0.184t = -1.584 and p = 0.017 of usability of information resources have composite contribution on learning ability of ASD students. Thus, the null hypothesis is rejected.

H₀₄: There is no significant relative contribution of acquisition and utilisation of Information resources to enhance learning ability of students with ASD in North-central, Nigeria.

Table 7: Relative contribution of acquisition and utilisation of Information resources to enhance learning ability of students with ASD in North-central, Nigeria

Source of Variance	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	0.502	2	0.251	1.519	.002 ^b
Residual	13.545	82	0.165		
Total	14.047	84			

Source: Author's Field Data 2023

Table 7 showed the relative contribution of acquisition and utilisation of Information resources to enhance learning ability of students with ASD in North-central, Nigeria. From the table p-value (sig-value) = 0.002 significance. Thus, it implies that acquisition and utilisation of Information resources can enhance learning ability of students with ASD. Therefore, the null hypothesis is rejected.

Discussion of the Findings

The findings of the study showed that ASD students have the ability to think logically and ability to engage in effective communication. The findings are supported by Yilpet (2022) who asserted that students with ASD have the ability to think logically and ability to engage in effective communication depending on the level of the spectrum and types of information resources the ASD students are taught with. The findings also revealed that ASD students always have adequate understanding of what you teach them. Pinner (2016) stressed that understanding is needed for equipped knowledge to achieve the durable payoffs of education of learners. ASD students have efficient

cognitive ability on tasks given to them. The findings are supported by Siriwongs (2015) asserted that cognitive ability is obtainable in virtually all domains of life of an individual learning ability. ASD students can provide at least (50% -70%) of the needed concentration or attention to their lessons as affirmed by Yilpet (2022). The study disagreed that perception and memory capabilities of ASD students towards their lessons' teaching are flawless. The findings are supported by Stevenson et al. (2021) asserted that Autistic individuals have difficulties binding sensory information into unified perception and memory. ASD students are categories into two levels namely; basic level (age 0 -14) and advanced level (age 15 and above). The findings of the study revealed that information resources acquisition enhances learning ability, social interaction life, communication ability, educational background, behavioural and language expressions of ASD students. The findings are not supported by Ismiarti et.al (2019) findings and asserted that autistic teens have difficulties in social interaction so that their communication skills with the social environments have difficulties. They actually have a desire to interact, want a more intimate relationship with their friends, desire to contribute to their social environment, and strive to increase social awareness. The findings of the study showed that information resources utilisation enhances the logical thinking, communication ability, understanding, cognitive skills, concentration, perception and memory of ASD students. The study supported by Csillag (2017) stressed that there are two main types of assistive technology for students with ASD: teaching technologies and technologies for communication. Both technologies are integrated in classroom learning experiences of autistic students to help them develop the needful skills. The findings of the study showed that there is a significant relationship between utilisation of information resources and learning ability of students with ASD. R is the correlation coefficient. It is the value that shows the degree of relationship between two variables. From the table, it can be observed that $R = 0.189$, meaning that the correlation between utilisation of information resources and the enhanced learning ability of students with ASD is positively skewed. This infers that, utilisation of information resources has $(0.189*100) = 18.9\%$ positive and very low relationship with learning ability of ASD students in North Central Nigeria. The findings of the study showed that Beta = -0.012; t = -and p = 0.001 have the highest potent contribution to the dependent variable (learning ability of ASD students). The result of Beta = -0.184; t = -1.584 and p = 0.017 of usability of information resources have composite contribution on learning ability of ASD students. Thus, the null hypothesis is rejected. The findings of the study showed that the relative contribution of acquisition and utilisation of Information resources to enhance learning ability of students with ASD in North-central, Nigeria. From the table p-value (sig-value) = 0.002 significance. Thus, it implies that

acquisition and utilisation of Information resources can enhance learning ability of students with ASD. Therefore, the null hypothesis is rejected.

Conclusion

Based on the findings in this study, it concluded that Autism is not an illness or disease rather it is a disability. It cannot be cured. It is a lifelong development disability that effects how people perceive the world and interact with others. The proper acquisition and utilisation of information resources can enhance the learning ability of ASD students. Autism is a neurodevelopment disorder. This means the disorder occurs in the brain. Therefore, any intervention must be made by influencing the brain development. Early detection of the spectrum namely; mild, middle and severe end of the spectrum and early intervention using the right information resources can help in improving the life the child and making the child an independent individual in the future. Every child has the right to better life through knowledge by being exposed to the right information resources. Information resources can enhance the learning ability, social interaction life, communication ability, educational background, behavioural and language expressions of ASD students. Information resources can influence the logical thinking, communication ability, understanding, cognitive skills, concentration, perception and memory of ASD students. The library profession must made effort to ensure that many people are trained in school libraries as professionals with sound knowledge on Autism to be able to adequately cater for this category of library users. All types of information resources when properly acquired and used will serve as a good intervention to enhance the learning ability of children with autism. Children with autism can be taught and enrolled into the regular education system provided their Intelligent Quotient (IQ) ranges 85 – 115. There is a low and positive relationship which exists between Information resources acquisition and enhanced learning ability of the ASD students. There is also an established low and positive relationship which exists between Information resources utilisation and enhanced learning ability of the ASD students.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. Government, educational institutions, School libraries, and non-governmental organisations in North-Central, Nigeria should adopt pragmatic measures in creating adequate awareness about autism and the proper information resources should be acquired that can help this special group of library users to enhance their learning ability.
2. The government, parents and caregivers should ensure that only well trained professional are assigned to render services to this category of library users.

Providing good education to autism children is capital intensive. Therefore, regular moral and financial interventions are important to be given to autism children.

3. Autism is of the increase and measures must be put in place to cater for the children. Proactive measure must be done to by government and well-meaning individuals to ensure that whenever autistic schools are built, it should be built with trained librarians to manage it. Autistic schools must be made public to enable wider accessibility by all. School libraries must ensure that adequate information resources are acquired and are adequately utilise by children with autism which invariably will enhance their well-being and learning ability.
4. Government and wealthy individuals should ensure that autistic schools are established in all the states in the North-Central, Nigeria. The study indicated that these schools are only available in Abuja, Plateau State and Nasarawa State. There is no one existing in Benue State, Kogi State, Kwara State and Niger State. Each state should have at least one to cater for the needs of the children with autism in such state.

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