December 2021

# Psychological Factors, Digital Literacy Skills and Use of Electronic Information Resource by Postgraduate Students of Delta State University , Abraka

EJOMAFUVWE ERAVWOKE
ejomafuvweeravwoke@gmail.com

# PSYCHOLOGICAL FACTORS, DIGITAL LITERACY SKILLS AND USE OF ELECTRONIC INFORMATION RESOURCES BY POSTGRADUATE STUDENTS OF DELTA STATE UNIVERSITY, ABRAKA

**BY**

**ERAVWOKE, Ejomafuvwe**
**ejomafuvweeravwoke@gmial.com**
**08038312225**

## ABSTRACT

This study investigated psychological factors, digital literacy skills and use of electronic information resources by postgraduate students in the faculty of education, Delta State University, Abraka. Three research questions and two research hypotheses were raised, answered and tested. The study employed the descriptive survey design and the sample for this study consist of 45 postgraduate students. The purposive sampling technique was employed for this study. The instrument for the collection of data was the questionnaire. The questionnaire was titled "Psychological Factors and Digital Literacy Skills influencing the Use of Electronic Information Resources by Postgraduate Students Questionnaire (PFDLSIUERPSQ)". The face and content validity was established by the supervisor and two other experts. To determine the reliability of the instrument, the Cronbach's Alpha reliability statistics was used, and this produced a reliability index of 0.79. Data collected were analyzed using both descriptive and inferential statistics such as frequency, percentage, and Pearson product moment correlation coefficient r. The level of significance at 0.05. The findings of the study revealed that: Postgraduate students makes use of all electronic information resources with majority of them using a combination of different electronic information resources, all psychological factors influences the use of electronic information resource, postgraduate students possess the digital literacy skills, also the finding shows that there is a significant relationship among self efficacy, motivation and anxiety on usage of electronic information resource, while there is no significant relationship between stress and usage of electronic information resources, and lastly, no significant relationship was found between postgraduate students digital literacy skills and their usage of electronic information resource. It was therefore recommended that government should formulate policies that will support free access to Internet services in schools so that all students can get access to the Internet and enhance their digital literacy skills through frequent usage of electronic information skills.

Key words: Psychological Factors, Digital skills, Electronic Information Resources.

# Introduction

## Background to the study

Electronic information resource or E-resources are information bearing materials provided in electronic forms. Most of these e-resources are available on the Internet. Some examples are; E-book, E-journal, online database, CD ROM database, etc. Electronic information resource enables students to access 0international and local literature as soon as they are published on the Internet. In order for students to have access to these electronic information resources, they must have electronic devices and gadgets. These devices and gadget must be internet enabled, for them to access to wider range of information. The availability of E-resources makes academic activities which involves surfing up-to-date materials for project writing, articles publication and updating of one's knowledge easier. As a result of the availability of e-resources, learning activities especially at the postgraduate levels which embraces rigorous academic activities that involves sorting of numerous information by students, becomes easier since most of their learning are independent with little guide from their lecturers.

The availability of electronic resources has been an integral part of the library especially in academic institutions, and students are expected to access and use the resources. The opportunity to use e-resource has been enhanced by the development of electronic facilities like smart phones, tablets, laptops, mini computers, etc. most of which are handy and can be easily connected to the Internet with little amount spent on subscription to service providers. With these facilities, students can conveniently at anytime and locations have access to electronic information resource. According to Prabha and Hunter (2017), electronic information resources which makes online education possible has the potentials to resolve access to education, where distance is a primary barrier by mitigating some of the impediment to indigenous education such as traveling long distances or leaving away from home.

But experience has shown that most students employ the services of business centre operators and few other course mate at extra cost to help them surf for information materials online when given assignment and other academic exercise even when they have access to gadgets and devices that will enable them access electronic information resource themselves. To buttress this, literature has shown that there are some factors (attitude, perception, age, gender social economic status etc) that affect students abilities in using electronic information resource (Booker, Detlor and Serenko, 2012; Faruk and Yusulf 2016). However, the researcher is limiting his self to psychological factors and lack of digital literacy skills.

According to Beharu (2018) psychology is one of the factors that affect human productivity. The success and failure one encounter during various activities depends on ones everyday psychology. He identified the following as psychological factors: stress, anxiety, depression, motivation, loneliness, self-efficacy, helplessness and phobia. Stress is a feeling of emotional strain and pressure, it is a type of psychological pain. Psychological research suggests that performance is best when stress levels are moderate. Performance suffers under both low and high stress conditions. Under conditions of high stress, performance on perception, memory and higher order thinking tend to be poor, due to the very high levels of stress created by the situation.

The second psychological factor which he identified is anxiety. Anxiety is a mental health disorder characterized by feelings of worry or fear that is strong enough to interfere with ones' daily activities, an example is panic attack. Anxiety is the most frequent affective variable related to students' performance and achievement. Research results consistently show a negative effect of anxiety on academic performance. In the same vain a student's level of anxiety could have a positive or negative influence on hi/her usage of electronic information resource

(Dawood, Ghadeer, Mitsu, Almutary & Alenezi, 2016). This is because when anxiety level is so high there will be a panic attack leading to unnecessary shaking of the hands and body which will affect their usage of electronic information resource negatively, but on the other hand, when the anxiety level is moderate, panic attack will be avoided and it will have positive influence on the usage of electronic information resource.

Stress is yet another psychological factor. Stress is the body's reaction to any change that requires an adjustment or response. The body reacts to these changes with physical, mental tension, and emotional responses. Psychological research suggests that performance is best when stress levels are moderate. Performance suffers under both low and high stress conditions. Under conditions of high stress, performance on perception memory and higher other thinking tend to be poor due to the very high level of stress created by the situation. According to Beharu (2018), stress is a factor that leads to failure in students. In agreement with him, when a student undergoes high level of stress, his attention will be divided leading to lack of concentration in what so ever he/she does. And the aftermath effect will be little or no productivity in any academic activity the student is involved in. And this is also applicable to the use of electronic information resource

Another psychological factor identified by him that is of interest to the researcher is motivation. Motivation is a process that initiates, guide, and maintain good oriented behavior. It involves an emotional, biological, social and cognitive force that activates a behavior. It is both intrinsic and extrinsic. Intrinsic motivation comes from internal factor to meet personal needs, students who are intrinsically motivated engage in activities because they enjoy it, and studies have shown that intrinsic motivation have positive influence on students learning (Orhen-Ozen, 2017; Sharma and Nasa,2014). Extrinsic motivation comes from external factors that are given

or controlled by others. Both motivations could have influence on students' usage of electronic information resources.

Yet another factor that is of interest to the researcher as identified by Beharu (2018), is self-efficacy. Self-efficacy is operationally defined as one's belief that people can successfully perform a given task (Alay & Triantoro, 2013). Self-efficacy affects students' choice of activities, efforts and their persistence in it. This is to say that when students have high level of self-efficacy, they carry out any activity given to them irrespective of the problems encountered. With high level of self-efficacy, students should be able to use electronic information resources effectively.

To Beharu (2018), these psychological factors can lead students in higher institution to failure and fear or uneasiness that interferes with their ability to function normally. Also high level of anxiety, lack of motivation and low self-efficacy can have negative effects on the use of electronic information resource.

Another factor to be considered in this study is the digital literacy skills. Digital skills can be defined as the range of abilities one possess that enables him/her to use digital devices, communication applications and networks to access and manage information effectively. They enable people to create and share digital content, communicate and collaborate and solve problems for effective and creative self fulfillment in life, learning, work and social activities at large (UNESCO, 2018). In order to effectively manage and use electronic information resources, students must possess adequate digital literacy skills which will in turn give them satisfaction on the search for information using e-resources.

In the light of these challenges, it becomes imperative to assess the influence of psychological factor and digital literacy skills on the use of electronic information resources by postgraduate students of Delta State University, Abraka.

**Statement of Problem**

The new development in the use of Information Communication Technology (ICT) has lead to the adoption and use of electronic information resources for research, teaching and learning activities. This has influenced the teaching and learning process because, most of the assignments, research, seminars, dissertations and class activities given are carried out using electronic information resources. A student can have access to these resources irrespective of time and location, once the student has the enabled facilities like computers, mobile phone and Internet services which make research work easier to carry-out. As a result of this technological innovation, students can have access to free scholarly resources which are available over the Internet with wider range of information to choose from. Despite these opportunities and enhanced flexibility that electronic information resources provide, the researcher observed that most postgraduate students consult other people to do information surfing for them with a charged fee attached even when they have the enable electronic information resource facilities at their disposal. Also from literature, it is discovered that the assessment of published research information has been hampered by many challenges and some of such are psychological factors and digital literacy skills. Could the lack of use of electronic information resources by postgraduate students be as a result of the influence of psychological factors such as self-efficacy, motivation, stress and anxiety, and their digital literacy skills?. It is as a result of this, that this study seeks to investigate, how psychological factors and digital literacy skills influence

the use of electronic information resources by postgraduate students in Delta State University, Abraka.

**Research Questions**

This study is guided by the following research questions:

1. What are the electronic information resources used by postgraduate students in Delta State University?
2. What are the psychological factors influencing the use of electronic information resource by postgraduate students?
3. What are the digital literacy skills possessed by postgraduate students?

**Research Hypotheses**

This study is guided by the following hypotheses.

$H0_1$: There is no significant relationship between postgraduates students psychological factors and their use of electronic resource

$H0_2$: There is no significant relationship between postgraduates students digital literacy skills and their use of electronic information resource

**Conceptual framework for the Study**

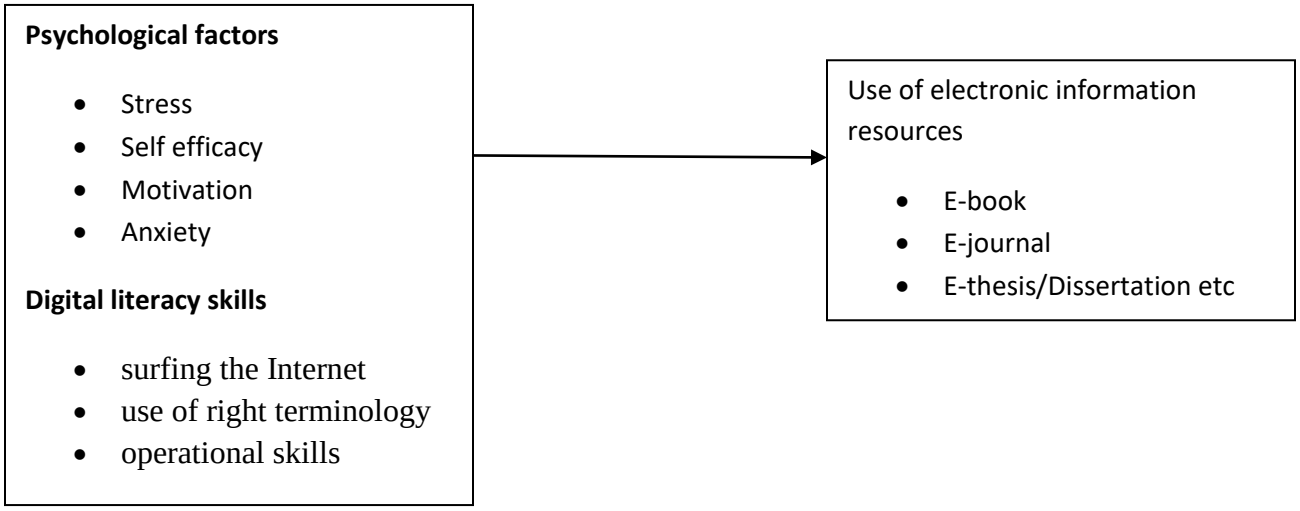

Fig. 1: conceptual framework on the influence of psychological factors and digital literacy skills on the use of electronic information resource.

From the conceptual framework, the use of electronic information resources is determined by the psychological factors and the digital literacy skills possessed by the individual. Research findings in the field of psychology show that for students to engage in any learning situation, there are three fundamental questions that must be answered, these questions include; can I do this activity? Do I want to do this activity and why? And lastly what do I need to do to succeed? The question "can I do this activity" is the expectation students have according to their capabilities to perform a certain activity in different areas, this can be termed their self-efficacy. Self efficacy can be seen a person's judgments of their abilities to organize and execute causes of actions required to attain elected types of performance. Students' self-efficacy affects their choice of activity, efforts and persistence in it. Different studies show that self-efficacy is one of the most powerful predictors of students' achievement (Alay & Triantoro, 2013; Sharma & Nasa, 2014). The question "do I want to do this activity and why" is a motivational construct, they are both intrinsic and extrinsic motivation. Students who are motivated intrinsically engage in activities for their own sake because they find working on the task enjoyable. These sets of students learn because they are curious about the content and they feel challenged by the learning activities. On the contrary, students who are extrinsically motivated engage in activities when they believe that working on such activity will result in desirable outcome. High level of motivation usually results in more cognitive achievement (Logan, Lundberg, Roth & Walsh, 2017). Extrinsic motivation can make students engage in activities and finish up with it, and through that process develop intrinsic motivation. According to Kian, Yusuf, & Rajah (2014); and Turan (2015), motivation is a crucial factor that affects human behavior and performance. Also, educational researchers and practitioners are of the view

that motivation is one of the most important factor which influences student achievement and also an important factor in ensuring continuous achievement (Alkış 2015).

Lastly the question what do I need to be successful in an activity is related to the use of cognitive and meta-cognitive strategy in learning activity. Cognitive learning ability includes rehearsal, elaboration and organization, while that of meta-cognitive strategies include planning, monitoring and evaluation. These strategies if properly used have positive influence in whatever one does.

Another psychological factor as shown in conceptual framework is anxiety. Anxiety is a feeling of worry, nervousness, or unease about something with an uncertain outcome. It is the most frequent affective variable related to students' performance. Dawood, Ghadeer, Mitsu, Almutary, and Alenezi, (2016) explained the concept of Anxiety as a common phenomenon which constitutes universal cause of poor academic performance among students worldwide. According to them also, anxiety is a kind of self preoccupation which is manifested as self minimization that results in negative cognitive evaluation, unfavorable physiological reactions, academic failure and lack of concentration,

Literature has shown that there is a negative effect of anxiety on academic performance (Dawood, Ghadeer, Mitsu, Almutary, & Alenezi, 2016). In addition, stress is yet another psychological factor. Stress is the body's reaction to any change that requires an adjustment or response. The body reacts to these changes with physical, mental tension, and emotional responses. Psychological research suggests that performance is best when stress levels are moderate. Performance suffers under both low and high stress conditions. Under conditions of high stress, performance on perception memory and higher other thinking tend to be poor due to the very high level of stress created by the situation.

From the conceptual framework, digital skill is another factor that affects the use of electronic information resource. Digital skills can be defined as the range of abilities one possess that enables him/her to use digital devices, communication applications and networks to access and manage information effectively. When a student has adequate digital skills it is expected that such a student will be able to access electronic information resource and lack of it may affect their usage negatively. This is related to this study in the sense that both psychological factors and digital skills could influence the use of electronic information resource by the students.

**Research Methods**

The research design for this study is the descriptive survey design. Whawo (1992) stated that, a survey design can be used for studying people's opinions, attitudes and academic achievements. Therefore, this design is suitable for this study. This design was adopted for this study because, there was no manipulation of any of the variables under study and findings were only used for descriptive purposes, and not to establish a cause and effect relationship.

The population of the study consists of 167 postgraduate students in the faculty of education, Delta State University, Abraka in the 2019/2020 academic session. The sample for the study consists of 137 postgraduate students from the various departments in the faculty of Education. This includes Masters' and Ph.D students in the 2019/2020 academic session. The total enumeration sampling technique was employed for the study because of the population size.

The instrument for data collection in this study is the questionnaire titled, "Psychological Factors and Digital Literacy Skills influencing the Use of Electronic Information Resources by Postgraduate Students Questionnaire (PFDLSIUERPSQ)". It was designed by the researcher and consist of four sections; A, B, C and D. Section **A** is designed to obtain information on the bio-

data of the respondents, while Section B, C, and D contains twenty-five items raised to obtain information on the variables of the study.

In order to determine the validity of the instrument, it was given to the supervisor and two other experts, one in the Department of Library and Information Science and the other in Measurement and Evaluation, Delta State University, Abraka, to determine its face and content validities. They suggested that the names of the department should be listed in section A, age bracket should be removed, section B should address only psychological factor, the scale on stress and anxiety should be re-arranged and section C should address digital skills and it was recommended that items on use of electronic information resource should be raised in section D.

The reliability of the instrument was ascertained using the Crobach Alpha statistics. The instrument was administered to 30 postgraduate students in the department of Business and Administration who were not part of the sample used for the study. The result yielded reliability co-efficient of 0.79. This shows that the test is reliable for measuring the characteristic it was design to measure.

**Method of Data Collection**

The data collection exercise was personally carried out by the researcher. The questionnaires were administered to the respondents and were collected on the spot to ensure maximum return rate. The data collection exercise lasted for a period of five days.

**Method of Data Analysis**

Data were analyzed using both descriptive and inferential statistics such as frequency, percentages, statistical mean and Pearson product moment correlation coefficient r. The criterion mean is put at 2.50 and level of significance at 0.05.

**Results and Discussion**

**Research question 1:** What are the electronic information resources used by postgraduate students in Delta State University?

**Table 4.3: Descriptive Statistics of Percentage Showing Electronic Information Resources Used by Postgraduate Students in the Universities**

| USAGE OF ELECTRONIC INFORMATION RESOURCES | | | |
|---|---|---|---|
| **S/N** | **ITEM** | **Response** | **Percentage** |
| 1 | E-book, E-journal, E- thesis/dissertation, OPAC E-newspaper and E-article | 3 | 2.2% |
| 2 | E-journal and E-dictionary | 3 | 2.2% |
| 3 | E-journal, E-dictionary E-newspaper, E-article, and Online database | 3 | 2.2% |
| 4 | E-dictionary | 3 | 2.2% |
| 5 | Online database | 12 | 8.8% |
| 6 | E-book, E-dictionary, E-newspaper, and E-article | 3 | 2.2% |
| 7 | E-dictionary, Online database, and E-newspaper | 3 | 2.2% |
| 8 | E-journal, E-thesis/Dissertation, E-dictionary, Online Database CD-ROM, E-newspaper and E-article | 6 | 4.4% |
| 9 | E-journal, E-book, E-thesis/Dissertation, E-encyclopedia, E-article and E-newspaper | 3 | 2.2% |
| 10 | E-thesis/Dissertation and CD-ROM | 3 | 2.2% |
| 11 | E-journal, E-book, Online Database, E-newspaper and E-article | 3 | 2.2% |
| 12 | E-book and E-dictionary | 3 | 2.2% |
| 13 | E-journal, E-book, E-dictionary, CD-ROM, E-newspaper and E-article | 3 | 2.2% |
| 14 | E-book, E-dictionary, Online Database, E-encyclopedia, E-newspaper and E-article | 9 | 6.6% |
| 15 | E-book, E-thesis/Dissertation, E-dictionary, Online database, E-encyclopedia, E-newspaper and E-article | 3 | 2.2% |
| 16 | E-journal, E-book, Online Database and E-article | 3 | 2.2% |
| 17 | E-dictionary, Online-Database, E-newspaper and E-article | 3 | 2.2% |
| 18 | E-journal, E-book, E-dictionary and E-encyclopedia | 3 | 2.2% |
| 19 | E-book, Online Database and E-encyclopedia | 3 | 2.2% |
| 20 | Online Database and CD-ROM | 3 | 2.2% |
| 21 | Online Database, E-encyclopedia, E-newspaper | 3 | 2.2% |
| 22 | E-journal, E-book, E-dictionary, Online Database CD-ROM, and E-encyclopedia | 3 | 2.2% |
| 23 | E-journal, Online Database, OPAC, E-newspaper and E-article | 3 | 2.2% |

| | | | |
|---|---|---|---|
| 24 | E-thesis/Dissertation, E-dictionary, Online Database, CD-ROM, E-newspaper E-article | 3 | 2.2% |
| 25 | E-journal, Online Database and E-article | 3 | 2.2% |
| 26 | E-journal, E-book, E-dictionary, Online Database, OPAC, E-newspaper and E-article | 3 | 2.2% |
| 27 | E-book, E-thesis/Dissertation, Online Database and E-article | 3 | 2.2% |
| 28 | E-book, Online Database, CD-ROM E-newspaper and E-article | 3 | 2.2% |
| 29 | E-journal, E-book and E-dictionary | 3 | 2.2% |
| 30 | E-journal, E-newspaper and E-article | 3 | 2.2% |
| 31 | E-journal, E-book, E-thesis/Dissertation, E-Dictionary, Online Database and E-encyclopedia | 3 | 2.2% |
| 32 | E-journal, E-book, E-thesis/Dissertation, E-Dictionary, Online Database, E-encyclopedia and E-article | 3 | 2.2% |
| 33 | E-journal, E-book, E-thesis/Dissertation, E-Dictionary, E-encyclopedia, E-newspaper and E-article | 4 | 2.5% |
| 34 | All E-Resources | 19 | 13.9% |
| | **TOTAL** | **137** | **100%** |

From table 4.3, it is seen that 19 which makes up 13.9% of the respondents make use of all electronic information resources, while 12 of them which make up 8.8% make use of online database, whereas 9 of the respondents which make up 6.6% of the respondents make use of E-book, E-dictionary, Online Database, E-encyclopedia, E-newspaper and E-article and 6 of them which make up 4.4% of the population make use of E-journal, E-thesis/Dissertation, E-dictionary, Online Database CD-ROM, E-newspaper and E-article. While the least of respondents that makes use of other combinations of electronic information resources has a frequency of 3 each which represents 2.2% of the population.

**Research question 2:** What are the psychological factors influencing the use of electronic information resource by postgraduate students in Delta State University?

**Table 4.4: Descriptive Statistics of Frequency and Percentage Showing Psychological Factors Influencing the Use of Electronic Information Resource**

| **Self-efficacy** | **SA F(%)** | **A F(%)** | **D F(%)** | **SD F(%)** | **TOTAL** | **MEAN** |
|---|---|---|---|---|---|---|
| I cope very well with encountered difficulties when using electronic information resource | 31(22.7) | 88(64.2) | 3(2.2) | 15(10.9) | 137(100) | 2.99 |
| I am always sure that I could get the desired information when using electronic information resource | 63(46.0) | 62(45.2) | 9(6.6) | 3(2.2) | 137(100) | 3.35 |
| I am always sure that I can solve all your academic problems using electronic information resource | 27(19.7) | 73(53.5) | 34(24.8) | 3(2.2) | 137(100) | 2.91 |
| I am always sure that I can use electronic information resource independently | 49(35.7) | 70(50.1) | 9(6.6) | 9(6.6) | 137(100) | 3.16 |
| I am very effective in using electronic information resource in groups | 50(36.6) | 57(41.6) | 15(10.9) | 15(10.9) | 137(100) | 3.04 |
| **MOTIVATION** | **SA F(%)** | **A F(%)** | **D F(%)** | **SD F(%)** | **TOTAL** | **MEAN** |
| I use electronic information resource to learn outside your academic work | 64(46.7) | 61(44.5) | 6(4.4) | 6(4.4) | 137(100) | 3.34 |
| I make use electronic information resource When there is steady power supply | 59(43.1) | 57(41.6) | 18(13.1) | 3(2.2) | 137(100) | 3.26 |
| Electronic information resource is just a way of life for me irrespective of its benefits | 27(19.7) | 71(51.8) | 30(21.9) | 9(6.6) | 137(100) | 2.85 |
| When I go to locations that has free data services I can spend the whole day using electronic information resource | 38(27.8) | 51(37.2) | 30(21.9) | 18(13.1) | 137(100) | 2.80 |
| When there is good network I enjoy using electronic information resource | 64(46.7) | 49(35.8) | 00(00.0) | 24(17.5) | 137(100) | 3.12 |
| **STRESS** | **VO F(%)** | **ST F(%)** | **FO F(%)** | **AN F(%)** | **TOTAL** | **MEAN** |
| How often do you get upset when using electronic information resource most especially when you encounter difficulties | 40(29.2) | 66(48.2) | 22(16.0) | 9(6.6) | 137(100) | 2.00 |
| How often do you get tired when using electronic information resource | 3(2.2) | 70(51.1) | 40(29.2) | 24(17.5) | 137(100) | 2.62 |
| How often do you feel nervous and stressed when using electronic information resource | 6(4.4) | 48(35.0) | 53(38.7) | 30(21.9) | 137(100) | 2.78 |

| | | | | | | |
|---|---|---|---|---|---|---|
| How often do you feel nervous about your competencies when using electronic information resource | 9(6.6) | 55(40.1) | 33(24.1) | 40(29.2) | 137(100) | 2.76 |
| How often do you feel that you cant cope with the stress of using electronic information resource | 33(24.1) | 49(35.8) | 25(18.2) | 30(21.9) | 137(100) | 2.38 |
| **ANXEITY** | **MT F(%)** | **AA F(%)** | **ST F(%)** | **AN F(%)** | **TOTAL** | **MEAN** |
| I have less difficulties when using e-resources | 51(37.2) | 34(24.8) | 36(26.3) | 16(11.7) | 137(100) | 2.12 |
| I think about the consequences of failing to achieve my aims when using e-resources | 24(17.5) | 33(24.2) | 45(32.8) | 35(25.5) | 137(100) | 2.66 |
| I do not worry about what people will say if am un-able to use e-resources | 24(17.5) | 15(10.9) | 40(29.2) | 58(42.4) | 137(100) | 2.96 |
| 1 am always calm when using e-resources | 58(42.4) | 39(28.4) | 31(22.6) | 9(6.6) | 137(100) | 1.93 |
| 1 am emotionally unstable when using e-resources | 29(19.7) | 9(6.6) | 33(24.1) | 68(49.6) | 137(100) | 3.04 |

From the table, it can be seen that most of all the items that addressed the psychological factors have mean value higher than the criterion mean of 2.50 except for item 11 which has mean of 2.00, item 16 with a mean of 2.12, and item 19 with a mean of1.93. This shows that the identified psychological factors influence the use of electronic information resources.

**Research question 3:** What are the digital literacy skills possessed by postgraduate students in Delta State University?

**Table 4.5: Descriptive Statistics of Frequency and Percentage Showing Digital Literacy Skills Possessed by Postgraduate Students**

| **Digital skills** | **SA F(%)** | **A F(%)** | **D F(%)** | **SD F(%)** | **TOTAL** | **MEAN** |
|---|---|---|---|---|---|---|
| I have the required skills used in surfing the internet and selecting the required materials | 58(42.3) | 70(51.1) | 3(2.2) | 6(4.4) | 137(100) | 3.31 |
| The skills I possess enables me understand the terminologies used in internet data –base and this enables me use reference sources to increase my familiarities of topics or problems been | 57(41.6) | 71(51.8) | 0(0.00) | 9(6.3) | 137(100) | 3.28 |

| | | | | | | |
|---|---|---|---|---|---|---|
| solved | | | | | | |
| My operational skills enables me to use internet facilities in sorting, retrieving and storing information using different devices | 63(46.0) | 65(47.4) | 0.(0.00) | 9(6.6) | 137(100) | 3.33 |
| The skills I possess enables me subscribe and get access to subscription based electronic resources | 61(44.5) | 54(39.4) | 6(4.4) | 16(11.7) | 137(100) | 3.17 |
| The skills I possess enables me to use authors search for electronic catalogue (OPAC) | 30(21.9) | 85(62.1) | 4(2.9) | 18(13.1) | 137(100) | 2.93 |

From table 4.5, it is seen that postgraduate students possesses and make use of all the digital literacy skills since the mean values of the items are higher than the criterion mean of 2.50

**Testing of Hypotheses**

**$H0_1$:** There is no significant relationship between postgraduates students psychological factors and their use of electronic resource

**Table 4.6: Pearson Product Moment Correlation Coefficient Showing Relationship between Postgraduates Students Psychological Factors and their Use of Electronic Resource (n=137)**

| **Variable** | **r** | **$r^2$** | **sig(2tailed)** |
|---|---|---|---|
| Relationship between Postgraduates Students Psychological Factors of self efficacy and their Use of Electronic Resource | 0.11 | 0.01 | 0.21 |
| Relationship between Postgraduates Students Psychological Factors of motivation and their Use of Electronic Resource | 0.21 | 0.04 | 0.01 |
| Relationship between Postgraduates Students Psychological Factors of stress and their Use of Electronic Resource | -0.13 | 0.02 | 0.14 |
| Relationship between Postgraduates Students Psychological Factors of anxiety and their Use of Electronic Resource | -0.22 | 0.05 | 0.01 |

Table 4.6 shows that there is a weak positive relationship between psychological factors of self efficacy and motivation on use of electronic information resource, this is because the r

values of 0.11 and 0.21 are far away from 1, while there is the existence of a weak negative relationship between the psychological factors of stress and anxiety on their use of electronic resource. This is because their r values of -0.13 and -0.22 respectively are far away from 1. Also the table shows that there is no significant relationship between self efficacy, and stress on the use of electronic information resources since the sig. values of 0.21 and 0.14 are higher than 0.05, but there exist a significant relationship between motivation and anxiety on the use of electronic information resources since the sig, value of 0.01 and 0.01 respectively are lesser than 0.05.

**$H0_2$:** There is no significant relationship between postgraduate students digital literacy skills and their use of electronic information resource

**Table 4.7: Pearson Product Moment Correlation Coefficient Showing Relationship between Postgraduates Students digital literacy skills and their Use of Electronic Resource (n=137)**

| **Variable** | **r** | **$r^2$** | **sig(2tailed)** |
|---|---|---|---|
| Relationship between Postgraduates Students Digital literacy skills and their Use of Electronic Resource | 0.16 | 0.03 | 0.68 |

Table 4.7 shows that there exist a weak positive relationship between digital literacy skills and the postgraduate students usage of electronic information resource. The strength of the relationship is weak because the r value of 0.16 is not close to 1. The table shows that the relationship is not significant since the sig value of 0.68 is higher than 0.05, therefore, $H0_2$ which says that there is no significant relationship between postgraduates students digital literacy skills and their use of electronic information resource is retained.

**Discussion**

The first finding of the study shows that postgraduate students make use of electronic information resource. This may be as a result of the nature of their assignments and course activities that they are exposed to, and also as a result of availability of Internet connectivity. This finding is in agreement with that of Bassi and Cambel (2011) who found that Internet availability makes it possible for one to access many electronic information resources on a range of subjects.

The second finding of the study shows that all psychological factors influence the use of electronic information resource. This is because self-efficacy, motivation, anxiety and stress plays major role in the activities one is engaged in. The level of these psychological factors one possess influences the usage of electronic information resources positively or negatively.

The third finding of the study shows self-efficacy influences the use of electronic information resource. This is because self efficacy play a major role in the activities people engage in. This finding is in agreement with that of Alay and Triantoro (2013), they found out that self-efficacy have positive influence on performance and that of Sharma, and Nasa, (2014) who are of the view that Self-efficacy development is closely intertwined with a person's experiences, competencies and developmental tasks in different domains at different stages in life. Self-efficacy beliefs should be relevant for understanding educational outcomes because self-efficacy leads to specific behaviours and motivations that can encourage or discourage effective performance. This is also in agreement with their finding of Dawood, Ghadeer, Mitsu, Almutary, and Alenezi, (2016) who found out that there is a negative relationship between anxiety and performance. Finally the finding is also in agreement with the view of Sandi (2013).who is of the opinion that stress can affect cognition in different ways. Also, the finding showed a positive

significant relationship of motivation on usage of electronic information resources. This is because when on gets motivated in exhibiting a particular behavior, the tendency to repeat such behavior will be high. This finding is in agreement with the findings of Orhan-Özen (2017). Sharma, & Nasa (2014) whose finding shows that there is a positive relationship between motivation and student achievement

The fourth finding of this study shows that postgraduate students' possess digital literacy skills; this is because most of the activities they are involved in require them to make use of some or all of the digital skills. This finding is in agreement with the finding of Okeji, Nwankwo, Anene and Olorunfemi (2020), whose findings shows that librarians possesses digital literacy skills in private universities.

The fifth finding of the study shows that there is no significant relationship between postgraduate students' digital literacy skills on the use of electronic information resource. This is because whether they possess the skills or not, they will try as much as possible to use any of the electronic information resources because of its necessity to their study and daily activities.

## Reference


Prabha, P.E.R. & Hunter, E., (2017). Digital literacy and other factors influencing the success of online courses in remote indigenous communities. Retrieved from: https://www.google.com

Beharu, T.W. (2018). Psychological factors affecting students academic performance among freshman psychology students in Dire Dawa University. *Journal of education and practice. 9,* 4, 59-65

Booker, L. D. Detlor, B. and Serenko, A. (2012). Factors affecting the adoption of online library resources by business students. *Americas Conference on Information System (AMCIS) conference Proceedings. 8.*

Dawood, E., Ghadeer,H.H., Mitsu,R., Almutary,N., & Alenezi,A (2016). Relationship between test anxiety and academic achievement among undergraduate nursing students. *Journal of Education and Practice, 7(2), 57-65*

Orhan-Özen, S. (2017). The effect of motivation on student achievement. *Springer International Publishing AG,*35-56.

Alay, A.& Triantoro S., (2013).Effects of self-efficacy on students' academic performance**.** *Journal of Educational, Health and Community Psychology*, 2, (1) 22-23

UNESCO institute for statistics (2018a). A global framework of reference on digital literacy skills for indicator 4.4.2. Montreal: UIS

Whawo, D.D. (1992). *Basic educational research and statistics*. Benin City: Egun Prints.

Bassi, M.D., & Camble E. (2011) Gender differences in the usage of electronic information resources in University libraries of Adamawa State Nigeria. Retrieved from https://www.google.com

Sharma, H.L & Nasa, G (2014). Academic self-efficacy: a reliable predictor of educational performances**.** British Journal of Education, 2, (3) 57-64

Sandi, C. (2013), Stress and Cognition. *WIREs Cognitive Science*, 4:245–261

Sharma, H.L & Nasa, G (2014). Academic self-efficacy: a reliable predictor of educational performances**.** British Journal of Education, 2, (3) 57-64

Okeji, C.C.; Nwankwo, N.G; Anene, I.A & Olorunfemi, E.A (2020), Accessment of digital literacy skills of 21st century possessed by century librarians in private university libraries in Anambra State. *International Journal of Library and Information Science Studies;* 6 (4): 34-47

Logan, J., Lundberg, O.H., Roth,L., & Walsh,K.R (2017). The effect of individual motivation and cognitive ability on student performance outcomes in a distance education environment, *Journal of Learning in Higher Education; 13 ( 1), 83-91*

Kian, T., Yusoff, W., & Rajah, S. (2014). Motivation for generations' cohorts: An organizational justice perspective. *International Journal of Management Sciences*, 11(2), 536–542.

Turan, Z. (2015). The evaluation of flipped classroom method and examination of its effects on academic achievement, cognitive load and motivation (Unpublished Doctoral dissertation). Atatürk University, Erzurum.

Alkış, N. (2015). The influence of personality traits, motivation and persuasion principles on academic performance (Unpublished Doctoral Dissertation). Middle East Technical University, Ankara.