

PERSONAL VARIABLES AND ACADEMIC USE OF SOCIAL MEDIA AMONG SECONDARY SCHOOL STUDENTS IN CALABAREDUCTION ZONE, CROSS RIVER STATE, NIGERIA

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ABSTRACT

The purpose of this study was to investigate personal variables and academic use of social media among secondary school students in Calabar Education Zone, Cross River State, Nigeria. To achieve the purpose of this study, three null hypotheses were generated to direct the study. The literature review was done according to the variables under study. Ex-post facto was adopted for the study. A sample of six hundred and thirty-four (634) respondents was randomly selected for the study. The selection was done through the census sampling technique. The questionnaire was the instrument used for data collection. The instrument was subjected to face validity by experts in measurement and evaluation in the Faculty of Education, University of Calabar. The reliability estimate of the instrument was established through the Cronbach Alfa reliability method. Independent t-test analysis and One-way analysis of variance (ANOVA) and independent t-test analysis were the statistical analysis techniques adopted to test the hypotheses under study. All hypotheses were subjected to testing at .05 level of significance with relative degrees of freedom. The results of the analysis revealed that Age, Gender, and Self-concept significantly influenced academic use of social media among secondary school students. Based on the findings of the study it was recommended that Young individuals should be encouraged to work in the reference library, because they possesses the right energy for effective service delivery.

INTRODUCTION

Academic use of social media refers to the process of using the social media platforms as aids to study. Simply put, academic use of social media involves the systematic application of technological and electronic

based gadgets by students and teachers to access, select, organize and assemble learning materials to solve academic problems. Otu, Ojini and Ita (2021) has noted that the ability of the social media to connect, store and reproduce information universally in multimedia formats makes them important tools in sharing academic resources, collaborative learning, inquiry based learning, and reflective learning. This means that, the social media have contents that can make learning effective, laudable and worthwhile for students both in the secondary schools and the tertiary institutions.

The term social media refers to the set of interactive computer-mediated technologies that facilitate the creation or sharing of information, ideas, career interests and other forms of expression through virtual communities and networks. Merriam-Webster (2019) defined social media as forms of electronic communication such as websites for social networking and microblogging, through which users create online communities to share information, ideas, personal messages, and other contents such as videos. In the context of this study, social media refers to those computer based devices inform of applications which students used to create personal profiles and connections with other members of the platforms for sharing of information, text messages, ideas and videos. Such applications include among others; Facebook, WhatsApp, Twitter, Instagram, Wechat, Snapchat and others.

Facebook is one of the most common and popular social media used by students. Facebook used started in the United States by Mark Zuckerberg and his friends at Harvard University in 2004 and was mainly used by students for social interaction and advertisement of academic materials and event. Facebook has the potential to be used as a platform for online academic discussion. It is used generally for informal learning and complements the normal teaching and learning activities. Facebook has the advantage of connecting many people and facilitates feedback quickly during academic discussion. According to Ogbe (2014), Facebook is one of the two most frequented website in the entire internet, the second is WhatsApp. WhatsApp is a social media platform which can be described as a free download message application for smartphones. It was founded by Brian Acton and Jan Koum and developed by Facebook Incorporation in 2009. WhatsApp uses the internet to send messages, images, audio and videos. WhatsApp is very popular with teenagers because of features which include group chatting, voice messages and

location sharing; that is why it is believed to serve as a best means that offers simple, secured, reliable messaging and calling services. Barhoume (2015) has asserted that WhatsApp facilitate knowledge sharing among peers, improve learners' manipulative skills, facilitate the learning process and foster evaluation process. Interestingly, WhatsApp has the merit of giving feedback to users at a fast rate. Student used WhatsApp to keep touch with fellow students by getting instant information on the changes in class and venues for lectures, submission of assignments, examination date, postponement and discussion on learning materials and contents.

Another form of social media commonly used by teenagers is the Instagram. Instagram was developed in San Francisco by Kevin Systrom and Mike Krieger in 2010. The word Instagram is a portmanteau of Instant Camera and Telegram. The major function of the Instagram is enabling users to upload photographs and short videos, follow other users' feeds and images with the name of a location. Secondly, Instagram allows users to connect their Instagram account to other social networking sites, enabling them to share uploaded photos to those sites. Researchers have agreed that top among the motives for using Instagram among young people are mainly to look at posts, particularly, for the sake of social interactions and recreation. In the social media platforms, Twitter forms an interesting world of communication among teenagers. Twitters is an American microblogging and social networking service on which users post and interact with messages known as "tweets". Registered users can post, like and retweet tweets, but unregistered users can only read them. Users of Twitter access information through its websites interface, through short message service (SMS) or its mobile-device application software. These can provide interesting channel for students to access academic information and hold discussion conveniently.

Asemah, Okpanachi and Edegoh (2013) reveals that the exposure or access to social media affects the academic performance of students. Student who spend more time on social media are likely to perform poorly in their academics. This is instead of reading their books the spend time chatting and making friends via the social media and this will definitely have negative effect on their academic performance because inadequate study will lead to poor academic performance, this trend could likely predict or influence students negative perception of social media. This phenomenon which has become a source of worry to many who believe in knowledge and skills acquisition, incidentally calls for the

regulation of the excessive and unprofitable use of social media in education institution. Today, social media is a powerful new form of communication and its use cut across ranks, professions and age. There are different types of social media platforms that have support for educators (blogging, edublog awards, teachers tube, twitter); delivery of content (courseware, itunes U) and social learning (facebook, google+, blogs, linkedIn and youtube), collaborated project e.g wikipedia, blogs, micro blog twitter, content communities such as YouTube, Flickr, Myspace.com, Meetup, del.icio.us stumble upon.

Furthermore, the social media is a veritable tool that promotes connection with research experts on several topics that border on academics. Students through these platforms carry out their research. The social media have the capacity to broaden students' perspective on various subjects and give elaborate meaning to content that is new, making learning activities simple, easy and more gainful to students in the 21st century. Social media has a search advantage that can help students in their assignment and research work, clarity and content taught by teachers and enlarge learning border contents found on social media. In the words of Nelson and Kuh (2005), students use the social media regularly in both their academic and personal lives. Nevertheless, Mingle and Adams (2015) stated that there are some students who experienced improvement in their reading skills as a result of participating and involving in social media learning. Their view was supported by Eke, Omekwu and Odoh (2014) who posited that social media encourages virtual meeting with co-research scholars, self-esteem and wellbeing, and strengthening of interpersonal relationships. Going by the numerous benefits derived from the social media, one would have assumed that secondary school students will advance tremendously in their academic pursuits with the use of social media. Unfortunately, this assumption has come short of expectation because, many secondary school students in Calabar Education Zone have been observed to have misdirected the use of social media towards non-academic purposes.

The situation has recently spread among the students in Calabar Education Zone. Nearly every student has an android phone and move with it in the streets at the expense of using them to study what the need to that time. The effects of students not using the social media for academic purpose have resulted in many negative experiences. In the first instance, it has been observed that the reading culture among students in

the study area has drastically dwindled. Also, many students have recently performed poorly in spoken English, spelling and pronunciation due to their incessant use of the social media for non-academic purposes. These have led to involvement of students in examination malpractices. Moreover, the situation has resulted to students' involvement in pornographic exploration, indecent dressing and prostitution. Much effort have been made to curb these problems. The government have built and equipped libraries with modern facilities to aid e-learning. School managements have placed sanctions on examination malpractices and students who are caught in examination malpractices are often penalized for using their phones to cheat in examination. The mass media and religious organizations have continued to decry on the ills of students' addictiveness to the social media and poor performance and social vices carried out by students who use the social media wrongly and all efforts are yet to yield positive results.

Against this background, the researcher was curious to find out whether demographic variables influence or relate to academic use of social media among secondary school students in Calabar Education Zone. Personal variables to be investigated upon are age, gender and self-concept of students. Age, generally refers to how old a person is, and often measured with years. The chronological age of an individual often influences the behaviour of the person since human behaviour is moderated by experience and maturity. It is believed that the age of a person can determine his or her interest and procedure in doing a particular thing, such as how students make use of social media. Older persons are believed to be more mature in their approaches compared to the younger people. It is here, one could assume that, students who are not mature may not be able to utilize vividly the social media platforms with regard to academic discussion. Therefore, the researcher intends to find out whether age can influence academic use of social media among secondary school students.

Furthermore, gender which deals with the social classification of humans as males and females may be an actor in considering students' academic use of social media. It is however, noted that the social media is used by both male and female students. Nevertheless, the way, manner, purpose and interest of using the social media may vary among male and female students.

Moreso, self-concept as a personal variable is the way a person thinks about himself or herself. It has to do with the belief a person holds about his or her abilities, worth and value. There are two types of self-concept such as positive and negative self-concept. These two affect how a person handles a situation or carries him or herself. This invariably could account for how students use the social media. Therefore, investigating into these variables will provide empirical data that will help to solve problems related to academic use of social media among secondary school students in Calabar Education Zone, Cross River State, Nigeria.

LITERATURE REVIEW

Age is a moderating factor for human activities including academic works. Age comes with both psychological and social developments. Researchers have established that academic advancement goes together with age growth. This means that age can moderate students' academic use of social media. The teens between the ages of 12 and 17 use social media, the rates of social media use are even higher (83%) for young adults between the age of 18 and 29. The same information was given by Lenhart, Purcell, Smith and Zickhur (2010) and Madden and Zickhur (2011).

Umar and Idris (2018) carried out a study the influence of social media on psychosocial behaviour and academic performance of secondary school students in Batagarawa Local Government Area of Katsina state, Nigeria. A descriptive survey research design was employed. The target population consisted of four secondary schools purposively selected out of seven public schools and 30% SS2 students were randomly selected for the study. Data collected through questionnaire was analyzed using descriptive statistics of mean and standard deviation. The study found out among others that age variable influence academic performance of students in relation to social media. A study by Abu-Shanab and A-Tarawneh (2013) explored the advantages and disadvantages to Facebook utilizing university students. A sample of 206 students responded to a survey containing 10 advantages and 10 disadvantages of Facebook, and yielded interesting results. A study of Swedish university students utilized 239 undergraduate students filling a survey related to their Facebook use (Rouis et al., 2011). Results indicated that the extensive use of Facebook by students with extraverted personalities will lead to poor academic performance. The authors concluded also that self-regulation and goal orientation (related to performance) characterized the students who are

more in control of this social activity, and this better academic performance.

Although the majority of social media users are young adults, statistics shows that number of older social media users are picking up. According Pew Internet research on older adults between April 2009 and May 2010, social networking use among internet users ages 50-64 grew by 88% from 25% to 47%. During the same period, use among those ages 65 and older grew 100% from 13% to 26%. By comparison, social networking use among users ages 18-29 grew by 13% from 76% to 86% (Madden, 2010). As a matter of fact, according to Key Marketer Statistics on US Seniors (February - March, 2013), a significant portion of senior population (age 65 or order) is not shy away from internet and social network use. Like other aspects of digital, the rate of change in social media – its forms, its platforms, its uses - is growing at an exponential rate. One of the consequences of this trend is an increasing rate of behavioural change amongst new web users. For this reason, we see far greater variation within generational age groups towards the lower end of the scale. Amongst younger millennials, we can clearly see the emergence of two key trends. Firstly, those aged 18-24 are showing a far stronger tendency than their older peers towards using image-led social media.

A study by Ahmad and Abidin, (2010) to analyze the impact of age on social network sites among students in Malaysia. Using a conceptual approach, the study gathered that more young stars prefer the use of Facebook and Twitter in academic related discussions in complementing conventional classroom teaching and learning process. Thus, it is imperative that lecturers and academic institutions should implement the use of these applications in promoting academic excellence. As for profit oriented organizations such as bookshops computer and smartphone one vendors, they can promote their products through these applications and engage students to make purchases via them having understood that many students prefer and use Facebook, Twitter and Google+. The discussion from this study however does not represent the general sampling of Malaysian university students.

A study by Ahmad and Abidin (2010) to analyze the impact of age on social network sites among students in Malaysia showed a correlation between age and academic performance with regards to social media. The study used a conceptual approach and gathered that more young stars

prefer the use of Facebook and Twitter in academic related discussions in complementing conventional classroom teaching and learning process. Similar studies were conducted by Henhart (2009) and Kola (2009) and their findings showed that most of the social network users are young individuals, most of whom are university undergraduate students. The findings however did not show the extent to which students' use of social network relate to their academic exercise.

A report by Pew Research (2019) showed that there are pronounced differences in the use of various social media platforms within the young adult population in America. People of 18-24 years old are substantially more likely to use platforms such as Snapchat, Instagram and Twitter compared with those in their mid to late 20s. These differences are especially notable when it comes to Snapchat; 78% of 18-24 years old are Snapchat and Instagram at high rates, the youngest adults also stand out in the frequency with which they use these two platforms. Some 82% of Snapchat users ages 18-24 reported that they used the platform daily, with 71% indicating that they use it multiple times per day. Similarly, 81% of Instagram users in this age group visit the platform on daily basis, with 55% reporting that they do so several times per day. The concern of this research borders on how these social networks are used by students for academic enterprise.

A study by Ementa and Ile (2015) has shown that age does not determinate usability of social networking sites by students. The main purpose of the study was to investigate age factor in business education students' use of social networking sites in tertiary institutions in Anambra state, Nigeria. The population of the study was made up 577 penultimate and final year business education students of four tertiary institutions in the state. Proportionate sampling technique was used to select 236 students for the study. Three hypotheses were formulated to guide the study. The structural questionnaire was used to collect data for the study. Analysis of variance (ANOVA) was used to test the hypotheses at 95% confidence interval. Findings revealed that business education students do not differed significantly on social networking sites they use as a result of age. Consequently, it was recommended, among others, that business education students of all age brackets should be taught to harness the educational potentials of social networking sites also as to effectively use those sites for educational purpose. In similar study to ascertain students' use of social networking sits as regards to age, Mikani, Szweso, Allen,

Evans and Hure (2008) used a longitudinal sample of 92 students and examined young adults communication on social networking websites and reported that students ages 13-14 used social networking sites more than those ages 20-23. In the same vein, Kham (2011) conducted a study in Pakistan on impact of social networking sites on students and found out that students ages 15-25 used social networking sites for entertainment. Poelhuber, Normand and Anderson (2011) carried out a study in Canada to ascertain students' readiness for social media and collaboration. The researcher used 386 respondents who were selected through accident sampling technique. The instrument used for collection of data for the study was a structure questionnaire. Analysis of data was done with the aid of ANOVA. The findings showed that students ages 16-24 used social networking sites for social and entertainment purposes while older students understood that social networking sites offer them opportunity to use them for learning.

Huang (2014) study shows that excessive use of technology by teenagers has caused disruptions in their physical and mental health, sleeping patterns, their weight and level of exercise and notably in their school work 40% of young adults and 21% of adults, admits to using social media even while in bathroom. The reward area located in the mesencephalon (mid brain), and its pathway affect our decisions and sensation. When we experience something rewarding the, neurons in the principle dopamine-producing areas in the brain are activated, causing dopamine level to rise. The brain receives a reward and associates the drug or activities with positive reinforcement. For this reason activities which increase dopamine levels are the basis to mechanism of addiction. Social media addiction is taking a toll in teenager's lives at an alarming rate, students aren't paying enough attention to their studies and even in some extreme cases, and it has caused dangers to their brains.

Olowu and Seri (2012) who conducted a study to investigate the use of social networking sites and addiction among students. The researchers used 884 tertiary education students in Oyo state, Nigeria as sample of the study. The analysis was done using ANOVA as statistical tool. The findings revealed that students between the age of 16 and 30 spent a lot of time on social networking sites and the students were addicted to the use of these sites. The study however, did not indicate the purpose for which the students used the social networking sites for.

Gender and academic use of social media: Social media is often open to all classes of individuals to make use of them. The difference in the use of social media between males and females may be found due to the various purposes which the social media are used. Generally, females use social networking sites to make connections and stay in touch with family members or friends. Men, by contrast, use social media to gather the information they need to build influence. The social media help both men and women to perform research. Researchers have examined the gender of users of social media and came out with similar and contradictory results.

Otu, Ojini, Ita&Ngwanya N. (2022) carried out a research to determine individuals' usage purposes of social networks with a focus on the possible differences between females and males. The study specifically investigated Facebook as a critical area. The sample of the study consisted of 870 respondents who were sampled through accident sampling technique. Analysis of the data showed that usage purposes are categorized into four, namely, maintaining existing relationship, making new relationships, using the network for academic purpose and following specific agenda. The study found significant differences between genders in all the four categories. The difference in making new contacts was found among males, while the differences in the other three user purposes were found among the female respondents. The findings showed that gender influence Facebook usage. The study did not examine the extent to which the differences influence academic use of social media platform. The old saying "Men are from Mars, women are from Venus" holds water when it comes to how men and women use social media. Females use social media less than men for business reasons, whereas women use social media to share more personal information than men, revealing more about their personal lives. Women are more vocal, expressive and willing to share. In other words, women are biologically wired for social networking.

Generally, females use social networking sites to make connections and stay in touch with family or friends. Men, by contrast, use social media to gather the information they need to build influence. Social media helps them perform research, gather relevant contacts and ultimately increase their status. Men and women have varying degrees of online activity across different sites. 74% of internet users are using social media, with women (76%) having a slight edge over men (72%).

Men and women use Social Network Services (SNSs) differently and with different frequencies. In general, several researchers have found that women tend to use SNSs more than men and for different and more social purposes. Men and women use social network services (SNSs) differently and with different frequencies. In general, several researchers have found that women tend to use SNSs more than men and for different and more social purposes. Technologies, including communications technologies. Have a long history of shaping and being shaped by the gender of their users. Although technologies used to perform housework have an apparent historical connection to gender in many cultures, a more ready connection to SNSs may be drawn with telephones use has long had gendered connections ranging from the widespread assumption that women simply talk more than men, and the employment of women as telephone operators,. In particular, young women have been closely associated with extensive and trivial use of the telephone for purely social purposes. Similarly, women use of social media are influence on the development of computers has been trivialized while significant developments in computers have been masculinized. Thus, the idea that there may be both real and perceived differences in how men and women use SNSs and that those uses may shape the SNS is neither new nor surprising and has historical analogues.

There is historical and contemporary evidence that current fears about young girls' online safety have historical antecedents such as telegraphs and telephones. Further, in many cases those historical reactions resulted in restrictions of girls' use of technology to protect them from predators, molesters, and other criminals threatening their innocence. Like current fears focused on computer use, particularly SNSs and other communication media, these fears are most intense when the medium enters the home these fears have the potential to at least temporarily overwhelm the positive and empowering used of these technologies. These historical fears are echoed in contemporary media of youths' use of SNSs. Many studies have found that women are more likely to use either specific SNSs such as Facebook or MySpace or SNSs in general. In 2015, 73% of online men and 80% of online women used social networking sites. The gap in gender differences has become less apparent in LinkedIn. In 2015 about 26 percent of online men and 25% of online women used the business-and employee-oriented networking site (Yasemin, 2011).

In the same vein, Boateng and Amankwaa (2016) investigated the impact of social media on student's academic life in higher education. The target population of the study was international master students studying in Beijing normal university. A qualitative approach was employed using a semi-structured interview among the subjects. The sample of the study consisted of five male and five female students who were selected through convenient sampling technique from different programmes including comparative education, higher education, public policy, world economy and environmental science. The data collected was analyzed inclusively. The result revealed that social media is widely used by students of higher institution. The findings showed that, participants were in support of the idea that social media contribute significant quota to the development of students' academic life with no difference between male and female students. What the result implies is that gender does not influence academic use of social media on higher education students in Beijing University. The sample of the study was very small and could have been a major factor that influenced the outcome of the study. The present study use a sample size that is considered large enough to make generalization on other populations.

In a related study, Cheng and Alison (2017) examined the gender differences of undergraduate students' educational use of Facebook in University of Malaysia. Using a quantitative research method, the researchers sampled 64 students through purposive random technique. The data was analyzed with the aid of descriptive and inferential statistics, and t-test analytical tools. The results revealed that, male students have a higher frequency of Facebook visit (93.9%). Male students were more competent (48.5%) and more satisfied (42.2%) in using Facebook in comparison to female students. Although there was marginal differences between males' and females' perception for both usefulness and ease of use of Facebook (which means differences ranging from 0.01 to 0.33), the differences in their overall perception in the usefulness of Facebook were not significant ($P < .05$) what the findings showed is that Facebook use is influenced by gender among undergraduate students in Malaysia. The results however, might have been influenced by the sample which was small compared with the sample size of the present study.

Similarly, Rambaree and Knez (2017) investigated young people's identity and Facebook behaviour; the role of gender and ethnicity. The gender and people's ethnicity on Facebook visit with subjects between 14-25

years old-living in Mauritius, Madagascar. A stratified sampling by age, sex and location was designed and used to collect data from 517 respondents who were selected by random sampling method. The data generated were analyzed using multivariate analyses of variance (MANOVAS). The result showed that, male had a stronger Facebook identity than females.

The finding was in contrast to the study of Hog and Chand (2012), who explored the popularity and usage pattern of the Facebook and its impacts on academic performance of University students in China. The researchers used 384 students as sample of the study, using a self-administered questionnaire instrument to collect data from the subjects. The analysis of the data showed that 87.5 of the subjects have account on Facebook and no gender difference was found between male and female students. The findings also revealed that Facebook use adversely affected the academic performance of students and the adverse effect was observed greater among male students.

In another study, Mazman and Usluel (2011) investigated the relevance of social media and academic performance of students. The aim of the study was to determine individual's usage purpose of social networks with a focus on the possible differences between females and males. The study group consisted of 870 Facebook users who responded an online survey designed by the researchers. Analyses of the study showed that, usage purposes are categorized under four purposes namely, maintaining existing relationships, for academic purpose, searching for new relationship and following specific agenda. In the study, significant differences were found between males and females. The findings showed that gender significantly influence the use of social media among individuals.

In a related study, Akpan and Abe (2017) ex-rayed the effectiveness of WhatsApp as a collaborative tool for learning among undergraduate students in the University of Uyo, Akwa Ibom State, Nigeria. The study was guided by two research questions and hypotheses. The population of the study comprised all the 400 level science and education students in the faculty of education of the University of Uyo. The sample of the study was 60 science education students. A quasi experimental design was used in addressing the research questions while Z-test and t-test were used in testing the null hypotheses. The findings revealed a significant of students taught with WhatsApp application and those taught using conventional

approach of teaching, also, the findings showed that there is no significant difference between male and female students who used WhatsApp for learning. In the same vein, Ruba and Raghda (2017) carried out a study to examine gender and English as foreign language writing among students in Jordan. The sample used for the study was 98 students selected through a purposive random sampling technique. The subjects were divided into two experimental groups; one male and one female taught through WhatsApp. The data were collected by means of a pre-test and post-test whose analysis revealed improved writing performance, more for female participants than for their male counterparts. That means, WhatsApp influence students writing ability with positive difference among males and females.

Also, Abdulraheem (2013) carried out a study titled "University students' use of social networks sites and their relation with some variables". 120 respondents were randomly selected from the university of Ilorin as sample of the study. The instrument used for data collection was questionnaire, which contained "Yes" or "No" questions, multiple choice questions, and questions using a Likert-type scale. The data was analyzed by means of descriptive statistics. The results showed that students use social networks sites (SNSs) for social matters more than for academic purposes. The findings revealed that, there is no significant difference in using social network sites between female and male students.

Self-concept and academic use of social media: Self-concept refers to the collection of beliefs about oneself. It embodies the answer to "who am I". Generally, self-concept is the thought our individual perceptions have about our behaviour, abilities, and unique characteristics. Self-concept describes the mental power or picture of who a person is. Several studies have shown relationship between self-concept and the use of social media in respect to students' academic performance. The present study is intended to examine the relationship between self-concept and academic use of social media among secondary school students in Calabar Education Zone. Reviewing existing literature on self-concept and academic use of social media will help the researcher to fill the gap existing in the subject. Halder and Kaltun (2018) carried out a study on self-concept and attitude towards the use of Facebook. The aim of the study was to find out the relationship between self - concept and attitude towards the use of Facebook among the postgraduate students of University of GourBangu, in terms of their gender and locality. The

researchers adopted two tests (test i, the self-concept scale (SCS) developed and standardized by Halder (2015) and (test ii – test of Attitude towards Facebook use developed and standardized by Halder (2016), as instrument to collect data for the study. 486 subjects were sampled through accident sampling technique the researchers used Pearson product moment correlation method for statistical analysis. The study revealed that there are significant positive correlations between personality and attitude towards the use of Facebook of postgraduate male and female students. The study also showed significant positive correlations between self-concept and attitude towards the use of Facebook among post graduate urban and rural students. The study did not show a correlation between self-concept and academic use of Facebook which the present study seeks to find out.

In a similar study, Bergagna and Tartaglia (2018) investigated self-esteem, social comparison, and Facebook use. The aim was to find out whether the relationship between self-esteem and the amount of time on Facebook could be mediated by a tendency towards social comparison. Three different modalities of Facebook use were examined such as social interaction, simulation and search for relations. The mediation models were tested separately for males and females because of gender differences in technology use and social comparison. Data were collected by means of a self-reported questionnaire with a sample of 250 undergraduate and graduate Italian students (mean age: 22.1%years). The relations were examined empirically by means of four structural equation models. The results revealed that, the role of orientation to social comparison in mediating the relations between how self-esteem and some indicators of Facebook use for females, the use of Facebook for social interaction was directly influenced by low self-esteem.

The study was in agreement with the study of Buunk and Gibbons (2017) who asserted that individuals with low self-esteem whose self-concepts are particularly uncertain are especially interested in social media comparison, and the tendency to increase greater use of Facebook. The use of Facebook by those with low self-esteem and negative self-concept however, may bring about positive outcome in terms of academic performance.

Another study carried out by Sari, Siswadi and Sriati (2017) established a relationship between self-concept and the use of social media by students.

The main aim of the study was to find out whether there is relationship between social media user and self-concept of adolescents in Indonesia. The researchers adopted a descriptive correlation with cross sectional design to select 252 subjects as sample of the study. The instrument used by the researchers to generate data for the study was a questionnaire. In analyzing the data, the researcher used Rank Spearman Correlation test to observe relationship between the variables and canonical trials in order to determine the most dominant factor related to social media usage. The results of the study showed that, majority of the adolescents who use social media in Indonesia have positive self-concept and are quite good in social adjustment. The result further showed that, variables of social media usage have weak relationship between self-concept variable ($r_s = 0.224$) and social adjustment variable ($r_s = 0.254$). The result means that self-concept is a dominant factor of adolescents' social adjustment. In that case, social adjustment is a product of learning, which means that use of social media as factor for social adjustment plays a key role in academic performance of students vis-a-vis the use of social media.

Similarly, Popoola (2014) carried out a study to examine social media use and self-concept among undergraduate students in Oyo state, Nigeria. Survey method of research was used to generate information from undergraduates from two selected universities in the study area. The sample drawn for the study was 150 respondents. Questionnaire was used as instrument to obtain data for the study and the researchers analyzed the data with the aid of ANOVA. The findings showed that communicating with friends and family on social media sites was very common among undergraduates in the study area. The findings revealed that the benefits of social media was a determining factor for selecting the choice of social media the students used, and that self-concept was a moderating factor for the use of social media among the students. What these findings suggest is that self-concept determines the direction which students use the social media. This means that positive self-concept can lead to positive use of the social media by students, of which academic use of the social media is points to positive direction which the social media can be used.

In the same vein, Jan, Soomro and Ahmad (2017) have established a link between self-concept and social media use. The researchers carried out a study with the main aim of finding out the impacts of social media on self-esteem among students of institute of Business management in Pakistan.

150 students were selected and used as sample of the study. The survey was done by the aid of questionnaire and interviews. Correlation and regression model was applied to the data analysis with the help of SPSS statistics to test the relationship between social media and self-esteem. The major findings revealed that, there is a strong relationship between social media and self-esteem. Self-esteem is born out of self-concept; a positive self-concept will enhance social media use of an individual. This means that, students' self-esteem which influences the use of social media has a relationship with self-concept and students' use of social media for academic purposes.

The study of Shao, Xiaoli, Zheng, Ran and Jia (2018) agreed with the above findings. The researchers' major aim of carrying out the study was to find out the relationship between online social media use and "self" and subjective wellbeing of adolescents in China. 2390 voluntary teenagers participated in the survey; aged 11-28 years old. Self-identity (self-concept) and subjective well-being as latent variables, self-esteem as observed variables, to construct a structural equation model and to discuss their association relationship and mechanism. The results showed that the use of social media online had direct and significant positive effect on self-identity (self-concept) and subjective wellbeing; but negative relationship with self-esteem, at the same time, online social media use, self-identity, self-esteem and subjective well-being had interrelated associations with each other, especially, the mediating effect of self-esteem could positively predict subjective wellbeing. The literature under review has shown relationship between self-concept and social media use by students most especially at the university level.

RESEARCH METHODOLOGY

The research design to be adopted for this study were ex-post facto design. The study area is the Calabar Education Zone of Cross River State. The population of this study consisted of all the 6,339 students in senior secondary three (SS3) class enrolled for the 2019/2020 academic session. The study adopted stratified random sampling technique to select schools and subjects for the study. The sample of this study consists of 634 senior secondary three (SS3) students to be randomly selected from 42 secondary schools in Calabar Education Zone. A breakdown shows that 50% were males and 50% females from the schools. The major instrument used to generate data for this study was a questionnaire named; "Personal variable and academic use of social media

questionnaire (PVAUSMQ)". The instrument consist of three sections; A, B and C. section A contain demographic information from the respondents such as age, gender Section B focus on personal variables sub-scales with 6 items each to generate data on self- concept of students. Section C comprise of 16 items on academic use of social media, which were measured using a 4 point Likert Scale ranging from Strong Agree (SA) to Strongly Disagree (SD).

To determine the validity of the instrument to be used for this study, the researcher subjected the instrument to face validity by two experts in Test, measurement and evaluation who checked and ensured that the items were appropriate to measure what it meant to measure items that lacked face validity were expunged and replaced with the correct ones. To determine the reliability of the instrument to be used for this study, 50 copies of the questionnaire were administrated on 50 students drawn from the study area who will not be used as subjects for the study. This was done using split half reliability method. The reliability estimates ranged from .63 to .83. Out of 634 copies of questionnaire that were administered only 622 that successfully retrieved and were used as sample for the study.

RESULTS AND DISCUSSION

In this section each hypothesis is re-stated, and the result of data analysis carried out to test it is presented. Each hypothesis of the study was tested at .05 level of significance.

Hypothesis one: Age has no significant influence on academic use of social media among secondary school students. The independent variable in this hypothesis is age, below 15 years, 15-17 years and 18-20 years; while the dependent variable is academic use of social media among secondary school students. The statistical analysis technique deployed to test this hypothesis was one-way analysis of variance (ANOVA). The results of the analysis are presented in Table 1.

TABLE 1

Summary data and one-way ANOVA of the influence of Age on academic use of social media among secondary school students (N=622)

Age	N	\bar{x}	SD
Below 15 years	180	56.0000	3.58769
15-17 years	272	56.6250	4.15109
18 and above years	170	56.4000	3.78474
Total	622	56.3826	3.89825

Source of variance	SS	Df	Ms	F	Sig of F
Between group	42.382	2	21.191	1.396	.248
Within group	9394.550	619	15.177		
Total	9436.932	621			

*Significant at $P < .05$ level, $df = 2, 619$.

The result on Table 1 revealed that the calculated F-value of 1.396 is higher than the P-value at .05 level of significance with 2 and 619 degree of freedom. With this result the null hypothesis was rejected. This result therefore implied that, Age has a significant influence on academic use of social media among secondary school students. Since age had a significant influence on academic use of social media among secondary school students, a post hoc analysis was employed using Fishers' Least Significant Difference (LSD) multiple comparison analysis. The result of the analysis is presented in Table 2.

TABLE 2

Fishers' Least Significant Difference (LSD) multiple comparison analysis of the influence of Age on academic use of social media among secondary school students

LSD

(I) age	(J) age	Mean Difference (I-J)	Std. Error	Sig.
Below 15 years	15-17 years	-.62500	.37432	.095
	18 and above years	-.40000	.41664	.337
15-17 years	Below 15 years	.62500	.37432	.095
	18 and above years	.22500	.38089	.555
18 and above years	Below 15 years	.40000	.41664	.337

* The mean difference is significant at the .05 level.

The result of the analysis in Table 2 showed that students whose age was low were significantly different in their job performance from those whose age was either moderate or high. Also students whose age was moderate

were significantly different from those who were high in academic use of social media among secondary school students.

Hypothesis two: There is no significant influence of gender on academic use of social media among secondary school students. The independent variable in this hypothesis is gender (male and female); while the dependent variable is academic use of social media among secondary school students. The statistical analysis technique deployed to test this hypothesis was Independent t-test analysis. The results of the analysis are presented in Table 3.

TABLE 3

Independent t-test analysis of the influence of gender on academic use of social media among secondary school students (N=622)

Gender	N	\bar{X}	SD	t-value	p-value
Male	360	55.6694	4.15764		
	262	57.3626	3.27334	-5.472*	.000
Female	622	56.3826	3.89825		

* Significant at $P < .05$ level, $df = 620$.

The result in Table 3 revealed that the calculated t-value of -5.472 is higher than the p-value at .05 level of significance with 620 of degrees of freedom. With this result the null hypothesis that gender does not significantly influence academic use of social media among secondary school students was rejected. This implies that gender significantly influence academic use of social media among secondary school students. Hypothesis three: There is no significant influence of Self-concept on academic use of social media among secondary school students. The independent variable in this hypothesis is Self-concept low, moderate and High; while the dependent variable is academic use of social media among secondary school students. The statistical analysis technique deployed to test this hypothesis was one-way analysis of variance (ANOVA). The results of the analysis are presented in Table 4.

TABLE 4

Summary of data and one-way ANOVA of the influence of Self-concept on academic use of social media among secondary school students (N=622)

Self-concept	N	\bar{x}	SD		
Low	155	56.0000	3.58931		
Moderate	314	56.5764	4.08405		
High	153	56.3725	3.80250		
Total	622	56.3826	3.89825		
Source of variance	SS	Df	Ms	F	Sig of F
Between group	34.502	2	17.251	1.136	.322
Within group	9402.430	619	15.190		
Total	9436.932	621			

*Significant at $P < .05$ level, $df = 2, 619$.

The result on Table 4 revealed that the calculated F-value of 1.136 was higher than the P-value at .05 level of significance, with 2 and 619 degree of freedom. With this result the null hypothesis was rejected. This result therefore implied that, Self-concept significantly influences academic use of social media among secondary school students. Since Self-concept has significant influence on academic use of social media among secondary school students, a post hoc analysis was employed using Fishers' Least Significant Difference (LSD) multiple comparison analysis. The result of the analysis is presented in Table 5.

TABLE 5

Fishers' Least Significant Difference (LSD) multiple comparison analysis of the influence of Self-concept on academic use of social media among secondary school students

LSD

(I) Self-concept	(J) Self-concept	Mean Difference (I-J)	Std. Error	Sig.
Low	moderate	-.57643	.38259	.132
	High	-.37255	.44416	.402
moderate	Low	.57643	.38259	.132
	High	.20388	.38426	.596
High	Low	.37255	.44416	.402
	moderate	-.20388	.38426	.596

* The mean difference is significant at the .05 level.

The result of the analysis in Table 5 showed that students whose Self-concept is low are significantly different in their job performance from

those whose Self-concept is either moderate or High. Also students whose Self-concept is moderate are significantly different from those who are High in academic use of social media among secondary school students.

DISCUSSION OF FINDINGS

This section is concerned with the discussion of findings that emerged from the results of the analysis. The discussion is presented in accordance to the variables of the study. The result of the first hypothesis indicated that, age significantly influenced academic use of social media among secondary school students. The findings are in line with the view of in Abu-Shanab and A-Tarawneh (2013) who indicated that the extensive use of Facebook by students with extraverted personalities will lead to poor academic performance. The authors concluded also that self-regulation and goal orientation (related to performance) characterized the students who are more in control of this social activity, and this better academic performance. Although the majority of social media users are young adults, statistics shows that number of order social media users are picking up.

The result of the second hypothesis study indicated that, gender significantly influenced academic use of social media among secondary school students. The finding is in line with the view of Yasemin (2011) who found a significant differences between genders in all the four categories. The difference in making new contacts was found among males, while the differences in the other three user purposes were found among the female respondents. The findings showed that gender influence Facebook usage. The study did not examine the extent to which the differences influence academic use of social media platform. The old saying "Men are from Mars, women are from Venus" holds water when it comes to how men and women use social media. Females use social media less than men for business reasons, whereas women use social media to share more personal information than men, revealing more about their personal lives. Women are more vocal, expressive and willing to share. In other words, women are biologically wired for social networking.

The result of the third hypothesis indicated that, Self-concept has a significant influence on academic use of social media among secondary school students. The findings are in line with the view of Halder and Kaltun (2018) who revealed that there are significant positive correlations

between personality and attitude towards the use of Facebook of postgraduate male and female students. The study also showed significant positive correlations between self-concept and attitude towards the use of Facebook among post graduate urban and rural students. The study did not show a correlation between self-concept and academic use of Facebook which the present study seeks to find out.

Sari, Siswadi and Sriati (2017) also established a relationship between self-concept and the use of social media by students. The main aim of the study was to find out whether there is relationship between social media user and self-concept of adolescents in Indonesia. The researchers adopted a descriptive correlation with cross sectional design to select 252 subjects as sample of the study. The instrument used by the researchers to generate data for the study was a questionnaire. In analyzing the data, the researcher used Rank Spearman Correlation test to observe relationship between the variables and canonical trials in order to determine the most dominant factor related to social media usage. The results of the study showed that, majority of the adolescents who use social media in Indonesia have positive self-concept and are quite good in social adjustment. The result further showed that, variables of social media usage have weak relationship between self-concept variable ($r_s = 0.224$) and social adjustment variable ($r_s = 0.254$). The result means that self-concept is a dominant factor of adolescents' social adjustment. In that case, social adjustment is a product of learning, which means that use of social media as factor for social adjustment plays a key role in academic performance of students vis-a-vis the use of social media.

CONCLUSION/ RECOMMENDATIONS

Based on the results of the study the following conclusions were reached. Age, Gender, and Self-concept significantly influenced academic use of social media among secondary school students. On the basis of the findings of this study, the following recommendations were made:

1. Young individuals should be encouraged to work in the reference library, because they possess the right energy for effective service delivery.
2. Effective policies should be implemented to motivate or encourage the young individuals to become good students in the academic library.

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