

# **ACCESSIBILITY OF ICT INFRASTRUCTURE AND USE OF SOCIAL MEDIA BY STUDENTS OF IGNATIUS AJURU UNIVERSITY OF EDUCATION**

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## **Abstract**

The study investigated the effect of accessibility of ICT infrastructure and use of social media for learning by students of Ignatius Ajuru University of Education, Port Harcourt. In pursuance of the objective of the study, a research question and a null hypothesis were formulated to guide the study. The study was a survey research. A total of 677 students constituted both the population and sample size of the study. The researcher developed an instrument titled: Accessibility of ICT Infrastructure and Use of Social Media (AIUSMQ) Questionnaire. The instrument has a reliability index of .78 determined using Cronbach alpha reliability package in SPSS 17. The instrument was administered personally by the researcher with the help of two research assistants. Data generated from the field were analysed using Mean, Standard Deviation for the research question. The hypothesis was tested using Pearson Product Moment Correlation Coefficient at .05 level of significance. The findings from the data analysis showed that there is a positive significant relationship between accessibility and use of social media for learning by students of Faculty of Humanities, Ignatius Ajuru University of Education, Port Harcourt. It was recommended that the university management should strive to develop an ICT policy which will be aimed at initiating and sustaining the availability and accessibility of ICT infrastructure to the overall academic and otherwise benefits of the students.

**Keywords: Accessibility, ICT, Utilisation, Social Media**

## **Introduction**

Data and Communication Technology (ICT) has become, inside an extremely brief timeframe, one of the fundamental structure squares of current society. ICTs have effectively changed the social, financial and political spaces all inclusive. Through ICTs, the world has been decreased to a worldwide town. As indicated by Salawu (2008), ICT have empowered the globalized world gotten enormously interconnected, associated and without outskirts. Spencer and Smith (2009) bolster this statement by expressing that ICT are changing the world quickly by making a separation less and borderless universe of momentary correspondence. This momentary correspondence offers confidence to the perspective on Edewor, Imhonopi and Urim (2004) that ICTs include innovations that can procedure various types of data (voice, video, sound, text and information) and encourage various types of interchanges among human specialists, among people and data frameworks, and among data frameworks.

This correspondence medium as indicated by Garai (2006) covers Internet administration arrangement, media communications gear and administrations, data innovation hardware and administrations, media and broadcasting, libraries and documentation focuses, business data suppliers, organize based data administrations, and other related data and correspondence exercises.

Web based life are assortments of Internet sites, administrations, and practices that help joint effort, network building, cooperation, and sharing just as encourage social communication, and empower consultation across partners (Junco, R., Merson, D and Salter, D. W. (2010); Bryer and Zavatarro, 2011). These advances incorporate websites, wikis, Facebook, MySpace, YouTube, Flickr, Twitter, WhatsApp, IMO, Duo, and ZOOM and so on. Boyd and Ellison (2007) portrayed person to person communication sites as frameworks that permit people to develop an open or semi-open profile inside a limited framework, articulate a rundown of different clients with whom they share an association, view and cross their rundown of associations and those made by others inside the framework. Online life is the current pattern with which our lives are directly characterized. Saini and Abraham (2015) state that online life have attacked all parts of human lives especially in instruction as students of all levels utilize web based life devices like Face book, Youtube, Twitter and so forth to speak with their companions and instructors. The creator further revealed that presently, there is a nonstop increment of the nearness and utilization of web-based social networking for instructive purposes as internet based life have the capability of permitting students to become dynamic members in information development as opposed to aloof customers of substance. Subsequently the learning procedure turns out to be progressively participatory and communitarian.

Georgiadou, Makkonen, Siakas and Siakas (2014) opine that the utilization of web based life in training is quickly growing as it can possibly empower new instructive understudy focused routes through their base up approach for supporting information exercises that bridle aggregate knowledge dissimilar to the various leveled instructor focused methodologies. Instructors and advocators of new computerized education are certain that web based life and interpersonal organization energizes the advancement of transferable specialized and social abilities of significant worth in formal and casual learning. As indicated by Livingstone, Sonia, Brake and David (2010), internet based life improves understudies' association in adapting particularly those understudies who might typically pass on class. In the perspective on Jerkins (2006), internet based life in training gives a culture of investment which comprises of "space" that permits commitment, sharing, tutoring and an open door for social connection. Thus, Brein (2012) saw that some interpersonal organizations are unequivocally instructively centered with instructional substance and instructive condition making it a discussion for research arrange just as educating and learning system. As indicated by Hew and Cheung (2013), the utilization of web-based social networking in instruction gives:

- **Immediate Feedback:** The utilization of online life furnishes understudies with quick criticism. Informal communication permits instructors to furnish understudies with quick instructional direction in and outside of the homeroom as it has demonstrated that prompt input as well as information on results assume a significant job in the learning procedure.
- **Understanding and perceiving of students' needs:** The utilization of internet based life permits instructors to rapidly perceive understudies' adapting needs. The ceaseless accommodation of perspectives of understudies give educator plentiful material in order to survey understudy learning. Understudies who are experiencing issues with specific ideas can be distinguished at before stages and suitable intercession can be given to them.
- **Efficient correspondence:** Use of long range informal communication in or outside the study hall gives enough chances to change the detached and instructor focused single direction correspondence to a functioning and understudy focused two-way correspondence. Instructors can share connects to various learning assets, can post schoolwork tasks, and offer news with the understudy network. Web based life additionally help in including understudies, who in any case don't participate in the showing learning process. For instance, if an understudy doesn't feel great talking in a homeroom of more than 40-50 understudies, they may post a "Tweet" to add to class conversation.
- **Collaborative environment:** The utilization of internet based life as a learning instrument empowers coordinated effort. The fundamental idea of internet based life animates joint effort among students and educators. To an enormous degree it underpins the hypothesis of social constructivism, whose significant conviction is that understudies learn better in their normal social condition. It permits instructors to shape a learning network and in this manner boosting understudy connection on the online life stage. Internet based life gives a stage to understudies to give criticism on one another's tasks, work in gatherings to make content, to pose inquiries, and to begin a conversation. Accordingly, understudies learn by associating with their companions.
- **Increased understudy commitment:** Social media can possibly build understudy commitment which is essentially understudies' inclusion in exercises and conditions that are connected with excellent learning. The recognizable condition and casualness of the earth makes the learning procedure all the more fascinating and pleasant. They are naturally increasingly responsive to material introduced on long range interpersonal communication locales. The utilization of internet based life instruments gives instructors a chance to arrive at understudies who are reluctant to be a functioning individual from the showing learning process.
- **Beside the significance of openness of ICT framework to the utilization of web based life for learning,** period of ICT use assumes significant jobs in the utilization of online networking for learning. It's been uncovered that

long range interpersonal communication destinations are turning into a lifestyle among undergraduates and youthful grown-ups substantially more than the more established ages in their day by day exercises and data gathering (Lewis, 2008). With the developing access to the Internet, numerous youngsters and youthful grown-up use web-based social networking for changed explanation which incorporates associating with companions examining course related issues with speakers and friend, working together with different undergraduates universally. The current paper is on the connection between openness of ICT framework and utilization of online life by undergraduates of Ignatius Ajuru University of Education.

### **Purpose of the Study**

To determine the relationship between accessibility of ICT infrastructure and utilization of social media by students of Ignatius Ajuru University of Education

### **Research Question**

Is there any relationship between accessibility of ICT infrastructure and utilisation of social media by students of Ignatius Ajuru University of Education?

### **Null Hypothesis**

There is no significant relationship between the Accessibility of ICT infrastructure and utilization of social media by students of Ignatius Ajuru University of Education.

### **Research Methods**

The study adopted the survey research design. The research design or plan was viewed as suitable for the examination as it tried to get genuine beliefs of undergraduates' understanding on the openness and utilization of online life for learning.

The population of the study (otherwise number of inhabitants in the examination) included 671 students drawn from five departments of the faculty of Humanities, Ignatius Ajuru University of Education, Port Harcourt. The sample size for the study included 671 students using the Census sampling technique. Census sampling technique was considered appropriate for the study since the population is of manageable size. The researcher developed an instrument titled: Accessibility of ICT Infrastructure and Use of Social Media Questionnaire (AIIUSMQ) which was used for data collection. The instrument has twenty-five items and have three sections: A, B and C. Section A solicited for respondent's demographic data - Name of the institution, faculty, and course of study, level of study, gender and age. Section B solicited for information on accessibility of ICT infrastructure while section C solicited for information on utilisation of social media for learning. The instrument was developed on a four-point rating scale of: Adequately Accessible (4 points), Accessible (3 points), Fairly Accessible (2 points) and Not Accessible (1 point)

for accessibility of ICT. Very Often (4 points), Often (3 points), Fairly Often (2 points) and Not Often (1 point) for use of social media respectively. To establish the reliability of the instrument, trial test was conducted using a sample of 40 respondents selected from faculty of Vocational and Technical Education, Ignatius Ajuru University of Education, Port Harcourt. The researcher personally administered the questionnaires to the respondents at their faculty. All the copies administered were returned with valid responses. The responses were scored and the data obtained were analysed using Cronbach's Alpha reliability coefficient package in SPSS 20.0 and it yielded a reliability coefficient of .78 which showed that the instruments were reliable and capable of measuring the intended events with consistency. Mean and Standard Deviation was used to answer the research questions. Hypotheses was tested using **Pearson Product Moment Correlation Coefficient**, all hypotheses were tested at 0.05 level of significance. The instrument of the study was a four-point rating scale therefore a criterion means (a midpoint means) of 2.5 was adopted. The midpoint score between agree and disagree is 2.5. Every item with a response score at 2.5 and above implied agrees and below 2.5 implied disagree with the item statement.

### Data Analysis and Presentation of Results

**Research Question:** *What relationship exists between accessibility of ICT infrastructure and the use of social media by students of Ignatius Ajuru University of Education?*

r-value of Pearson Product Moment Correlation was used for answering the research question. The result of the analysis is presented in Table 1.

**Table 1: The result of r-value of the relationship between accessibility of ICT infrastructure and the use of social media by students of Ignatius Ajuru University of Education (N=636)**

Variables	$\sum X$	$\sum X^2$	$\sum XY$	r-value
	$\sum Y$	$\sum Y^2$		
Accessibility of ICT infrastructure	14526	343290		
			211439	0.47
Use of social media by students	8974	143108		

The result presented in Table 1 revealed that the r-value of .47 which when compared with extent scale of correlation indicates a moderate and positive relationship between accessibility of ICT infrastructure and the use of social media by students of Ignatius Ajuru University of Education. This result implies that there exists moderate and positive relationship between accessibility of ICT infrastructure and the use of social media by students of Ignatius Ajuru University of Education.

### Hypothesis Testing

**Hypothesis:** There is no significant relationship between accessibility of ICT infrastructure and the use of social media by students of Ignatius Ajuru University of Education

Pearson Product Moment Correlation was used for testing this hypothesis. The result of the analysis is presented in Table 2

**Table 2: Result of Pearson Product Moment Correlation of the relationship between accessibility of ICT infrastructure and the use of social media by students of Ignatius Ajuru University of Education (N= 636)**

Variables	$\sum X$	$\sum X^2$	$\sum XY$	r-value
	$\sum Y$	$\sum Y^2$		
Accessibility of ICT infrastructure	14526	343290		
			211439	0.47
Use of social media by students	8974	143108		

The result in Table 2 reveals that the calculated r-value of 0.47 is greater than the critical r-value of 0.088 at .05 level of significance with 634 degrees of freedom. With this result, the null hypothesis which assumed no significant relationship between accessibility of ICT infrastructure and the use of social media by students of Ignatius Ajuru University of Education was rejected. This implies that there is significant relationship between accessibility of ICT infrastructure and the use of social media by students of Ignatius Ajuru University of Education. nmm

### Major Findings of the Study

There was a statistically significant relationship between accessibility of ICT infrastructure and the use of social media for learning by students in the Faculty of Humanities, Ignatius Ajuru University of Education. Hence, hypothesis two which assumed no significant relationship of accessibility of ICT infrastructure and the use of social media for learning by students was rejected.

### Accessibility of ICT Infrastructure and Use of Social Media

The finding on the relationship between accessibility of ICT infrastructure and use of social media for learning by students of Faculty of Humanities, Ignatius Ajuru University of Education indicated a significant relationship between accessibility of ICT infrastructure and use of social media. The relationship was a moderate and positive one hence, Hypothesis two which assumed no significant relationship between accessibility of ICT infrastructure and use of social media for learning by students was rejected. The observed significant relationship between accessibility of ICT infrastructure and use of social media for learning by students corroborates the findings of Zhang, Wu, Bagchi and Udo (2012) state that even though university students use social media for various reasons but the most important factor that affect the usage of social media is infrastructure of which when accessible can

enhance the use of social media tools for learning. The finding of the study is in agreement with that of Richardson (2011) that accessibility of ICT infrastructure has a significant influence on the use of social media as it provides students with online access and opportunity to collaborate and cooperate with teachers and peers from around the world in order to share knowledge and experience that are educational, social or otherwise. It is equally in line with that of Willard (2016) that accessibility of ICT infrastructure enhances the educational value through the presence of the Internet which allows for collaborative and cooperative learning through the use of social media.

## **Summary, Conclusion and Recommendations**

### **Summary and Conclusion**

The study investigated the influence of accessibility of ICT infrastructure on use of social media for learning by students of Ignatius Ajuru University of Education, Port Harcourt. In pursuance of the objectives of the study, a research question and null hypothesis were formulated to guide the study. The study is a survey research. A total of 677 students constituted both the population and sample size of the study. The researcher developed an instrument titled: Accessibility of ICT Infrastructure and Use of Social Media (AIUSMQ) Questionnaire. The instrument has a reliability index of .78 determined using Cronbach alpha reliability package in SPSS 17. The instrument was administered personally by the researcher with the help of six trained research assistants. Data generated from the field were analysed using Mean, Standard Deviation for the research question. The hypothesis was tested using Pearson Product Moment Correlation Coefficient. The hypothesis was tested at .05 level of significance. The findings from the data analysis showed that there is a positive significant relationship between accessibility and use of social media for learning by students of Faculty of Humanities, Ignatius Ajuru University of Education, Port Harcourt. Based on the findings of the study, it was concluded that accessibility of ICT infrastructure has a significant positive relationship on the use of social media for learning by students in Faculty of Humanities, Ignatius Ajuru University of Education, Port Harcourt.

### **Recommendation**

The university management should strive to develop an ICT policy which will be aimed at initiating and sustaining the availability and accessibility of ICT infrastructure to the overall academic and otherwise benefits of the students.

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