Pre-service Teachers' Frequency of Use and Attitude towards Social Media Utilization for Educational Purposes in Tertiary Institutions in Minna, Niger State, Nigeria.

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Abstract

This study examined pre-service teachers' frequency of use and attitude towards social media utilization for educational purposes in tertiary institutions in Minna, Niger State, Nigeria. The influence of gender was also examined. The study employed a descriptive survey design. Five research questions and two hypotheses were answered and tested respectively. A multi-stage sample technique was used to select 1,200 pre-service teachers from two tertiary institutions. A researcher-developed questionnaire was used to elicit responses from respondents. The questionnaire is made up of two sections and its' items were validated by two educational technology experts and two test and measurement experts. The reliability of the questionnaire was determined as 0.89 using the Cronbach alpha formula in a single administration during the pilot study. Data gathered were analyzed using percentage, mean, standard deviation, and Kruskal-Wallis non-parametric test statistics. Based on the findings that emanated from the study, it was therefore recommended that educational tasks that will help the pre-service teachers should be carried out on social media platforms to encourage them to use such for educational purposes.

Keywords

Pre-service teachers, Social media, education, frequency of use, attitude.

INTRODUCTION

The world has been transformed into a global village where distance is no longer a barrier as a result of advancements in Information and Communication Technology (ICT). ICTs are broad range of technologies that are facilitated by electronic means in the acquisition, processing, transmission, dissemination and storage of information in form of text, voice, graphics and video(Brakel&Chisenga, 2003). The education

sector is not left untouched as technology has resoundingly permeated into the classroom to become part of learning, teaching, and research process (Mikre, 2011; Yusuf, 2005).

The evolution of ICT and the Internet has been the driving force behind the new mode of teaching and learning which has transformed the entire educational landscape and altered the educational equation in a fundamental way (Aduwa-Ogiegbaen, 2013). The use of ICT enhances an interactive learning environment which translates the teaching and learning process to such that learners can interact with knowledge medium actively and constructively (Yusuf, 2005). Social media are social interactions among people through smartphones and computer using social media platforms to create, exchange or share ideas and information in virtual communities. The virtual community is a social network of people who are connected to interact through a chosen type of social media platform thereby eliminating geographical distance to acquire mutual interest and goals through specific means and networks (Yusuf, 2005). In tertiary institutions, students are allowed to actively use social media to fully engage with their fellow students, lecturers, parents, and the community (Lockyer& Patterson, 2008). Importantly, using social media for information, entertainment or educative purpose largely depend on the attitude of users.

Attitude is the behaviour, feelings, pre-disposition of someone towards a particular thing/object whether good or bad, positive or negative among others. It is a summary evaluation of a psychological object captured in such attribute dimensions as good-bad, harmful-beneficial, pleasant-unpleasant, and likeable-dislikable (Ajzen, 2001). Lee, Cho, Gay, Davidson, and Ingraffe (2003), argue that understanding the usefulness of social media has a direct influence on students' attitude and satisfaction level. That is, a positive attitude towards social media platforms will increase the utilization and quality of participation of that platform. Therefore, in general, being aware of students' attitudes towards using social media for learning can help adapt and use these platforms more constructively and practically. Students' attitudes towards the use of these social media platforms constitute a significant factor to study; the researcher believes that it is important to identify and understand students' attitudes towards the use of social media. A larger percentage of social media users in Nigeria are students in institutions of higher learning. Babalola, (2007) defines tertiary education which is also referred to as post-secondary education is the educational level following the completion of a school providing secondary education. Bamiro, (2012) also defines tertiary education as including universities as well as institutions that teach specific capacities of higher learning such as colleges, polytechnics, monothecnics, nursing schools, and universities. These institutions admit, train and graduate students in different fields. It is expected that graduates from these institutions will work in different sectors of the economy and contribute their quotas towards making Nigeria a developed nation. Graduates from these institutions that offer education-based courses are referred to as pre-service teachers who will work in the educational sector of the economy to contribute their quotas towards making Nigeria a developed nation.

Pre-service teachers are students who are studying educational courses or learning the art of teaching profession in various higher institutions of learning. Pre-service teacher is a student in the tertiary institution who is involved in learning the art of teaching and also acquires mandatory teaching practice programme experience by practising teaching profession under the supervision of an experienced teacher by gradually taking on more classroom management and instructional responsibilities. The purpose of pre-service experiences is to allow students to practice the strategies and concepts they have been learning in their tertiary education courses.

Aim and Objectives of the Study

The aim of this study was to investigate pre-service teachers 'frequency and attitude towards the utilization of social media for educational purposes in selected tertiary institutions in Minna metropolis, Niger State, Nigeria. The objectives of the study are to:

(i) Investigate how frequently do pre-service teachers in tertiary institutions in Minna Metropolis use social media;
(ii) Find out whether pre-service teachers in tertiary institutions in Minna Metropolis utilize social media for educational purposes;
(iii) Examine the influence of gender on tertiary institution pre-service teachers' utilization of social media for educational purposes in Minna Metropolis;
(iv) Determine the attitude of pre-service teachers in tertiary institutions in Minna Metropolis towards the use of social media;
(v) Examine the influence of gender on pre-service teachers' attitude towards utilization of social media;

1.4 Research Questions

The following research questions were answered in this study:

1. How frequent do pre-service teachers in tertiary institutions in Minna, Niger State, Nigeria utilize social media?
2. Do pre-service teachers in tertiary institutions in Minna Metropolis of Niger State utilize social media for educational purposes?
3. Does gender influence pre-service teachers' utilization of social media for educational purposes in tertiary institutions in Minna Metropolis of Niger State, Nigeria?
4. Do pre-service teachers in tertiary institutions in Minna metropolis have positive or negative attitude towards utilization of social media?
5. Does gender influence pre-service teachers' attitude towards utilization of social media?

1.5 Research Hypotheses

The following hypotheses were tested in this study:

HO1:   There is no significant difference between male and female pre-service teachers' attitude towards utilization of social media.

HO2:   There is no significant difference between male and female pre-service teachers' utilization of social media for educational purposes in tertiary institutions in Minna Metropolis of Niger State, Nigeria.

Methodology

The research design that was adopted for this study is a descriptive survey design. The methodology involved the use of a questionnaire to elicit needed data from respondents on their attitude and utilization of social media for educational purposes.

The population of this study comprised of 31,087 regular students in the 2014/2015 academic session from two selected government-owned tertiary institutions in Minna metropolis, Niger State. The institutions are the Federal University of Technology Minna and Niger State College of Education Minna. The target population for the study is made up of 3,485 pre-service teachers from the two selected schools.

A multi-stage sampling technique was employed in sampling respondents for this study. Firstly, purposive sampling procedure was used to select two government-owned tertiary institutions in Mina metropolis of Niger state. The institutions were purposefully selected because they have regular students schooling to obtain a certificate. Also, one school each was purposefully selected from the two institutions based on the fact that the selected Schools offer science or technology education courses. Thereafter, the stratified sampling technique was employed to select 1,200 pre-service teachers across all level comprising of 600 male and 600 female students (more than one-third of the target population) from the selected Schools. One researcher-designed closed-ended questionnaire was used in collecting needed data. The reliability of the research instrument was determined after a trial testing using a simple random sample of 50 students from School of Information and Communication Technology (ICT) of the Federal University of Technology, Minna who are part of the population but not part of the study sampled for this study. The administration was done once and a reliability coefficient of 0.89 was obtained using Cronbach Alpha formula.

The data gathered from the administration of research instruments were analysed using descriptive and inferential statistics. Research questions were answered using mean, standard deviation and percentages while the hypothesis was tested using non-parametric statistics of Krusskal Wallis H-test statistic in Statistical Package for Social Sciences (SPSS) version 20 at 0.05 level of significance.

Results

Research Question 1: How frequent do pre-service teachers in tertiary institutions in Minna, Niger State, Nigeria utilize social media?

Table 1: Frequency of pre-service teachers' utilization of social media

S/N	Subscribed Social Media Platforms	N	% of every hour	% of once daily	% of once weekly	% of once monthly	% of once in a year
1	Facebook	962	22.77	24.32	29.52	11.85	10.60
2	Google	426	5.16	11.50	16.67	46.95	19.71
3	Yahoo	680	6.47	18.09	32.06	31.77	11.62
4	Twitter	624	11.70	34.62	17.46	19.55	16.67
5	WeChat	218	1.38	11.46	31.19	26.61	29.36
6	Instagram	604	49.01	17.72	30.96	18.54	16.89
7	Youtube	948	16.25	27.53	27.85	22.15	6.22
8	Snapchat	926	31.10	40.07	22.89	5.18	0.76
9	Skype	378	0.53	10.32	17.46	25.93	45.77
10	Whatsapp	984	41.67	31.10	21.65	3.76	1.83

Table 1 shows the frequency of usage of social media platforms among pre-service teachers who are subscribers of the ten selected social media platforms. The table reveals that 72.77% users of Whatsapp,

71.17% users of Snapchat, 66.73% users of Instagram, 47.09% users of Facebook, and 43.78% users of Youtube use them on a regular basis (every hour + at least once in a day responses).
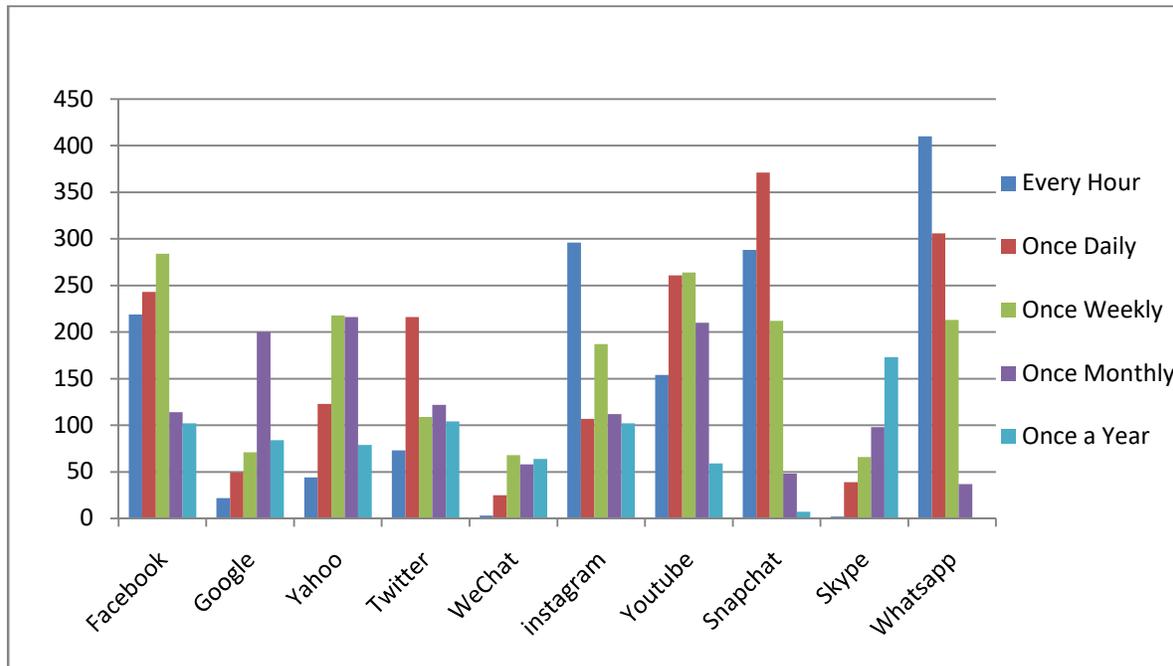

Figure 1: Bar-chart showing pre-service teachers' frequency of usage of social media platforms subscribed for.

Figure 1 shows the Whatsapp, Instagram, Facebook and Snapchat, are the social media platforms being frequently used by pre-service teachers in tertiary institutions in Minna Metropolis of Niger State, Nigeria.

Research Question 2: Do pre-service teachers in tertiary institutions in Minna Metropolis of Niger State utilize social media for educational purposes?

Table 2: Utilization of Social Media for Educational Purposes

S/No	Statement	N	Yes	%	No	%
1	I join group discussion on social media websites for revision on concepts taught in class	1,200	235	19.58	965	80.42
2	I upload questions on social media websites to get answers from other subscribers on difficult assignment	1,200	376	31.58	821	68.42
3	I interact with my lecturers through social media platforms to seek clarifications and further explanations on class activities	1,200	199	16.58	1001	83.42
4	I download and watch videos with instructional content on social media	1,200	417	34.75	783	65.25
5	I brainstorm with my course mates through social media on difficult class assignment	1,200	288	24	912	76
6	I interact with course mates through social	1,200	684	57	516	43

	media on group project and assignment					
7	I join academic professional groups similar to my course of study on social media to update my knowledge	1,200	678	56.5	522	43.5
8	I easily get update from my colleagues on social media on activities in classrooms whenever I am unavoidably absent in class	1,200	711	59.25	489	40.75
9	Usage of social media assist me to socialize with others thereby helping me in collaborative learning	1,200	566	47.17	634	52.83
10	The motive behind my regular usage of social media is to share, read, watch and download educative and instructional contents	1,200	442	36.83	758	63.17
	Percentage Yes and No response			**38.3%**		**61.7%**

Table 2 shows the percentage Yes and No responses of pre-service teachers in tertiary institutions in Minna metropolis to the utilization of social media for educational purposes. The table reveals that 61.7% of the responses of pre-service teachers are No to the 10 items. This indicates that pre-service teachers in tertiary institutions in Minna metropolis of Niger state do not utilize social media for educational purposes.

Research Question 3: Do pre-service teachers in tertiary institutions in Minna metropolis have positive or negative attitude towards utilization of social media?

Table 3: Attitude of Pre-service Teachers towards the Utilization of Social Media

No	Items	N	Mean	S.Dev.	Decision
1	I feel it is important to be able to find any information whenever I want on social media	1200	2.86	0.13	Agree
2	I feel it is important to be able to access various social media platform any time I want	1200	2.82	0.32	Agree
3	I think it is important to keep up with the latest information about my discipline on social media.	1200	2.63	0.13	Agree
4	I regularly use social media because I find information I gathered through them useful	1200	2.63	0.13	Agree
5	Social media make me build intimate relationship with people.	1200	2.73	0.23	Agree
6	Social media allow me to keep in touch with many friends	1200	2.84	0.34	Agree
7	Interaction on social media is enjoyable	1200	2.59	0.08	Agree
8	I get useful information on diverse areas	1200	2.74	0.24	Agree

	on social media				
9	Information I obtain on social media are never misleading	1200	2.55	0.05	Agree
10	I feel interaction on social media enhances learning	1200	2.49	0.01	Disagree
	Average Mean		**2.77**		

Decision Mean = 2.50

Table 3 shows the mean response of attitude of pre-service teachers in tertiary institution in Minna, Niger State towards the utilization of social media. A total number of 1,200 pre-service teachers responded to the 10 items. The table shows that respondents agree to 9 out of 10 items. The average mean response to all the 10 items is 2.77 which is up to 2.50. This indicates that pre-service teachers in tertiary institutions in Minna metropolis have positive attitude towards the utilization of social media.

Testing of Null Hypotheses

HO$_1$: There is no significant difference between male and female pre-service teachers' utilization of social media for educational purposes in tertiary institutions in Minna metropolis of Niger State, Nigeria.

To test this hypothesis, Kruskal-Wallis H Test (non-parametric equivalence of One-way ANOVA is applied on the male and female score regarding their utilization of social media for educational purposes as presented in Table 4.

Table 4: Kruskal-Wallis Result of Male and Female Score regarding their Utilization of Social Media for Educational Purposes

Group	N	Mean Rank	df	Chi-square	P
Male	600	598.49			
			1	1.622^{ns}	0.203
Female	600	602.51			

NS: Not significant at 0.05 level

Table 4. Shows the Kruskal-Wallis result of male and female score regarding their utilization of social media for educational purposes. The result indicated that there was no statistically significant difference between the two groups, X^2 (1) = 1.622, p = 0.203 with a mean rank score of 598.49 for male pre-service teachers and 602.51 for femalepre-service teachers. On the basis of this, hypothesis two was not rejected. This implies that both male and female pre-service teachers do not use social media for educational purposes in tertiary institutions in Minna metropolis of Niger state, Nigeria.

HO$_2$: There is no significant difference between male and female pre-service teachers' attitude towards

utilization of social media.

To test this hypothesis, Kruskal-Wallis H Test (non-parametric equivalence of One-way ANOVA is applied on the male and female score regarding their attitude to social media as presented in Table 5.

Table 5:Kruskal-Wallis Result of Male and Female Pre-service Teachers' Attitude Score towards Utilization of Social Media

Group	N	Mean Rank	df	Chi-square	P
Male	600	604.50			
			1	5.383^{ns}	0.060
Female	600	596.50			

NS: Not Significant at 0.05 level

Table 5 shows the Kruskal-Wallis result of male and female mean attitude score towards utilization of social media. The result indicated that there was statistically no significant difference between the two groups, X^2 (1) = 5.383, p = 0.060 with a mean rank score of 604.50 for male pre-service teachers and 596.50 for female pre-service teachers. On the basis of this, hypotheses one was not rejected. This implies that both male pre-service teachers and their female counterparts have positive attitude towards utilization of social media in tertiary institutions in Minna metropolis of Niger state, Nigeria.

Discussion of Findings

Finding that emanated from this study also revealed that Whatsapp, Twitter and Facebook are the major social media platforms being frequently utilized by pre-service teachers in tertiary institutions in Minna metropolis, Nigeria. This finding is in agreement with the earlier findings of Buzzetto-More (2012) who in their studies found that majority of students that subscribe to social media platforms frequently utilize such media on daily basis.

Also, findings on whether pre-service teachers in tertiary institutions in Minna metropolis utilize social media for educational purposes shows that pre-service teachers in tertiary institutions in Minna metropolis of Niger state do not utilize social media for educational purposes. This finding is supported by the earlier finding of Lejla, Burim and Betim (2014) who found that teachers and students utilize social media majorly for personal use only with no connection to teaching and learning responsibilities. The corresponding hypothesis result indicates that there is no significant difference between male and female

pre-service teachers' utilization of social media for educational purposes in tertiary institutions in Minna metropolis of Niger State, Nigeria. This is also in line with Sieverding and Koch (2009) result which says that female students utilize social media especially for educational purposes more than their male counterpart. This finding also negates the findings of Mozee, S. (2012) who investigated The impact of social media use on academic performance at one urban university high student usage of social media among college finds out that males students actually exhibited a higher percentage of social media use than their female counterpart.

Finally, finding of this study on pre-service teachers' attitude towards the utilization of social media revealed that pre-service teachers have positive attitude towards the utilization of social media. This finding is supported by the earlier findings of Stanciu, Mihai and Aleca (2012) who found that students have positive attitude towards the use of social networking sites and other web based technologies. The corresponding hypothesis finds out if there is significant difference between male and female pre-service teachers' attitude towards utilization of social media. The result shows that gender has no influence on pre-service teachers' utilization of social media for educational purposes in tertiary institutions in Minna metropolis of Niger state Nigeria. This is in line with Sieverding and Koch (2009) result which says that female students utilize social media more than their male counterpart. This finding is in contrast with the findings of Kathleen R. S. (2012) who investigated college students' perceptions of aptitude and attitude toward social media technology and technical computer technology which reveals that female students tend have positive attitude toward social technology aptitude than males while males tend to have a higher aptitude toward technical technology than female students.

Conclusion

Based on the findings of the study, it can therefore be concluded that pre-service teachers in tertiary institutions in Minna, Nigeria, frequently used several social media platforms of which Whatsapp, Facebook, Youtube and Twitter are the major ones among them. Such platforms are frequently being used but majorly for activities that have no educational value and also, pre-service teachers have positive attitude towards the use of social media. Finally, gender has no influence on pre-service teachers' attitude and utilization of social media for educative activities in selected tertiary institutions in Minna, Nigeria.

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