



Perceived Usefulness and Ease-of-Use of Pre-Service Teachers towards the Integration of Social Media for Education in Universities in Niger State.

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Abstract

This study investigated perceived usefulness and ease-of-use of pre-service teachers towards the integration of social media for education in universities in Niger state. The study adopted the survey approach of descriptive research design. The population for the study was 5321 Education students from the two universities in Niger State. Research Advisor was used to obtain 357 and purposive sampling technique was used to select the respondents. The research instrument for this study was a 20 item questionnaire titled ‘pre-service teachers’ perception towards effective integration of social media for education in universities in Niger State Questionnaire’ (PPSMQ) designed by the researcher and restructured by

two experts in the field of Counselling Psychology and Educational Technology. The instrument was trial tested on 20 pre-service teachers and its reliability yielded 0.85 and 0.83 respectively using Cronbach Alpha statistical tool. From the findings, pre-service teachers' perception towards the usefulness and ease-of-use of social media for education proved positive. In addition, there was no significant difference between male and female pre-service teachers' perceived usefulness and ease-of-use of social media for education in Niger State. Among other recommendations made was that: Government and policy makers in education should endeavour to introduce the use of social media into teacher education curriculum in the universities with support on procurement and a workable ICT policy.

Keywords: Ease-of-use, Pre-service Teachers, Social media, Usefulness

Introduction

Information and Communication Technology (ICT) plays a vital role in the development of any nation. It has been an instrument for achieving social economic, education and scientific development (Adedeji, 2010). Social media as an aspect of Information Communication Technology have influenced the education sector especially in the area of teaching, learning and research.

A major evolution has occurred in the way Web technology is being used in several settings. It is not a technical revolution, but it is a social revolution (An & Williams, 2010; Conole &

Alevizou, 2010; Voithofer, 2007).

The new social sharing platform is transforming the Web technology in many important ways: from Web 1.0 (read only) environment to Web 2.0 (both read and write technologies (Anderson, 2007; Greenhow, 2009). Web 2.0 has the potentials to design more interactive environments in which users become content developers, producers, editors and evaluators. In other words, these new technologies change how contents are developed, used, shared and distributed, and make sharing these contents among members and

participants much easier than it was in the past (An & Williams, 2010).

Social media offers several powerful digital tools that support participation and interaction in various digital formats. Blogs, wikis, podcasting, social bookmarking and social networking tools are some of the examples. Contemporary students are growing up by using these technologies and they are considered as “digital natives”. As a result of the emergent of these technologies, students can easily create information individually or as a group and share it with others.

Although these technologies are not designed specifically for use in teaching and learning, they have various characteristics that provide opportunities for student publication, support active and social learning and enhance effective and efficient feedback to learners in educational settings (Albion, 2008; Wheeler & Wheeler, 2009). Several researchers have emphasized that the development and growth of new Web 2.0 technologies offer new benefits to education at all levels (for instance Anderson, 2007; Bennett, Bishop, Dalgarno, Waycott & Kennedy, 2012; Bull et al, 2008; Ulrich, 2008; Voithofer, 2007). In spite of their popularity and advantages, these technologies have many challenges. One of the most important challenges concerns the teachers who have difficulty trying to guide and scaffold students using these technologies in their teaching environment. Counsellors, through effective orientation and other counselling services can help students to utilize social media technologies. Oluwatimilehin (2021) sees counselling as a set of procedures used in assisting individuals to solve problems that arise in various aspects of their lives or to assist them in maximizing their overall development so that they can be more useful to the society in which they live.

Studies of Kabilan (2010) whose findings revealed that the use of an online learning environment facilitates learning in terms of improvement of skills, confidence, motivation and attitude even out of the class. The author opined that social media applications can join teachers and students via a course link which includes setting up video conferences, posting comments for the class, putting assignments, announcements, documents and discussion topics. Erving, Gardener and Schmih (2001) findings on gender and the internet reported that

while females used e-mails more than males, the latter used the web more. Al-Mothana (2017) also reported that males exhibited more favourable attitudes towards web-based learning than females. The findings of technology acceptance model (TAM), Venkatesh and Morris (2000) reported that perceived usefulness was more salient for men while perceived ease of use was more salient for women. Adebayo (2020) and Baderinwa (2021) shows that pre-service teachers perceived usefulness and ease-of-use to be positive without difference in gender response towards social media and other technologies.

Statement of the problem

Despite pre-service teachers' positive feelings, they have also been faced with several challenges while integrating social media technologies into their educational settings. Grant and Mims (2009) categorized such challenges regarding the use of social media applications and their implications for teaching and learning into five categories of limitation including immature applications, longevity of applications, limited number of applications, unconsolidated services and issues concerning security and ethics. Although these technologies benefit both teachers and their students in various respects, many teachers still have little or no experience with Web 2.0 technologies.

Since majority of the pre-service teachers are digital immigrants and are trying to incorporate these technologies to their classrooms. It means that they might have different perceptions and attitude towards the benefits of using social media applications. By examining pre-service teachers' perceived usefulness, ease of use and attitude towards effective integration of social media into education in universities in Niger State, not only will this study fill a void that currently exists in the research but it will also be useful in adapting social media technologies into education environments.

Purpose of the study

The aim of this study was to investigate pre-service teachers' perceived usefulness, ease of use and attitude towards effective integration of social media for education in Universities in Niger State, Nigeria. Specifically, the study will:

1. Determine pre-service teachers' perceived usefulness of social media for education;
2. Determine pre-service teachers' perceived ease of use of social media for education;
3. Examine the influence of male and female pre-service teachers on their perceived usefulness of social media for education in Niger State;
4. Examine the influence of gender on pre-service teachers' perceived ease of use of social media for education;

Research Questions

The following questions were raised to guide this study:

1. How do pre-service teachers' perceived usefulness of social media for education in Niger State?
2. How do pre-service teachers' perceived ease of use of social media for education in Niger State?

Research Hypotheses

The following null hypotheses will be tested at 0.05 level of significance :

1. H_{01} There is no significant difference between male and female pre-service teachers' perceived usefulness of social media in education in Niger State.
2. H_{02} There is no significant difference between male and female pre-service teachers' perceived ease of use of social media in education in Niger State.

Significance of the Study

The findings of this study would be of benefit to lecturers in higher institutions especially those in the universities, students, government, curriculum designers, professional organizations, school administrators and future researchers. The result of would make the aforementioned people to be fully aware of social media and how they could be used for educational purpose.

Methodology

The study employed descriptive survey method. The population for this study was all pre-service teachers in universities in Niger State. The target population for the study was 5321 which consist of all University pre-service teachers from faculty/school of education in universities in Niger state, Nigeria. Purposive sampling procedure was used to select respondents across the institutions. The universities in Niger state was selected purposively for this research and pre-service teachers from the two universities were purposively selected. Research Advisors' Model (2006) sample size table was used to determine 357 sample size for the study based on the population of faculty/school of Education in each of the selected Universities and finally, purposive sampling technique was used to select the respondents.

Research Instrument

The research instrument for this study was a questionnaire titled 'pre-service teachers' perception towards effective integration of social media for education in universities in Niger State Questionnaire' (PPSMQ) was designed by the researcher and restructured by two experts in the field of Counselling Psychology and Educational Technology was used to obtain information from the respondents with the help of research assistants.

The questionnaire was divided into two sections; first section will consist of various items on the respondents' demographic data which include student's Institution/University and Gender. Section II has Sub-divisions (A) Pre-service teachers' perceived usefulness of social media in education and (B) Pre-service teachers' perceived ease of use of social media in education which contained 10 items each. The response mode for the items was on a four point scale response modes of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD)

RESULTS AND FINDINGS

Table 4.1: Showing distribution of respondents on the basis of Sex and Institution.

Sex	Frequency	Percentage
Male	178	49.9%
Female	179	50.1%
Total	357	100%

Institution	Frequency	Percentage
IBB University	194	54.3%
FUT Minna	163	45.7%
Total	357	100%

Table 1 shows that 178 of the respondents were male while 179 are female with 49.9% and 50.1% respectively. Also, 194 of the respondents are from Ibrahim Badamasi Babangida University Lapai and 163 of the respondents are from Federal University of Technology Minna with 54.3% and 45.7% respectively.

Research Question 1

How do pre-service teachers' perceived usefulness of social media for education in Niger State?

Table 2: Pre-Service Teachers' Perceived Usefulness of Social Media for Education

S/N	Items	Mean (X)	STD	Rank
1	Using Social Media can give me greater control over my work.	3.15	0.498	8th
2	Using Social Media can improve my learning performance.	3.11	0.471	9th
3	Using social media can reduce the time I spend on unproductive activities	3.10	0.842	10th
4	Using Social Media can improve the quality of the work I do.	3.24	0.762	6th
5	Using social media increases my productivity.	3.27	0.893	4th
6	Social media supports critical aspect of my learning.	3.26	0.863	5th
7	Social Media can allow me to accomplish more scope than would otherwise be.	3.32	0.653	1st

8	Social Media can enable me to accomplish task more quickly.	3.30	0.747	2 nd
9	Using social media can save me time.	3.28	0.678	3 rd
10	I find social media useful in learning.	3.21	0.623	7 th
Grand Mean		3.427		

Decision mean: 2.50

Table 2 reveals that social media can allow me to accomplish more scope than would otherwise be was ranked highest having the mean score of 3.32 out of 4. This was followed by social media 4can enable me to accomplish task more quickly, using social media can save me time, and that i find social media useful in learning 3.30, 3.28 and 3.2 respectively. The lowest mean score was 3.11 that using social media can improve my learning performance and that using social media can reduce the time I spend on unproductive activities. However, the grand mean score for perceived usefulness was found to be 3.22. Using 2.50 as the average benchmark, it can then be inferred that pre-service teachers' perceived the usefulness of social media in education positively.

Research Question 2

How do pre-service teachers' perceived usefulness of social media for education in Niger State?

Table 3: Pre-Service Teachers' Perceived Ease of Use of Social Media for Education

S/N	Items	Mean (X)	STD	Rank
1	Using Social Media can give me greater control over my work.	3.26	0.620	8 th
2	Using Social Media can improve my learning performance.	3.30	0.607	9 th
3	Using social media can reduce the time I spend on unproductive activities	3.28	0.658	10 th

4	Using Social Media can improve the quality of the work I do.	3.19	0.704	6 th
5	Using social media increases my productivity.	3.19	0.688	4 th
6	Social media supports critical aspect of my learning.	3.00	0.000	5 th
7	Social Media can allow me to accomplish more scope than would otherwise be.	3.18	0.617	1 st
8	Social Media can enable me to accomplish task more quickly.	3.24	0.600	2 nd
9	Using social media can save me time.	3.28	0.702	3 rd
10	I find social media useful in learning.	3.30	0.711	7 th
Grand Mean		3.274		

Decision mean: 2.50

It could be noted from table 4.3 that the respondents were of the opinion that I find the social media platforms easy to use and that I find it easy to get social media platforms to do what I want it to do as the mean score were 3.30 and 3.30 respectively. Moreover, it was revealed that I find it easy to recover from errors encountered while using social media to be 3.28. On the other hand I often become confused when I use Social media only with a mean score of 3.26. Also, the social media provides helpful guidance in performing task and it is easy for me to remember how to perform task on social media with mean score of 3.19 and 3.18 respectively. On the final analysis, the least mean score for interacting with the social media is often frustrating was found to be 3.0 with 2.50 as the benchmark; it means that the respondents have positive perception towards the ease of use of social media for education in Niger State.

Research Hypotheses

All hypotheses were tested at 0.05 level of significance.

HO₁: There is no significant difference between male and female pre-service teachers' perceived usefulness of social media for education in Niger State.

Table 4: *t*-test difference of Male and Female Pre-service Teachers Usefulness of Social Media for Education.

Gender	No	\bar{x}	SD	Df	t-cal.	p-value
Male	178	2.932576	0.5040044	362	0.20	0.110
Female	179	2.943537	0.3674597			

Ns= not significant at 0.05

Table 4 indicates that the stated null hypothesis was accepted. This was because $t(2.932) = 0.20$, p-value of 0.110 greater than 0.05 level of significance. By implication, the stated null hypothesis was established thus: there was no significant difference between male and female pre-service teachers' perceived usefulness of social media for education in Niger State.

HO₂: There is no significant difference between male and female pre-service teachers' perceived ease of use of social media for education in Niger State.

Table 5: *t*-test difference of Male and Female Pre-Service Teachers Perceived Ease of Use of Social Media for Learning

Gender	No	\bar{x}	SD	Df	t-cal.	p-value
Male	178	3.197222	0.5040044	362	0.226	0.122
Female	179	3.226172	0.3674597			

Ns= not significant at 0.05

Table 4.6 indicates that the stated null hypothesis was accepted. This was because $t(3.197) = 0.226$, p-value of 0.122 greater than 0.05 level of significance. By implication, the stated null hypothesis was established thus: there was no significant difference between male and female pre-service teachers' perceived ease of use of social media for education in Niger State.

Discussion of Findings

The perception of pre-service teachers' towards the usefulness of social media in education was examined using research question one. The result of the mean score established that pre-service teachers positively perceived the usefulness of social media for education.

This finding agreed with the earlier findings of Kabilan (2010) whose findings revealed that the use of an online learning environment facilitate learning in terms of improvement of skills, confidence, motivation and attitude even out of the class. The author opined that social media applications can join teachers and students via a course link which includes setting up video conferences, posting comments for the class, putting assignments, announcements, documents and discussion topics. It also agrees with (Akbulut, 2007; Shahrokni, 2009) whose findings revealed that dynamic structure of social media makes it appropriate for learning functional and grammatical aspects of the language like learning writing, vocabulary and reading. (Johnson, 2006) also concurred in his finding that pre-service teachers' perceptions of the kinds of social interaction surrounding the use of social media have the potential to shape the principles by which knowledge, values, practices, skills and teaching strategies are negotiated, learned and applied to teaching/learning activities in real-life situations. Conversely, (Vivian, 2011) revealed that social media use can be distractive when exaggerated and result in procrastination, distraction and privacy issues.

From the findings, it could be deduced that integrating social media into learning process in the university will be a welcomed idea. Efforts to make it work should therefore be made by all stakeholders at the University level.

Based on the mean values of the results of the pre-service teachers' perceived ease of use of social media for learning, the respondents' perception was positive. However, some were of the opinion that social media are not meant for education purposes but only for social engagements and that social media will make students to become lazy, the grand mean score showed positive perception. This revealed that there will not be much difficulty in making use of social media for learning. This finding was in agreement with the findings of

Lin et al (2008) whose findings revealed that factors, such as perceived ease-of-use, may mediate the effect of subjective norm on technology acceptance. Based on the findings of the aforementioned research, perceived ease-of-use, and subjective norm appeared to be promising variables for explaining behaviour in distance learning environments. TAM pointed out that better understanding the factors that influence perceived usefulness and perceived ease-of-use in online learning has potential to improve the design and implementation of learning systems. The findings of Al-Mothana (2017) revealed that participants perceived the integration of WhatsApp into their education to be easy, fun and useful. Longe, Boateng, Longe and Olatunbosun (2010) concurred with the finding by stressing further that perceived ease-of-use and perceived usefulness have been primarily tested and discussed in the content of organization settings and with reference to computer based processing. It also corroborates with the findings of Adebayo (2020) and Baderinwa (2021) shows that pre-service teacher' perceived usefulness and ease-of-use to be positive.

From the above findings, it can be deduced that perceived ease of use has prominent role in the meta-analysis of the relationship between the characteristics of an innovation and its adoption. This showed that majority of the pre-service teachers are not likely to have problem if social media should be integrated into teaching at the university level. Capacity building of administrators and managers will therefore play a major role.

The influence of pre-service teachers' gender on their perceived usefulness and ease of use of social media for education was examined by hypotheses 1 and 2. The results of the t-test established no significant difference between male and female pre-service teachers' perceived usefulness and ease of use of social media for educational purposes.

These findings on gender agrees with the earlier findings of Atan, Azli, Rahman and Idris (2002) whose findings revealed that absence of gender disparity is obvious when females and males are in learning environment that requires the constant use of specific computer software to support their learning activities. However, this present findings refute the earlier findings of Jackson, Erving,

Gardener and Schmih (2001) whose findings on gender and the internet reported that while females used e-mails more than males, the latter used the web more. Al-Mothana (2017) also reported that males exhibited more favourable attitudes towards web-based learning than females. The findings contradicted technology acceptance model (TAM), Venkatesh and Morris (2000) who reported that perceived usefulness was more salient for men while perceived ease of use was more salient for women. Adebayo (2020) and Baderinwa (2021) shows that pre-service teachers perceived usefulness and ease-of-use to be positive without difference in gender response towards social media and other technologies. It can therefore be established that there was no significant difference between male and female pre-service teachers on their perceived usefulness and ease-of-use to use social media in education. Gender should therefore not be considered as a major criterion in the integration of social media for education.

Conclusion

The result obtained from data gathered and analyzed in this study indicated that the perception of pre-service teachers toward the usefulness of social media for learning was positive. It also showed that the pre-service teachers positively perceived the ease of use of social media in learning. Moreover, there was no significant difference between male and female pres-service teachers on their perceived usefulness as well as the ease of use of social media for education. This showed that females are also coming up in matters concerning ICT and so should not be discriminated against. Appointments that will involve the use of social media can thus be given to anybody without gender biasness.

Counselling Implications

1. Counsellors should motivate undergraduate students to use social media for educational purposes as they perceived it useful and easy to use.
2. Counsellors should let undergraduates be aware of the importance of social media for learning and also for educational purposes by orientating them order than using it to watch unnecessary skits.

3. Counsellors should also leverage on social media in counselling undergraduate students, this will help to improve their skills
4. Counsellors should also encourage lecturers to engage university students in meaningful classroom discussions on social media.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Government should give the necessary supports on the procurement of all needed social media facilities. This could be in form of free excise duty, reduction in their prices and free supply of the facilities into higher institutions. This will encourage all students to embrace its integration;
2. Government and policy makers in education should endeavour to introduce the use of social media into teacher education curriculum in the universities so that both the lecturers and students will be using it for instructional purposes;
3. Pre-serve teachers' should help themselves by making use of social media for instructional purpose and shift their foci from using it for fun and entertainment;
4. Government should formulate workable ICT policy that will be friendly to all levels and categories of educational programme, universities not being left out

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