

## Postgraduate Students Integration of Social Media to Area Of Studies and Self-Efficacy in South-West Nigeria

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### Abstract

Social media is an interactive technology, that came into reality out of fun for interaction, but it has advanced towards a powerful tool for instruction globally. However, despite its use and relevance, the utilization and its self-efficacy to learning have not been significantly be aware of. Therefore, this study investigate social media in the context of area of study for learning and its self-efficacy. Descriptive research of cross-sectional survey method and purposive sampling was used to sample 2,458 postgraduate students across the universities in South-west, Nigeria. Through administering the instrument of study questionnaire. The findings revealed that there were no significant differences between postgraduate students to use social media for learning based on their area of study  $t(2,2456)=5.93;p>0.05$ . Self-Efficacy,  $t(2,2454)=0.56;p>0.57$ . The study concluded that postgraduate students' have positive perception towards social media. It was however recommended that the use of social media should be encouraged in facilitating learning.

### Key words

Integration, Area of Studies, Instruction, Self-efficacy, Social Media.

### Introduction

The advent of ICT have turned education to content delivery via e-learning and m-learning making it ubiquitous and extensively contribute to pedagogical process [1]. Mobile technologies also facilitate myriads of experiences through social networking sites. Andreas and Michael explained that social media is an internet-based application which are constructed on the ideological and technological foundations of Web 2.0 [4]. It also allows the creation, exchange of user-generated contents, ideas, social relation and communication. It empowers universal access and communication procedures. Social media has significantly changed the techniques through which tertiary institutions, organizations, communities, and individuals communicate [5].

The stated objectives of teaching and learning can be achieved through the roles played by both the students and the instructors in the various institutions of learning. This also bring about progressive positive change in behaviur via learning. Mangal and Mangal defined learning as a process that progressively brings relative permanent behavior change in the learners via experience or related practice [20]. The author further describe learning not to be absolutely permanent due to the fact that habits are been picked up, interests are been cultivated and develop, skills are acquired through varied experiences, while knowledge are more often gained due to learning at diverse of occasions and sometimes can be unlearned, improved upon or substituted by some set of differently developed behavior. Students' Learning behavior has a good link with how students learn and their social comprehension, knowledge and behavior using diverse social media to relay experiences in form of learning collaborations. The association between the use of social media and the learning does not transpire in isolation, it incorporated varieties of influences and not students' indisposition to learn or act as obligatory by the institution. These varied learning behaviors have to do with resource dissemination, communication, learning collaboration to

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complete an assigned task, motivation and students' engagement Powell & Tod and dexterity possessed to influence learning termed self-efficacy [25].

The theory of self-efficacy beliefs are vital areas of human motivations and attitude based on the influence it has on the actions that can affect one's life. Bandura viewed self-efficacy as a belief on someone's ability and capabilities to accomplish the cause of action expected in order to manage prospective situations [9]. The theory of self-efficacy observed people's tendencies to engage in different activities that have high self-efficacy than those ones with less self-efficacies. The implication is that self-efficacy has influence on people's ability to learn, motivate and improve performance, as people more often make attempt to learn in order to perform task which they believe they will successfully accomplish [14].

Self-efficacy is people's belief about their abilities to exhibit certain levels of achievement performance that influences the events that influence their lives [10]. It is also about the nature of how people think, motivate themselves and behave. Such beliefs produce myriads of effects via four major processes: cognitive, affective motivational and selection processes. In other words, perceived self-efficacy is defined as the belief of people about their abilities to select levels of activities that have authority over actions that influence people's lives [9, 27]. Moreover, Green explained that inadequate skills in the use of computer is a severe barrier for women and girls in accessing the new information communication technology [15]. self-efficacy can be explained as a self-regulated that has to do with the prediction of use and whether the user of a certain technology would be able to use the available social media for learning purposes or not irrespective of the students' gender and area of study.

Compeau and Higgins survey professionals' computer self-efficacy [11]. Several hypotheses that have relationship with self-efficacy were tested, including encouragement of others, others' use, support, computer self-efficacy, outcome expectations, affect, and anxiety. The finding revealed that computer self-efficacy has a significant influence on individuals' expectations of the outcomes of using computers. It also has influence on emotional reactions to computers, as well as the actual use of computer. Thus, Self-efficacy was found to play an important role in positive influencing and determine individuals' feelings and behaviors. People with moderately high self-efficacy in the use of computers more often received more enjoyment from their use and experienced less computer anxiety. This implies that individual's self-efficacy has positive influence on encouraging use of computers.

According to Tsai and Tsai, internet searching strategies by the users exemplified high internet self-efficacy by the students in tertiary institutions to acquire better information surfing strategies than the low Web-based learning self-efficacy students in carrying a given task [30]. Shung-Ling and Pei-Yi conducted a study on 76 Taiwan students on the impact of self-efficacy in web based learning [26]. The results revealed that self-efficacy was a pointer in predicting students' improve performance vis-a-vis the chosen and use of that learning strategies thereby providing instant response and feedback of change in behavior. The study further attested that students with high level of self-efficacy towards the utilization of technology depicted high-level learning strategies and critical thinking. Similarly, students that provide detailed response are students with high self-efficacy.

Peng, Tsai and Wu investigated the college students' perception, on attitudes and self-efficacy towards the utilization of the internet and social media and internet [24]. The instruments used were the internet Attitudes Survey (IAS) for assessing students, and the Internet Self-efficacy Survey (ISS) that measured students' internet self-efficacy. The result revealed that students tend to appreciate the potential usefulness of the Internet. Gender differences, attitudes and self-efficacy were also included in the study as the moderating variables. The study revealed that male students expressed more confidence in the use of the internet and demonstrated better communicative self-efficacy towards the usage of the internet than the female students in different disciplines and area of studies.

According to Matthews (2014), area of specialization has its root in fields such as philosophy, epistemology and naturalism. Many educationists such as Pestalozzi, Froebel, Dewey, etc. were influenced by these fields and they applied many of the ideas expressed therein in their teaching practice. Since the end of the 19th century, significant educational movements have been developed in various countries and their focus has been on the natural environment as a learning field [32]. The author further described field of study to form part of courses from a wide-ranging spectrum of sciences including Archaeology, Biology, Geology, History as well as from numerous social sciences as it is often implemented in formal tuition and adult education programs as part of the practical exercises carried out by the students. The field of study also relates to students' activities that were accomplished in learning environments outside the conventional classroom, such as, historical areas, office environments, national parks, monuments and museums, zoos, seaside, wild life areas, wetlands, etc. The presumption was based on the most valued experiences of the students that are gained via pictures and images taken by the senses [32]

The area of study cut across disciplines like pure sciences, humanities and applied sciences. The interrelatedness of these areas of study to all disciplines exemplifies that there is a significant need to study the students' perception towards the utilization of social media in facilitating learning as it relates to forms of communication via websites. Popular social media such as Facebook, Twitter, Myspace, Instagram and so forth have been called the public display of connection and give people opportunities to satisfy the need to socially identify with others, who share similar interests and are often comprised of their closest friends and peers. These social media enable the users to snap photos, transform or enhance the image, and upload to their friends as a way of documenting the moment on the students' mobile devices [29].

The use of social media is connected with most educational techniques and it often forms part of universities projects in facilitating learning. It allows students to participate in the design of the educational activity and to acquire in anywhere, anytime, on the move experience and knowledge through the research process [21]. Specifically, it helps students acquire new knowledge and skills and formulate interesting attitudes towards learning as the changes through learning takes place on knowledge, skills and attitudes levels [17].

The work that the students undertake in the field can vary since they may be involved in the description of a place, the comparison of visual or other data, in some kinds of research or a survey in general, in other words, things which cannot be achieved as effectively in the traditional classroom (Michael & Deanna 2013). Adopting the field study as a suitable educational method in social media depends on the learning object. However, it is useful since it can relate to many of the conditions for effective learning in university education such as the active participation and the activation of the students' existing plans [18]. More specifically, in field of study the students are offered ample opportunity for active participation in diverse of disciplines since students are called upon either in groups or individually to plan, implement, apply, re-plan and evaluate certain activities relating to the theoretical background of their studies. The learning via the use of social media through different field of study is concerned with consolidating knowledge and the acquisition or development of skills and attitudes through the media. In this way studying becomes more active and experience-related with emphasis on the local environment (Clover, 1998).

The use of social media like (facebook, Youtube, twitter and whatsapp) by business education students today is resulting to mass failure of business education students in academic achievement [12]. This is because students spend more time chatting with their friends rather than engaging in studying and research. A growing number of Nigerian scholars agree that addiction to social media sites have become a distractive technology to students' academic work in higher institutions. Among the scholars are Lawal, and Oluwatoyin who surveyed 1,860 Facebook users from the Lagos State University and found that 90 per cent of the students could not get up to cumulative grade point average (CGPA) above 3.50 because of the considerable time are spent on

social media than on home work and studying time [22]. Area of study is paramount to students' academic. Studies on postgraduate students on social media for learning regarding to their area of studies and self- efficacy of are lacking. It is on this the study investigated post graduate students integration of social media to learning south-west Nigeria the study further intend to close the gap created by the previous researchers on self-efficacy of social media and the postgraduate student on area of study.

### **Research Hypothesis**

The following hypothesis were tested in the study;

1. There is no significant differences in the variation of the postgraduate students' in the use of Social media in learning based on Area of Study.
2. There is no significant differences in the influence of the postgraduate students' self-efficacy on their Adoption to use Social media in learning.

### **Methodology**

The design of this study was a descriptive research type using cross-sectional survey method. The study population composed of the postgraduate students in all the six states in the South-west, Nigeria. They are; Oyo, Ogun, Ondo, Ekiti, Osun and Lagos States. The target population included the postgraduate students in the Federal and the state owned universities in six states in Southwestern Nigeria. Ten Universities were purposively sampled out of fifteen universities in the South western Nigeria . National Open University of Nigeria (NOUN) was deliberately excluded from the study because it operates on open and distance learning mode and provide lectures to students in study centers; which may not readily make the postgraduate students accessible to give adequate information needed for the research. The Private Universities and 4 other state and federal universities; Federal University, Oye Ekiti, Ekiti State . Federal University, Oye Ekiti, Ekiti State Tai Solarin University of Education, Ijagun, Ijebu-Ode, Ogun State. Osun State University, Osogbo, Osun State. Ondo State University of Science and Technology, Okiti pupa, Ondo State were excluded because they are fairly young in terms of years of establishment and do not have a regular pattern of postgraduate programs. Stratified sampling technique was used to select the postgraduate students based on students' institution, department, university type, course of study and gender. A total sample of 2,458 out 4000 copies of the questionnaires that were randomly distributed to the postgraduate students from Humanities, Pure Sciences and Applied Sciences, were retrieved from analysis.

The research instrument used was a research designed questionnaire, sub-divisions into 2 sections contains 10 items numbered 1 - 10 and were patterned after the five point-likert type rating scale format of Strongly Agree (SA) - 5 points, Agree (A) - 4 points, Disagree (D) - 3 points Strongly Disagree (SD) - 2 points and Undecided (UD) -1 point for section A, B. and D. While section 'C' is measured by rating as competent and proficient (CP) - 1, Proficient (P) - 2, Moderately Proficient (MP) - 3, Very Proficient (VP) - 4 and Highly Proficient (HP) - 5.

The validity of both face and content of the instrument were done by 3 experts in the field of ICT namely: a lecturer in the Department of Test, Measurement and Evaluation, a lecturer in the Department of Library and Information Science and a lecturers in the Department of Educational Technology all in the University of Ilorin. Ilorin, Nigeria. The reliability of the instrument was administered on postgraduate students Federal University of Technology Akure (FUTA) Minna Niger State, Nigeria, which was not among the study. The split half method was used and computed with the Cronbach's alpha in SPSS packages version 2.1 was used to run the data for the reliability, the values were 0.79 for area of study and self-efficacy 0.82. The data were analyzed using ANOVA and t-test at 0.05 level of significance.

### **Hypothesis Testing**

Hypothesis 1: There is no significant differences in the variation of the postgraduate students' in

the use of Social media in learning based on Area of Study.

In determining whether there is any significant difference in postgraduate students' use of Social media in learning based on areas of study, the null hypothesis was tested by using one way Analysis of variance (ANOVA) as shown in Table 1.

**Table 1.** Postgraduate Students' use Social Media in Learning based on Area of Study

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.869	2	.435	.032	.968
Within Groups	32992.098	2455	13.439		
Total	32992,967	2457			

Table 1 reveals  $F(2, 2455) = 0.32, p > 0.05$ , for postgraduate students' use of social media in learning based on area of study. There is no significant difference in postgraduate students' use of social media in learning based on area of study.

Hypothesis 2: There is no significant differences in the influence of the postgraduate students' gender self-efficacy on the use Social media in learning.

In determining whether there is any significant difference in postgraduate students' self-efficacy in the use of social media in learning, the null hypothesis was tested by using t-test as shown in Table 2.

**Table 2.** Postgraduate Students' Self-efficacy in the Use of Social Media in Learning based on gender

Gender	No	X	SD	Df	T	Sig. (2-tailed)
Male	1530	32.52	4.39	2456	0.56	0.57
Female	928	38.62	4.53			

Table 24 indicates that  $t(2454) = 0.56, p = 0.57$ . This means that the stated null hypothesis was accepted. This was as a result of the t-value of 0.56 equals to 0.57 equivalent to 0.05 alpha value. The implication was that, there was no significant difference between male and female postgraduate students' self-efficacy in the use of Social media in learning. Despite there was no significant in the self-efficacy in the use of Social media in learning by the postgraduate students,

## Discussions

On postgraduate students' use of social media in learning based on area of study indicates significant difference that is postgraduate male and female students are positive on perceived use of social media in learning. The finding is in line with [2]. Alharbi and Changchit who established the significant difference on the perceived usefulness of students, lecturers and employees on perceived usefulness of integration of cloud computing to learning continuum [3, 6]. The findings, on postgraduate students' perceived ease of use of social media in learning based on area of study was positive therefore, postgraduate students should be encouraged to judiciously and continually use Social media in learning.

Also, The result of t-test analysis on male and female postgraduate students' and their area of study on use of social media in learning showed significant gender difference on area of study on perceived ease of use of social media in learning. The findings agreed with the study of Han, Nelson, and Wetter, who showed that social networking tool is not beneficial to male and female students despite their frequent use [16].

The finding negates that of Teo, Tam and Wei who earlier submitted that both men and women use World Wide Web equally [28]. From the findings, the perceived ease of use of social media in area of students' study was positive; therefore more researches are expected to be carried out in the future to identify the potentiality of the postgraduate students in the use of Social media in

learning.

This research explored the postgraduate students' perception of the integration of social media in learning in South-west Nigeria. The study specifically examined the postgraduate students perceived usefulness, ease of use, self-efficacy and intention towards social media in learning. The result obtained from data gathered and analyzed in this study indicated that the perception of postgraduate students was positive on the use of social media in learning. It also showed that the postgraduate students positively perceived usefulness, ease of use, self-efficacy and intention of social media in learning.

The findings in the research also established that postgraduate students' had a positive attitude towards using social media in learning and they have positive intention to its use. The result showed that there was a significant relationship among postgraduate students' perceived usefulness, ease of use, self-efficacy and intention to use social media in learning. The significant relationship was evident when each of the variables was used as dependent variable and others used as independent variables.

Moreover, there was no significant difference between male and female postgraduate students' intention, perceived ease of use, self-efficacy and intention to use social media in learning. Finally, there was a significant difference between male and female postgraduate students in their perceived ease of use, self-efficacy and perceived usefulness of social media in learning.

Based on the result of the hypothesis two, the result of the analysis using t-test of significance revealed that there was significant difference between both male and female postgraduate students' high positive perception in their self-efficacy towards the use of Social media in learning. These findings showed that there was difference in post graduate students' male response to using Social media in learning. The finding conforms to the study of Peng, Tsai, and Wu, who confirmed high proficiency of male and female college students' towards the Internet, but negates the findings of Compeau and Higgins and Webber who claimed that computer self-efficacy had a significant control over individuals, and played a significant role in individuals' feelings, behaviours [24, 11, 34]. Male and female lecturers are more interested in the use of ICT resources for teaching and research work. However, postgraduate students have higher positive interest in using Social media in learning.

Moreover, the study disagreed with Babalola and Tselio, Daskalakis and Papadopoulou who established it that there was no significant difference between male and female postgraduate students on self-efficacy in the use of ICT resources for educational research [7, 31]. It supported Debatin, Lovejoy, Horn, and Hughes, who concluded that Facebook use, self-efficacy as determinants of attitudes about general Internet and Wotana, Nicole, Ellisonb, LaeeqKhana, Fewins-Blissa and Graya, who claimed that Social media usage plays a significant role for students and that it was associated with higher levels of efficacy about college application procedures [13, 35].

The findings contradict Venkatesh and Davis who observed that computer self-efficacy is a strong predictor to other TAM variables [33]. From the findings of the difference between male and female postgraduate students' self-efficacy in the use of social media in learning, one can conclude that, gender is not a factor among postgraduate students' demonstration of efficacy in the use of social media in learning.

### **Discussion and Conclusion**

This research explored the postgraduate students' use of social media in learning in South-west Nigeria. The study specifically examined the postgraduate students use and self-efficacy towards social media in learning. The result obtained from data gathered and analyzed in this study indicated that the postgraduate students was positive on the use of social media in learning. It also showed that the postgraduate students positively perceived use and self-efficacy of social media in learning.

### Recommendation

Based on the findings and conclusions of this study the following recommendations are made:

- Postgraduate students should be encouraged to have a proper useful medium for accessing the social media.
- They should be educated on how to utilize the social media in their various universities for instructional purposes.
- They are encouraged to make use of the Social media in learning rather than for entertainment.

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