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**MEDIA MULTITASKING BEHAVIOUR AND  
SKILL LEVEL IN THE USE OF SOCIAL MEDIA  
APPLICATIONS FOR MOBILE LEARNING  
AMONG STUDENTS' IN TERTIARY  
INSTITUTIONS**

**Bolaji Hamed Olalekan**

**Department of Science Education,  
Faculty of Education,  
Al-Hikmah University, Ilorin, Nigeria**

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## Media Multitasking Behaviour and Skill Level in the Use of Social Media Applications for Mobile Learning among Students' in Tertiary Institutions

Bolaji, H. O.

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### Abstract

*Use of social media is prevalent among the digital natives. This study examined tertiary institution students' multitasking behaviour and skill levels in the use of social media applications for mobile learning. Questionnaire was used to gather information and the reliability test yielded 0.89. Random sampling was adopted to select 270 respondents. Three questions and two hypotheses were raised. percentages, Pearson Moment Correlation Coefficient and ANOVA were used. Results showed students engaged in multitasking activities through social media. Gender has interactive effect on multitasking behaviour and skill levels. Lecturers should explore multitasking behaviour and skill levels of students through social media and consideration should be given to gender*

## Introduction

Social media is fast becoming prevalent among students of various educational settings, and it is indeed gaining wider acceptance as a means of communicating and receiving information. Social media can be viewed as one of the information and communication technology (ICT) tools that many people of different age categories employ to socialize with peers and families. By layman definition, social media can be defined as an ICT tool that provides a platform for age-groups or the likes to share instant information about contemporary issues with their choice of concern. So many researchers as attempted to define and explain what social entails and as well as present the working principles among users. Jacka and Scott (2011) argued that there is no single recognized definition of social media and contend that it is a set of web-based broadcast technologies that enable the democratization of content, giving people the ability to emerge from consumers of content to publishers. Hence, social media have provided a platform for users to construct and communicate information thereby making them a publisher of information rather than being a consumer of information only.

Social media can play an essential role in the process of collaboration, community building, participation and sharing of vital information or socialization. One vital aspect of social media is that it uses mobile and web-based technologies to create highly interactive platforms through which individuals and communities share, discuss, and modify user-generated content (Jan & Hermkens, 2011). In the submission of Mazer, Murphy and Simonds (2007), social media exists in different forms such as internet forums, web-logs, social-blogs, microblogging, wikis, podcasts, rating, social bookmarking and social networks. The existence of a variety of social media application promotes its simultaneous use which is referred to as multitasking. Multitasking as a concept is the act of engaging in two or more activities at once through the use of technological software application (Wang & Tchernev, 2012). Therefore, social media multitasking can be view as the instantaneous engagement of two or more applications to communicate or share necessary information, skill, idea, value or knowledge among peers or groups. Media multitasking is an activity that involves engaging in multiple media activities simultaneously which include multiple windows on a single media platform and or multiple media (Vega, 2009). In a further explanation by Chowdhury, Finn, & Olsen (2007), media multitasking is a phenomenon born from the myriad interactive media platforms easily accessible to individual and this comprises of contemporary media that include multiple forms of information presentation, such as television newscasts displaying multiple messages on one screen that enable viewers to access several different news items simultaneously (e.g. Chowdhury, Finn and Olsen, 2007). By implication, social media multitasking involves the use of social media applications to engage in multiple activities in a single or more platforms to communicate or collaborate on particular tasks simultaneously. The opportunities offered by social media have caused a dramatic increase in multitasking behaviour among younger generations in the bid to socialize and share information (Wang & Tchernev, 2012). The behavioural pattern of the Net Generation in social media multitasking continues to increase as they either engage in watching TV, listening to music or reading while using the social media (Rideout, Foehr, & Roberts, 2010). Social media

multitasking behaviour can occur during interactions with multiple communication media, such as watching a program on TV, listening to one's iPod while chatting with friends on Facebook, and shopping online at Amazon around one medium, such as a personal computer, mobile phone, etc. (Bardhi, Rohm, & Sultan, 2009).

### Research Questions

1. Do students engage in social media multitasking behaviour in tertiary institutions in Kwara State?
2. What is the social media multitasking skill level of students in tertiary institutions in Kwara State?
3. Do students adopt social media multitasking for a mobile learning experience in a tertiary institutions in Kwara State?
- 4.

### Research Hypotheses

H<sub>01</sub>: There is no significant relationship between students' social media multitasking behaviour and skill level for mobile learning experience in tertiary institutions in Kwara State.

H<sub>02</sub>: There is no significant influence of gender on students' social media multitasking behaviour and skill level for mobile learning experience in tertiary institutions in Kwara State.

### Methodology

Descriptive survey method was adopted for this study. The target population was tertiary institution students in Kwara State comprising universities, polytechnic and colleges of education. A simple random sampling technique was used to select one university, polytechnic and college of education. A researcher-designed questionnaire was used to examine samples and the Cronbach Alpha of 0.89 value was recorded for the reliability of the instrument. The questionnaire was divided into four sections (A-D). Section A gathered response on demographic information of sample while section B examined the social media multitasking behaviour of students in Kwara State. Furthermore, section C investigated social media multitasking skill of respondents and section D finds out respondents' social media multitasking activities for mobile learning. The sampling technique adopted simple random in selecting 270 students from an estimated population of 21,243 across the three institutions based on Cohen, Manion and Morrison (2007) sample size determination. Research questions were answered through descriptive statistics of percentages while t-test was used to analyze hypothesis one and analysis of variance (ANOVA) was used to test hypothesis two.

### Results

Table 1:

Gender Distribution of Respondents

| Gender       | Frequency  | Percentage (%) |
|--------------|------------|----------------|
| Male         | 101        | 37.4           |
| Female       | 169        | 62.6           |
| <b>Total</b> | <b>270</b> | <b>100</b>     |

The respondents are made up of 270 in which 37.4% were males while 62.6% were female. It implies that majority (62.2%) of students in tertiary institutions in Kwara State are made up of female. Therefore, it could be deduced from Table 1 that girl child education has gain acceptability in the Nigeria society contrary to the initial perception

**Research Question One:** Do undergraduates engage in social media multitasking behaviour pattern in a tertiary institution in Kwara State?

Table 2:

Frequency and Percentage on Social Media Multitasking Behaviour

| SN | Statement  | Often (%)  | Sometimes (%) | Seldom (%) | Never (%) |
|----|--|------------|---------------|------------|-----------|
| 1  | Social media is one of the ICT tools I used for learning purpose                                 | 87 (32.2)  | 158 (58.5)    | 19 (7.0)   | 06 (2.2)  |
| 2  | I use social media for socializing with friends and family                                       | 189 (70.0) | 81 (30.0)     | 0          | 0         |
| 3  | Social media is used to communicate with friends simultaneously                                  | 105 (38.9) | 111 (41.1)    | 54 (20.0)  | 0         |
| 4  | I use a variety of social media applications at an instant for sharing and receiving information | 78 (28.9)  | 91 (33.7)     | 67 (24.8)  | 34 (12.6) |
| 5  | I do use two or more social media at an instant to communicate information                       | 132 (48.9) | 105 (38.9)    | 12 (4.4)   | 21 (7.8)  |
| 6  | I make a voice call to family and friends than using social media applications                   | 32 (11.9)  | 69 (25.6)     | 91 (33.7)  | 78 (28.9) |
| 7  | I prefer to use the Google search engine for learning purpose than social media applications     | 37 (13.7)  | 44 (16.3)     | 98 (36.3)  | 91 (33.7) |

Majority (70%) of students in tertiary institutions in Kwara State socializes with friend and family through social media utilization and 38.9% (105) make use of the social media as a medium to communicate with friends simultaneously. It implies that students engage in conference calling thereby communicating with two or more friends at a time. It is on rare occasion that students make voice calls to family and friends rather voice call is put through social media. It is evident in item six of Table 2 were 91(33.7%) of respondents selected the sometimes option. Furthermore, the majority (36.3%) of students of tertiary institutions in Kwara State seldom use Google search engine rather it is more preferable to use social media applications for the task. Therefore, it can be concluded that students of tertiary institutions in Kwara State engage in multitasking behaviour and more often than not, prefer to use social media for communicating with friend and family. Also, students engage in communication via conference calls whereby conversations are carried with two or more friends or family simultaneously.

**Research Question Two:** What is the social media multitasking skill level of undergraduates in tertiary institution in Kwara State?

Table 3:

Frequency and Percentage on Social Media Multitasking Skill Level

| SN | Statement   | Very High (%) | High (%)  | Moderate (%) | Low (%)   |
|----|---|---------------|-----------|--------------|-----------|
| 1  | Communicate and receive instructions through social media applications                      | 137 (50.7)    | 87 (32.2) | 32 (11.9)    | 14 (5.2)  |
| 2  | Engaging in downloads and listening to music simultaneously using social media applications | 198 (73.3)    | 34 (12.6) | 27 (10.0)    | 11 (4.1)  |
| 3  | Video stream and at the same time chat with social media applications                       | 78 (28.9)     | 91 (33.7) | 63 (23.3)    | 38 (10.1) |
| 4  | Read web materials and as well install new application files                                | 103 (38.1)    | 99 (36.7) | 33 (12.2)    | 35 (13.0) |
| 5  | Engage in two activities at a point in time on social media applications                    | 62 (23.0)     | 31 (11.5) | 91 (33.7)    | 86 (32.2) |
| 6  | Google search and at the same time interact with friends on social media                    | 97 (35.9)     | 86 (31.9) | 67 (24.8)    | 20 (7.4)  |
| 7  | Podcast and Vodcast on social media instantaneously   | 87 (32.2)     | 79 (29.3) | 68 (25.2)    | 36 (13.3) |

The social media multitasking skill level was examined in Table 3 and the level was determined through response mode of very high, high, moderate and low. From the response, the majority (50.7%) possesses very high skill and 32.2% possesses high skill in multitasking ability to communicate and receives instructions through social media applications. Also, 73.3% and 12.6% of respondents possesses very high and high skills in downloading and listening to music simultaneously using social media applications respectively. Furthermore, respondents engage in video streaming and at the same time chat with friends on social media applications. This is evident from the frequency of response possessing very high (28.9%) and high (33.7%) skills in carrying out these activities. Therefore, it can be concluded that students of tertiary institutions in Kwara State possesses very high and high skill levels in multitasking activities concerning the use of social media applications.

**Research Question Three:** Do undergraduates adopt social media multitasking for a mobile learning experience in a tertiary institution in Kwara State?

Table 4:

Frequency and Percentage on Social Media Multitasking for Mobile Learning

| SN | Statement   | Often (%)    | Sometimes (%) | Seldom (%)   | Never (%)    |
|----|---|--------------|---------------|--------------|--------------|
| 1  | I use social media applications for achieving my learning objectives and as well for socialization                                | 85<br>(31.5) | 91<br>(33.7)  | 55<br>(20.4) | 39<br>(14.4) |
| 2  | Social media is employed for carrying out classroom assignments and charting at the same time                                     | 77<br>(28.5) | 81<br>(30.0)  | 74<br>(27.4) | 44<br>(14.1) |
| 3  | Social media provides the opportunity to share and receive concrete information in my course of study                             | 87<br>(32.2) | 91<br>(33.7)  | 62<br>(23.0) | 30<br>(11.1) |
| 4  | Social media assist me to reach fellow students outside my classroom environment to solve a difficult task in the course of study | 95<br>(35.2) | 76<br>(28.1)  | 54<br>(20.0) | 45<br>(16.7) |
| 5  | Once am learning through social media applications, I ignore any communication initiated by friends or family                     | 65<br>(24.1) | 45<br>(16.7)  | 89<br>(33.0) | 71<br>(26.3) |
| 6  | Social media multitasking has encouraged me to use a mobile phone for learning  | 98<br>(36.3) | 91<br>(33.7)  | 45<br>(16.7) | 36<br>(13.3) |
| 7  | Engaging in social media multitasking distract my attention and don't use a mobile phone for learning                             | 61<br>(22.5) | 71<br>(26.3)  | 53<br>(19.6) | 85<br>(31.5) |

The use of social media multitasking for mobile learning was examined in Table 4 and from the responses supplied by students of tertiary institutions in Kwara State it can generally be deduced that they engaged often in using social media application for mobile learning in a multitasking approach. For instance, 98 (36.3%) of respondents were encouraged by multitasking approach to use social media through mobile phone for learning. Also, social media applications promote out of classroom discussion among students in solving difficult tasks in the course of study as 98 (36.3%) often engage in the act. Therefore, it can be concluded that respondents engage in the use of social media multitasking approach to learn through mobile phone.

**Hypotheses Testing**

H<sub>01</sub>: There is no significant relationship between undergraduates' social media multitasking behaviour and skill level for mobile learning experience.

Table 5:

Mean Representation based on Students' Multitasking Behaviour and Skill Level

Table 5:  
Mean Representation based on Students' Multitasking Behaviour and Skill Level

| Variable    | Mean  | Std. Deviation | N   |
|-------------|-------|----------------|-----|
| Behaviour   | 14.43 | 5.20           | 270 |
| Skill Level | 14.37 | 6.44           | 270 |

There was no mark difference between the mean of behaviour and skill level of students in the act of multitasking through the use of social media application. It then implies that students of tertiary institutions in Kwara State engaged in multitasking behaviour and possesses a very high skill level in multitasking activities through social media applications.

Table 6:

Relationship between Students' Multitasking Behaviour and Skill Level

| Variable  | Correlations        | Behaviour | Skill  |
|-----------|---------------------|-----------|--------|
| Behaviour | Pearson Correlation | 1         | .982** |
|           | Sig. (2-tailed)     |           | .000   |
|           | N                   | 270       | 270    |
| Skill     | Pearson Correlation | .982**    | 1      |
|           | Sig. (2-tailed)     | .000      |        |
|           | N                   | 270       | 270    |

\*\* Correlation is significant at the 0.05 level (2-tailed).

As reflected in Table 6, there is a significant relationship between students' multitasking behaviour and skill level in the use of social media applications. The correlation,  $r(.982)$  shows that there exists a positive relationship between multitasking behaviour and skill of students in the use of social media application. Importantly also, it connotes that an increase in multitasking behaviour will imply an increase in the skill level. Hence, the null hypothesis is rejected because the *p-value* is less than 0.05 significant level. In conclusion, there is a positive relationship existing between students' multitasking behaviour and skill level in the use of social media applications.

H<sub>02</sub>: There is no significant interactive effect of gender on undergraduates' social media multitasking behaviour and skill level for mobile learning experience.

Table 7:

Interactive Effect of Gender on Students' Multitasking Behaviour and Skill Level

| Variable  | Group          | Sum of Squares | df. | Mean Square | F       | ig.  |
|-----------|----------------|----------------|-----|-------------|---------|------|
| Behaviour | Between Groups | 00             |     | 00          | 571.808 | .000 |
|           | Within Groups  | 19             |     |             |         |      |
|           | Total          | 19             |     |             |         |      |
| Skill     | Between Groups | 27             |     | 27          | 416.886 | .000 |
|           | Within Groups  | 36             |     |             |         |      |
|           | Total          | 963            |     |             |         |      |

Table 7 revealed that  $F(1; 268) = 571.81$ , Sig. 0.00 for multitasking behaviour and  $F(1; 268) = 416.89$ , Sig. 0.00 for multitasking skill level which is less than 0.05 because the probability of 0.00 is lower than the alpha value ( $\alpha = 0.05$ ) for the students. Therefore, the null hypothesis is rejected. It implies that there is an interactive effect of

gender on students' multitasking behaviour and skill level in the use of social media application in a mobile learning environment.

### Discussion and Conclusions

The use of social media application through multitasking approach is pronounced among students of tertiary institutions in Kwara State. Most tertiary institution students are engaged in multitasking behaviour through the use of social media applications. This is supported by Wang and Tchernev (2012) by stating that opportunities are offered by social media which have caused a dramatic increase in multitasking behaviour among younger generations in the bid to socialize and share information. In the opinion of Rideout, Foehrand Roberts(2010), the behavioural pattern of the Net Generation in social media multitasking have continued to be on the increase as they either engage in watching TV, listening to music or reading while using the social media. It implies that the majority often engaged in the use of social media application for two or more activities simultaneously. Furthermore, the skill level of students of tertiary institution through social media activities is very high. It then implies that students multitask through social media application by simultaneously engaging in two or more activities of high-level sophistication of technological literacy. This result is supported by Bardhi, Rohmand Sultan(2009) when it was stated that social media multitasking behaviour can occur during interactions with multiple communication media, such as watching a program on TV, listening to one's iPod while chatting with friends on Facebook, and shopping online at Amazon around one medium, such as a personal computer and mobile phone.

### Recommendations

Based on the analysis, the following were the recommendations deduced from the result displayed:

1. Lecturers should build on multitasking behaviour pattern of students in tertiary institution by delivering instructional content through social media applications.
2. The social media multitasking skill level of students in tertiary institution should be explored appropriately to facilitate meaningful learning.
3. Mobile learning should be encouraged within and outside the classroom environment through social media application for multitasking activities to take place.
4. Social media multitasking behaviour should be promoted among tertiary institution students to improve skill level for mobile learning experience.
5. Gender should be considered in the promotion of social media multitasking behaviour and skill level for mobile learning experience.

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**Author Information**

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**BOLAJI, H. O. Ph.D.**

Department of Science Education,  
Faculty of Education,  
Al-Hikmah University, Ilorin, Nigeria  
[lalekanbolaji@gmail.com](mailto:lalekanbolaji@gmail.com)

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