

Gender Differences in the Use of Smartphones Among Library and Information Science Students in Delta State Polytechnic, Ogwashi-Uku

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Abstract

This study examined gender differences in the use of smartphone among library and information science students in Delta State Polytechnic, Ogwashi-uku by surveying 80 National Diploma (ND) 1 and ND2 students in the school with the aid of a well structured questionnaire. The study focused gender differences as it pertains to specific information regarding Smartphone use including the frequency of use of a device, the various uses of Smartphones and the constraints both male and females encounter in their use of a smartphone. Finding revealed that gender differences do exist in the frequency of smartphone usage among students. However, both male and female students had common constraint in the use of a smartphone. Hence, the researchers concluded and recommended that students, regardless of their gender, should embrace discipline while using their smartphone to benefit immensely from the impeccable 21st mobile device.

Keywords: Gender, Library and Information Science, Students, Smartphone, Use

Introduction

There has been an astronomical increase in smartphone usage in the country, especially among students. Smartphones are mobile phones that have an operating system similar to that of computers. Chen, Liu, Ding, Ying, Wang and Wen (2017) noted that Smartphones are no longer considered merely as "mobile phones", but real-time information providers and powerful portable computers. This is because these portable devices provide a variety of functions such as phone, camera, multimedia player, internet browser, a navigation system, and e-mail service as well as facilitate social networking and game playing.

Notably, students seem to be at the forefront in the use of this mobile and computing technology and cannot even imagine a day without their Smartphones. According to Robinson, Cronin, Ibrahim, Jinks, Molitor, Newman, and Shapiro (2013), smartphone's potential as an educational tool is an area which is starting to gain recognition among students. It would not be out of place to state that this device has become an addiction for students, especially those in tertiary institutions as evident in Al-Barashdi, Bouazza and Jabur (2015) study. Students use the device to communicate, socialise and for educational purposes. However, there is increasing use of smartphones by students for socialising.

Commenting in this regard, Head and Ziolkowski (2012) stated that "while Smartphone use has been increasing all across economic and age sectors, university students have been seen as one of the most important target markets and the largest consumers group of Smartphone services" (p,211). This may be attributed to the fact that smartphones have several features that make students attracted to the device. These functions allow students not only to communicate with others face-to-face or instantly, which is a perfect way for shy students to communicate

with others but also to enjoy different kinds of entertainment like games. Users can also get information while surfing on the Internet, which helps them to escape from uncomfortable situations. As a result, it seems that many students tend to rely heavily on their phones, which will inevitably lead to even more massive use. This, however, may be subject to individual difference such as gender differences. For instance, Andone, Błaszczewicz, Eibes, Trendafilov, Markowetz, and Montag (2016) have found that females use phones longer than males, with the average difference being around 8%. There is enough evidence stating that males and females have different patterns of internet activities and different preferences for mobile phone/smartphone usage. Males are more likely to involve in problematic use of computers and the Internet in the past (Taywade & Khubalkar, 2019). However, a gap exists concerning gender differences in the use of smartphones, especially among students. This study, therefore, seeks to discover gender differences associated with the use of smartphones among Library and information science students in Delta state polytechnic, Ogwashi-Uku.

Problem Statement

Certain studies have discovered that gender differences do exist in the use of technologies like the Internet and computers. However, few have established the actual gender differences that exist in the use of smartphones. Among the few is that of Chen, Liu, Ding, Ying, Wang and Wen (2017). Chen et al. (2017) examined gender differences in factors associated with smartphone addiction. They found that Smartphone addiction may result in psychological and behavioural problems, such as depression, anxiety, and low sleep quality, and females who scored at the addiction level were more likely to be depressed than males. Nevertheless, a gap exists with regard to the gender differences in patterns and frequency of usage of smartphones among students. This study investigates gender differences associated with the use of smartphones among Library and information science students in Delta state polytechnic, Ogwashi-Uku.

Objectives

The objectives of this study are to

1. Establish the existence of gender differences in the frequency at which library and information science students use Smartphone usage.
2. Find out gender differences in the patterns of usage of smartphones among Library and Information science students
3. Determine the constraints male and female students encounter in the use of a smartphone.

Literature Review

Smartphones have replaced almost every other screen, even when people are watching TV or using their laptop, they keep checking their smartphones, and people are using multiple screens simultaneously. Earlier people used to watch screens for leisure or work; this used to be a scheduled activity. Today, they have to take some time out of the screen time for the other activities. Smartphone has become one of the most private things one owns. From one's memories with family and close friends to private conversations, to one's shopping list, bank details and much other personal information, it has everything. One's smartphone has almost every information about an individual, maybe more than what even their closest mates know. (Taywade & Khubalkar, 2019).

Smart phones are advancing at a very quick pace and some have the ability to talk to you, answer questions, turn off your lights when you are not there, open doors, and even watch movies. A smartphone is a cell phone that allows you to do more than just make phone calls and send text messages. Smart phones can browse the Internet and run basic software programs like a computer and the user often interacts with the Smartphone by using their finger on the touch screen. There are thousands of Smartphone apps (software programs); including games, personal-use programs, and business-use programs that can all be executed from the phone like a computer, a Smartphone has an operating system on it, like Windows or Mac OS.(Abdulkadir, 2018)

Methodology

The research instruments used for this study use the questionnaire. The information collected included primary socio-demographic data, such as gender, age, level of study, religion and the like. Specific information regarding smartphone usage included the frequency of use of the device, the various uses of smartphones, and the constraints/affects both males and females encounter in their use of a smartphone. The participants of the study were 80 students purposively selected from ND 1 and ND 2 from the Department of Library and Information Science, in Delta state polytechnic, Ogwashi-uku based on their ownership of a smartphone. Data collected were analysed using simple percentages, and descriptive statistics. The criterion mean of this study is 2.50. All analysis was done with the aid of SPSS version 20.

Results and Discussion

Table 1: Respondents Biodata

		Frequency	Per cent	Valid Percent
age in years	18-22	37	46.3	46.3
	23-27	24	30.0	30.0
	28-32	9	11.3	11.3
	33 _above	10	12.5	12.5
gender	male	33	41.3	41.3
	female	47	58.	58.8
level of study	nd1	45	56.3	56.3
	nd2	35	43.8	43.8
	Total	80	100.0	100.0

Out of the 80 respondents used for this study, 37(46.3%) of them are within the age bracket of 18-22 years, 24(30%) were 23 -27 years, 9 students are about 28 -32 years, while the remaining 10(12.5%) respondents were 33 years and above. The students in library and information science department, Delta state polytechnic are relatively young. Furthermore, table 1 showed that there were more female respondents (47,58.8%) than the male, which are 33(41.3%). Also, nd1 and nd2 students were used for this study as the programme at the moment

has only ND students. Meanwhile, as shown in table1, 45 ND1 students were making 56.3% of the respondents while the remaining 35(43.8%) were ND 2 students.

Table 2: Gender differences in the frequency of Smartphone usage among Library and Information science students

Frequency of smartphone usage			Strongly disagree	Disagree	Agree	Strongly Agree		
You use your smartphones every minute	Male	Count	11	9	6	7	33	
		% of Total	13.8%	11.3%	7.5%	8.8%	41.3%	
	female	Count	20	24	2	1	47	
		% of Total	25.0%	30.0%	2.5%	1.3%	58.8%	
	Total		Count	31	33	8	8	80
			% of Total	38.8%	41.3%	10.0%	10.0%	100.0%
You use your smartphones every hour	Male	Count	7	10	12	4	33	
		% of Total	8.8%	12.5%	15.0%	5.0%	41.3%	
	female	Count	29	6	10	2	47	
		% of Total	36.3%	7.5%	12.5%	2.5%	58.8%	
	Total		Count	36	16	22	6	80
			% of Total	45.0%	20.0%	27.5%	7.5%	100.0%
Your smartphone is online every day	Male	Count	10	1	12	10	33	
		% of Total	12.5%	1.3%	15.0%	12.5%	41.3%	
	female	Count	6	8	21	12	47	
		% of Total	7.5%	10.0%	26.3%	15.0%	58.8%	
	Total		Count	16	9	33	22	80
			% of Total	20.0%	11.3%	41.3%	27.5%	100.0%
You use your smartphones once a week	Male	Count	10	20	1	2	33	
		% of Total	12.5%	25.0%	1.3%	2.5%	41.3%	
	female	Count	23	18	3	3	47	
		% of Total	28.8%	22.5%	3.8%	3.8%	58.8%	

Total		Count	33	38	4	5	80
		% of Total	41.3%	47.5%	5.0%	6.3%	100.0%
You use your smartphones every month	Male	Count	11	16	4	2	33
		% of Total	13.8%	20.0%	5.0%	2.5%	41.3%
	female	Count	29	16	1	1	47
		% of Total	36.3%	20.0%	1.3%	1.3%	58.8%
Total		Count	40	32	5	3	80
		% of Total	50.0%	40.0%	6.3%	3.8%	100.0%
You use your smartphones only when you have a call, message or e-mail	Male	Count	15	16	1	1	33
		% of Total	18.8%	20.0%	1.3%	1.3%	41.3%
	female	Count	9	17	9	12	47
		% of Total	11.3%	21.3%	11.3%	15.0%	58.8%
Total		Count	24	33	10	13	80
		% of Total	30.0%	41.3%	12.5%	16.3%	100.0%

Table 2 portrays the gender differences in the frequency of smartphone usage among LIS students. There were more males (13,16.3%) either strongly agreeing or agreeing that they use their smartphone every minute. Although the majority of the respondent's majority of the respondents disagreed to the item, it can be inferred that male students tend to use their smartphone more frequently than female students. Besides, more females (44, 55.5%) disagreed to the item. On the item "you use your smartphone every hour, the majority of respondents strongly disagreed or disagreed to the item. However, females (43.8%) still constituted the majority that disagreed or strongly disagreed to the item. Similarly, most of the 47 female respondents (51.3% of the females) strongly disagreed or disagreed that they use their smartphones every week or every month. Interestingly, only 2 male students agreed that they use their smartphone only when they have calls, messages or e-mails while 21 (27.3%) of the females strongly agreed or agreed to the item. This further confirms that males tend to use their smartphone more frequently than their female counterparts.

Table 3: Gender differences in the use of Smartphones among Library and Information Science Students

Uses of Smartphones			strongly disagree	disagree	agree	strongly agree	
To make phone calls	male	Count	-	1	18	14	33
		% of Total	-	1.3%	22.5%	17.5%	41.3%
	female	Count	-	0	15	32	47
		% of Total	-	0.0%	18.8%	40.0%	58.8%
	Total	Count	-	1	33	46	80
		% of Total	-	1.3%	41.3%	57.5%	100.0%
To send and receive a text message	male	Count	1	1	7	24	33
		% of Total	1.3%	1.3%	8.8%	30.0%	41.3%
	female	Count	0	1	27	19	47
		% of Total	0.0%	1.3%	33.8%	23.8%	58.8%
	Total	Count	1	2	34	43	80
		% of Total	1.3%	2.5%	42.5%	53.8%	100.0%
To make video calls	male	Count	1	7	16	9	33
		% of Total	1.3%	8.8%	20.0%	11.3%	41.3%
	female	Count	6	0	17	24	47
		% of Total	7.5%	0.0%	21.3%	30.0%	58.8%
	Total	Count	7	7	33	33	80
		% of Total	8.8%	8.8%	41.3%	41.3%	100.0%
To carry out research	male	Count	-	-	8	25	33
		% of Total	-	-	10.0%	31.3%	41.3%
	female	Count	-	-	7	40	47
		% of Total	-	-	8.8%	50.0%	58.8%
	Total	Count	-	-	15	65	80
		% of Total	-	-	18.8%	81.3%	100.0%
To watch videos/films	Male	Count	1	1	14	17	33
		% of Total	1.3%	1.3%	17.5%	21.3%	41.3%
	female	Count	1	1	18	27	47
		% of Total	1.3%	1.3%	22.5%	33.8%	58.8%
	Total	Count	2	2	32	44	80
		% of Total	2.5%	2.5%	40.0%	55.0%	100.0%
To listen to	male	Count	3	1	15	14	33

music							
		% of Total	3.8%	1.3%	18.8%	17.5%	41.3%
	female	Count	0	3	4	40	47
		% of Total	0.0%	3.8%	5.0%	50.0%	58.8%
Total		Count	3	4	19	54	80
		% of Total	3.8%	5.0%	23.8%	67.5%	100.0%
To browse the Internet	male	Count	-	-	13	20	33
		% of Total	-	-	16.3%	25.0%	41.3%
	female	Count	-	-	23	24	47
		% of Total	-	-	28.8%	30.0%	58.8%
Total		Count	-	-	36	44	80
		% of Total	-	-	45.0%	55.0%	100.0%
for twitter	male	Count	0	0	8	25	33
		% of Total	0.0%	0.0%	10.0%	31.3%	41.3%
	female	Count	11	9	15	12	47
		% of Total	13.8%	11.3%	18.8%	15.0%	58.8%
Total		Count	11	9	23	37	80
		% of Total	13.8%	11.3%	28.8%	46.3%	100.0%
For group chats	male	Count	2	5	6	20	33
		% of Total	2.5%	6.3%	7.5%	25.0%	41.3%
	female	Count	0	0	11	36	47
		% of Total	0.0%	0.0%	13.8%	45.0%	58.8%
Total		Count	2	5	17	56	80
		% of Total	2.5%	6.3%	21.3%	70.0%	100.0%
To make new friends	male	Count	0	1	3	29	33
		% of Total	0.0%	1.3%	3.8%	36.3%	41.3%
	female	Count	4	8	12	23	47
		% of Total	5.0%	10.0%	15.0%	28.8%	58.8%
Total		Count	4	9	15	52	80
		% of Total	5.0%	11.3%	18.8%	65.0%	100.0%
For Facebook	male	Count	1	1	5	26	33
		% of Total	1.3%	1.3%	6.3%	32.5%	41.3%
	female	Count	0	0	0	47	47
		% of Total	0.0%	0.0%	0.0%	58.8%	58.8%
Total		Count	1	1	5	73	80
		% of Total	1.3%	1.3%	6.3%	91.3%	100.0%
for WhatsApp	male	Count	-	0	0	33	33
		% of Total	-	0.0%	0.0%	41.3%	41.3%

Total	female	Count	-	1	15	31	47
		% of Total	-	1.3%	18.8%	38.8%	58.8%
		Count	-	1	15	64	80
		% of Total	-	1.3%	18.8%	80.0%	100.0%

Majority of respondents either strongly agreed or agreed to the items in table 3. However, it could send that no gender differences exist in the patterns at which LIS students make calls as only 1 (1.3%) male and 1 (1.3%) female student disagreed that they use their smartphone to make calls. No student, either male or female, strongly disagreed that they used their smartphone to make calls. Also, no significant gender differences were found in the use of a smartphone to send and receive messages, make video calls, carry out research, watch video/films, listen to music, browse the Internet, For Facebook or Whatsapp. However, there was no male respondent that disagreed or strongly disagreed to using the Smartphones to tweet. All the male students claim to use their smartphone for twitter, while 20(25.1%) females claimed not to use their smartphone for twitter. It could; therefore, be implied that male students tend to use the Smartphone for Twitter more than female students. Or could it mean that females do not have twitter accounts or they do not use their smartphone to tweet?

Furthermore, gender differences were observed in the use of a smartphone for group chats. Unlike their male counterparts, all-female students strongly agreed or disagreed to the use of smartphone for group chats, but 6 male 97.5%) agreed and 20 (25.0%) strongly agreed to the item. 7 males either strongly disagreed or disagreed that they use their smartphone for group chats. Interestingly, out of the 41.3% of males, only 1.3% disagreed that he uses his smartphone to make new friends. 15% of the 58.8% females, on the other hand, either strongly disagreed or disagreed to using their smartphone to make new friends. More male students use their smartphone to make new friends than their female counterparts.

Table 4: Constraints male and female students encounter in the use of smartphones

Constraints	N	Mean	Std. Deviation
Invades your privacy	80	2.66	1.113
Takes up your money	80	3.54	.779
Takes up my time	80	3.36	.641
Affects your academic performances	80	3.34	.674
Affects your reading habits	80	3.36	.621
Affects your health	80	2.23	1.253

Using the mean scores, the constraints both female and male students encounter in their use of smartphone are it takes up students money ($x=3.54$), takes up their time ($x=3.36$). Other affects your academic performances ($x=3.34$), affects students reading habits ($x= 3.36$) and invades their privacy ($x=2.66$). However, students' use of smartphone does not affect their health as the item had a mean score of 2.23, which is below the 2.50 criterion mean of this study.

Conclusions

Gender differences do exist in the use of smartphone among library and information science students in Delta State Polytechnic, Ogwashi-uku. Males were found to use their smartphone more frequently than female LIS students. Even though there was no gender difference found among students' specific uses of Smartphone among LIS students, there were some apparent differences in the various ways male and female students use a smartphone. For instance, male students use their smartphone to make new friends, and for twitter, more than females do. However, both male and female students face common constrains in their use of a smartphone. Hence, students regardless of their gender should embrace discipline while using their smartphone to benefit immensely from the impeccable 21st mobile device.

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