
Social Media Use and Perceived Social Capital Dimensions among Students of Covenant University, Ota, Ogun State, Nigeria

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Abstract

In this 21st century, social media plays a pivotal role in the lives of users due to innumerable benefits gained from its continuous usage, one of which is social capital. This study investigated social media use and perceived social capital dimensions among students at Covenant University, Ota, Ogun State. A survey design approach was adopted, using a structured and validated questionnaire to collect data. A total of 325 students served as the sample size, based on stratified sampling selection of 8 departments under the College of Science and Technology (CST) in Covenant University, Ota, Ogun State, Nigeria; while the Purposive sampling technique was used in the distribution of a questionnaire to students in the study area. Findings revealed a positive correlation between social media use of some popular sites such as Facebook, Instagram, LinkedIn, WeChat, Snapchat, and perceived online bonding as well as bridging capital. However, there were no significant differences between male and female students in their perceived online bonding and bridging social capital. In terms of relative contribution, Facebook had the strongest contribution to online bonding capital; while Instagram had the strongest contribution to bridging capital. It was concluded that the intense use of some popular social media sites drives the accumulation of bonding and bridging social capital. Therefore, based on the findings of this study, it was recommended that University management of Higher Education Institutions (HEIs) should create an enabling environment for the adoption and use of popular social media platforms by students, for quicker accessibility, faster formation and accumulation of bonding, and bridging social capital.

Keywords: Social capital, Bonding capital, Bridging capital, Social media use, Social capital dimensions

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Introduction

The emergence of social media usage at the onset of the twenty-first century revolutionized social interactions and engagements globally. It brought to the limelight the use of Social Media Platforms (SMPs) across nations and continents which aided the connection of people via the Internet. This novel development led to seamless communication across space and boundaries using diverse social media applications. These applications have unique features that might have contributed to their wide acceptance, such as simplicity, user-friendliness, and user-generated content among others. Over a decade now, globally, SMPs have become indispensable tools to individuals and organizations alike. This may be attributed to its popularity among diverse categories of people, based on the benefits that accrue to users such as quick information sharing, instant messaging, and sharing and downloading of files among others. Besides, corporate organizations have also leveraged these tools for reasons such as

official engagements, entertainment, knowledge sharing, and advertisements of products and services among others.

Social Networking Sites (SNSs) also known as Social Media platforms have been defined from varying perspectives. For instance, SNSs are internet-based online applications that allow users to engage in varying activities such as the creation, sharing, and exchange of user-generated content (Kaplan & Haenlein, 2010). In other words, SNSs are interactive applications that allow social actors to create and share content in multi-dimensional ways. Although there are quite several SNSs that are available to users, they differ in their modus operandi and functionalities. Some of the commonly used sites are Facebook, Twitter, WhatsApp, Wechat, Youtube, and Instagram among others. SNSs share similar features such as allowing users to share information in different forms such as text, audio, video, and pictorial forms singly or collectively, building and enhancing relationships, and connecting users with known and unknown persons (Pang, 2017). However, for the sake of clarity, social networking sites and social media platforms will be used interchangeably in this paper.

Interestingly, students in Higher Education Institutions (HEIs) globally constitute one of the largest user groups of social media platforms. The majority of them are mostly endeared to these platforms, perhaps, due to reasons such as acceptability, flexibility, ease of use, socialization, need for belongingness, and timely access to numerous online resources. However, research has proven that the level of accessibility to online resources is hinged on the strength of relationships with others on the network (Lin, 2016). In other words, the strength of a relationship, whether weak or strong within a homogenous or heterogeneous grouping determines access to varying resources (Loss et al., 2018). These resources include informational support, unlocking new sources of information, and emotional support in difficult times among others (Domahidi, 2018; Trepte et al., 2015; Horgan et al., 2013).

Several researchers have examined the impact of social media on students as a user group from varying perspectives. The findings of these studies have revealed a positive impact in the area of collaboration, networking, sharing knowledge, and access to physical, emotional, and social support among others (Domahidi, 2018). On the other hand, some researchers have also examined the negative side of social media usages such as addictive behaviour, cyberbullying, identity theft, and information overload among others (Baccarella et al., 2018; Stegner, 2022). Regardless of some challenges associated with its use, SNSs have an array of hidden resources that can be harnessed by students based on their strength of relationship with others on the network. These resources are referred to as Social Capital. Therefore, SNSs help to foster interaction, and virtual engagements and promote the development of social capital among students (Allameh, 2018; Ochonogor & Okile-Amughoro, 2018). It also allows users on online networks to accumulate social capital based on the strength or tie of their relationships. However, social capital can equally be formed on offline networks depending on the strength of the relationship of people engaged in face-to-face interactions. Social capital is in the form of quantifiable benefits such as job opportunities, the creation of financial and human capital, and emotional, physical, and social support accruing from closer ties among others (Kwon & Adler, 2014).

In line with the literature, there are two dimensions to social capital which are: Bonding and Bridging social capital. These two dimensions were first classified by Putnam (2000). Bonding social capital has been defined as connections formed on the network based on strong ties (Domahidi, 2018). Network participants classified as having strong ties are close acquaintances such as friends, family members, and close associates that often give emotional, social, and physical support when the need arises (You & Hon, 2019). On the other hand, bridging social capital are connections formed on the network based on weak ties, while network participants classified as having weak ties are colleagues at work, casual

acquaintances, or unknown persons (Pang, 2018a). Those in this category focus mainly on information sharing (Brown & Michinov, 2019).

In relation to students in HEIs in Nigeria, these two dimensions of social capital come to play in their interactions through the use of social media. However, there is a dearth of studies on social media use vis-a-vis the formation and accumulation of bonding and bridging capital among students in the Nigerian environment; and equally gender differences in the perceived online and offline social capital dimensions. Therefore, there is an urgent need to investigate social media and social capital dimensions among students in HEIs because findings from other foreign studies cannot be generalized to the Nigerian environment (Chakraborty, 2016; Johnston et al., 2013). In view of this, the following questions are therefore raised in this research work: Is there a relationship between the intense use of social media platforms and perceived bonding and bridging capital among Nigerian students? What dimensions of online social capital mostly drive students' use of social media? Is there a difference between males and females in their perceived online and offline social capital dimensions? These questions are imminent because some foreign studies have found a significant positive relationship between students' intense use of specific social media such as Facebook and LinkedIn and their bonding and bridging social capital (Chakraborty, 2016; Johnston et al., 2013; Ellison et al., 2014); and also some studies within and outside Nigeria have reported gender differences in the use of SNSs between male and female students (Chakraborty, 2016; Ajayi, n.d.).

In light of this, this study intends to ascertain the relationship between social media usage and perceived social capital dimensions among students at Covenant University, Ota, Nigeria. The main aim of this research is to determine the relationship between social media use and perceived social capital dimensions among students at Covenant University in Nigeria, using the College of Science and Technology (CST) as a case study. The study is informed by the following specific research objectives: To determine the frequency of use of selected social media platforms among students of Covenant University, Ota, Nigeria; to determine the relationship between intense use of social media platforms and perceived online bonding and bridging social capital dimensions among students in Covenant University, Ota, Nigeria; to determine whether a significant difference exists between male and female students in Covenant University, Ota, Nigeria in their perceived online/offline bonding and bridging social capital dimensions; and to determine the relative contribution of intense use of social media platforms on perceived online bonding and bridging social capital dimensions among students of Covenant University, Ota, Nigeria.

The following research questions were raised in this study: What is the frequency of use of selected social media platforms among students of Covenant University, Ota, Nigeria? Is there a relationship between the intense use of social media platforms and perceived online bonding and bridging social capital dimensions among students of Covenant University, Ota, Nigeria? Is there a significant difference between male and female students in Covenant University, Ota, Nigeria in their perceived online/offline bonding and bridging social capital dimensions? What is the relative contribution of the intense use of social media platforms on perceived online bonding and bridging social capital dimensions among students of Covenant University, Ota, Nigeria? The following hypotheses were tested at 95% (0.05) level of confidence: *There is no relationship between the intense use of social media Platforms and perceived online bonding and bridging social capital dimensions among students of Covenant University, Ogun State, Nigeria; there is no significant difference between male and female students of Covenant University, Ogun State, Nigeria in their perceived online/offline bonding and bridging social capital dimensions; intense use of each of the social media platforms does*

not contribute relatively to perceived online bonding and bridging capital among students of Covenant University, Ogun State, Nigeria.

Review of Literature

Social Media Usage among Students in HEIs

Several studies have examined social media use among students in HEIs from varying perspectives. The findings of some of these studies have proven that social media is a potent tool that has wide acceptability most especially among youths globally (Domahidi, 2018; VanMeter, et al., 2015; Zarina, 2009). For instance, research has also proven that Facebook is one of the most popular and widely used social network site used by students in HEIs (Zachos et al., 2018). Students use these sites to interact with people they are familiar with online and in meeting new people (Olatokun & Ilevbare, 2014). Therefore, SNSs has permeated into all sectors, and it is used for diverse purposes- entertainment, online communication, learning and teaching, and maintaining social relationship among others.

Studies have examined social media use among students globally and most especially in Nigeria from diverse perspectives. For instance, Zarina (2009) conducted a study on social media among teenagers in Malaysia. Findings revealed that students mostly use SNSs for diverse purposes such as reading other people's profiles, uploading pictures, uploading files, downloading pictures, sharing videos, and creating content and posting messages. However, this study did not look at specific social media sites and their frequency of usage amongst students in the study locale. Also, the results of a focus group interview of students in three different universities in the United States revealed numerous uses of social media, because it created enormous opportunities for collaborative learning between teachers and learners, and also allowed students to engage in extra curriculum activities (Gikas & Grant, 2013). In a similar vein, Ansari and Khan (2020) reported the findings on eight Egyptian Universities, it was revealed that social media plays a significant role in higher education institutions in terms of accessibility and use of learning tools and teaching aids. These foreign studies show that social media is an indispensable global tool for both teachers and learners in HEIs due to the numerous benefits gained from its usage.

Coming down to Nigeria, Olatokun and Ilevbare (2014) also investigated university students' adoption and utilization of SNSs from two public universities in Nigeria. Findings revealed a positive relationship between socio-demographic variables such as age, gender, level of study, and religion vis-a-vis the adoption of SNSs. However, in terms of age, it has been established that younger online adults between the ages of (18-24) years use SNSs more frequently compared to their older counterparts (Lenhar & Madden, 2011). In terms of gender, Ajayi (n.d.) also revealed that male students use SNSs more than female students. No doubt, SNSs have been embraced by students in HEIs regardless of differences in ethnicity, cultural orientation, background, and the like. However, it is worth noting that, social capital that accrues from the use of social media platforms by students may differ across gender groups depending on the strength of their relationships. Therefore, it is expedient to investigate the gender differences in social capital formation amongst students.

Social Media Usage and Perceived Social Capital Formation among Students in HEIs

The use of social media among students in HEIs is quite alarming due to its popularity and usefulness. Therefore, SNSs have become indispensable tools among students due to their several benefits such as improved communication, entertainment, exchanging ideas, and educational purposes among others (Domahidi, 2018; VanMeter, et al., 2015; Zarina, 2009). Apart from this, students are attracted to SNSs due to access to social capital resources. These sites are tools for building and maintaining relationships, thereby increasing the probability of

access and growth of individuals' social capital (Pang 2018b) Social capital are resources that accrue to an individual based on the quality of his or her relationship with others.

Some studies have examined social capital formation through SNSs usage (Williams, 2019; Wang, et al., 2016; Burke & Kraut, 2016). However, there are mixed findings based on their study of single and multiple SNSs vis-a-vis social capital formation (E.g. Chakraborty, 2016; Johnston et al., 2013; Ellison et al., 2014). For instance, some studies have established the relationship between Facebook users and social capital formation (Brown & Michinov, 2019; Kahai & Lei, 2019; Pang 2018b). Studies have also proven that online social capital formation is different from offline social capital (Subrahmanyam et al., 2008). Again, some studies have supported the claim that bridging social capital through SNSs is higher compared to offline social capital (Lin et al., 2016); while some have claimed that bonding social capital is produced through the use of SNSs (Phua et al., 2017). Lately, some studies have claimed that both bridging and bonding social capital accrue to users on online social networks (Tiwari et al., 2019; Pang, 2018b; Arampatzi et al., 2018).

However, concerning students in HEIs, few studies have examined the relationship between social media usage and social capital formation. For instance, Chakraborty (2016) examined the relationship between the intense use of SNSs and social capital, both bonding and bridging among students of Panjab University, India. Results revealed a significant positive relationship between students' intense use and their bonding and bridging social capital. Also, a significant difference was found in the intense use of SNSs between male and female students. The finding of this study is in tandem with Johnston et al., (2013) who found a strong association between intense use of Facebook use and three dimensions of social capital-perceived bridging, perceived bonding, and perceived maintained social capital. In the same vein, Ellison et al., (2014) found that Facebook users had higher level of bridging capital than non-users. Ahmad (2014) investigated SNSs usage and its relevance to social capital as well as its role in academic adjustment among Nigerian University students. Findings revealed a positive relationship between SNSs usage and social capital formation among students of the selected Universities in Nigeria.

A critical look at the literature shows that most studies on social media use and social capital formation among students in HEIs globally are limited to specific and few SNSs. As pinpointed in the literature, intense use of specific social media such as Facebook, and LinkedIn has been linked to social capital formation such as bridging, bonding, and maintained capital respectively. However, due to the wide variation of SNSs among users in the 21st century, this study intends to examine an array of SNSs, and their intensity of use, vis-a-vis bonding, and bridging(online/offline) social capital formations.

Concept of Social Capital

Several authors in the literature have viewed social capital from multi-dimensional perspectives. Based on this premise, definitions of some early proponents of social capital are discussed. For instance, Woolcock (1998) defined social capital as a term that encompasses organizational norms and networks facilitating collective action for mutual benefits. In the same vein, Dinda (2008) viewed social capital as social relations that have the potential of facilitating the accrual of economic and non-economic benefits. Therefore, in line with this definition, social capital resides in relations and not in individuals or employees in an organization.

Also, Bourdieu and Wacquant, (1992) defined social capital from the network perspective. It was viewed as the sum of resources, actual or virtual that accrue to an individual or group through the establishment of a durable network of more or less institutionalized

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relationships. Therefore, based on the individual and network perspectives, social capital is an advantage an individual obtains by being connected to others within a network. This advantage is often created by the individual's location in the structure of network relationships (Burt, 2005). It is fundamentally a network of social connections, that is, it is not what you know, but who you know (Coleman, 1988).

Types of Social Capital

There are different types of social capital as identified by researchers in the literature. Social capital has been classified from varying perspectives as discussed below: Nahapiet and Goshal (2009) identified three types of social capital that are relevant in any social relationship whether online or offline. These are Structural, Relational, and Cognitive social capital. Structural social capital covers the overall network structure of formal and informal relationships that exist within an organization, while relational social capital involves the parameters influencing relationships among employees in an organization such as trust, obligations, norms, and values among others. The presence of these elements in the relationship will contribute to the strength of the relationship. The last type which is the cognitive social capital refers to cognitive elements that allow communication and cooperation to occur between actors.

In addition, Putnam (2000) classified social capital into two main types: Bridging and Bonding social capital. Bridging social capital is also referred to as weak ties (Pang, 2018a). Examples include colleagues at work casual acquaintances or strangers. The major focus of those having weak ties is information sharing and dissemination (Brown & Michinov, 2019). On the other hand, the bonding social capital is referred to as a strong tie, and it comprises those having closer and more intense relationships (Darcy, 2014). Also, those with strong ties are likely to receive emotional, social and physical support accruing from a close relationship (You & Hon, 2019). Based on this premise, this research work will focus on ascertaining the relationship between the intense use of SNSs and the perceived bridging and bonding of social capital among students in the Nigerian environment.

Methodology

A Correlational survey research design was used for this study using a structured and validated questionnaire to capture field data. This design type is mostly used in ascertaining the strength of the relationship between two or more variables. Therefore, determining the relationship between social media use and perceived social capital dimensions among students was the focus of this study. The population of study comprised only students in the College of Science and Technology at Covenant University, Nigeria. The College of Science and Technology was selected due to the large number of departments in the college compared to other colleges that had a minimal number of departments. The College comprised ten departments, out of which 8 departments were selected using a stratified sampling technique. This gave a total population of 6460 as of the 2021/2022 session as shown in Table 1:

Table 1: Population of each of the departments along with their samples

S/N	Department	Population size	5% criterion
1.	Computer Science	1850	93
2.	Mathematics	1200	60
3.	Architecture	1100	55
4.	Chemistry	480	24
5.	Building Technology	850	43
6.	Management Information Systems	420	21
7.	Industrial Mathematics	450	23
8.	Applied Physics	110	6
	Total	6460	325

A 5% criterion was used in the selection of students across eight departments in CST using a stratified sampling technique. This gave a total of 325 as the sample size for this study. A purposive sampling technique was also used in the distribution of questionnaires to the students in CST. This sampling technique was adopted due to the variety of social media platforms commonly used by students. Therefore, all students in the study locale were suitable for the study.

A structured questionnaire was the main instrument for data collection. The questionnaire was divided into three sections. Section A consists of the demographic data which comprises gender, age, level, and department; Section B focused on items relating to the frequency of use of social media sites along with their usage patterns. Section C comprised an adapted scale of 20 items measuring the different dimensions of social capital for both online and offline networks (Bonding/Bridging social capital. The adapted scales were developed by Williams (2006) and Ellison et al., (2007) measuring online and offline bonding and bridging social capital respectively.

Three hundred and twenty-five (325) copies of the questionnaire were distributed to the students by hand based on departmental selection. However, three hundred and twenty (320) copies were filled and returned valid. The rate of return was ninety-nine (99%). Descriptive and inferential analyses such as frequency, percentage, mean, and correlation were used to analyse the relevant data that was obtained from the respondents. The copies of the questionnaire were analysed using a Statistical Package for Social Sciences version 20.0

The face validity of the research instrument was achieved through two experts in the field of Educational Technology. The questionnaire items were proofread and corrections were made to ensure the face validity of those items. The content validity was determined by calculating Cronbach's Alpha reliability coefficient for the measuring scales. The Cronbach's Alpha for the adapted scales ranged from 0.74 to 0.82 depicting that the scales are reliable, thereby, measuring what it purports to measure. Please find below the Cronbach's Alpha reliability coefficient as reflected in Table 2 for adapted scales. Field data was analysed and the results of the analyses are presented in the Tables presented below:

Table 2: Showing the Cronbach's alpha reliability scores for the adapted scales

Social Capital Sub Scales	No of Items	Source	Cronbach's Alpha
Bonding Capital (Online)	5	Williams (2006); Ellison et al., (2007)	0.74
Bonding Capital (Offline)	5	Williams (2006); Ellison et al (2007)	0.76
Bridging Capital (Online)	5	Williams (2006); Ellison et al., (2007)	0.81
Bridging capital (Offline)	5	Williams (2006) Ellison, et al. (2007)	0.82

Results

Demographic Information of Respondents

Demographic information of the respondents in terms of gender, age, department, and level of study was analysed and presented in Table 3:

Table 3: Demographic profile of respondents.

Demographic profile	Frequency	Percentage (%)
Gender		
Male	182	56.9
Female	138	43.1
Total	320	100
Age		
Below 18	92	28.8
18-20	168	52.5
Above 21	60	18.8
Total	320	100
Department		
Computer Science	93	29.1
Mathematics	60	18.8
Architecture	55	17.2
Chemistry	24	7.5
Building Technology	40	12.5
Management Information Systems	20	6.2
Industrial Mathematics	28	8.8
Total	320	100
Level		
100L	82	25.6
200L	96	30.0
300L	10	3.1
400L	132	41.2
Total	320	100

Table 3 shows the demographic profiles of respondents. In terms of gender, 182 (56.9%) of the students are males while 138 (43.1%) are females. Also, 92(28.1%) were below 18 years, while 168(52.5%) of the respondents fall in within the age range of 18-21years; while 60(18.8%) were above 21 years. The majority of the respondents were between 18-21 years of age. In

terms of the department of the respondents 93(29.1%) were from Computer and Information Science, 60(18.8%) from Mathematics, 55(16.2%), 24(7.5%) Chemistry, 40(16.5%) Building Technology, 40(12.5%) Architecture, 20(6.2%) Management Information System respectively. Also, 132(41.2%) of respondents were in 400 level, 10(3.1%) 300 Level, 96(30.0%) 200 Level and 82(25.6%) 100 Level respectively.

Table 4: Mode of access on social media platforms by students of Covenant University, Nigeria

Mode of Access	Frequency (F)	Percentage (%)
Mobile Phone	192	60.0
Ipad	46	14.4
Tablet	34	10.6
Laptop	48	15.0
	320	100.0

Table 4 shows the mode of access to social media platforms by students in the study area. The most frequently used mode of access was 192 (60.0%) Mobile phones, followed by 48(15.0%) Laptops, 46 (14.4%) Ipad, and 34(10.6%) tablets respectively.

Use of Selected Social Media Platforms by Covenant University Students

Table 5 shows the frequency of use of selected social media sites among students at Covenant University, Nigeria. Students frequently used the following social media platforms with their mean scores Youtube (4.20), Telegram (4.20) Instagram (4.06), and WhatsApp (3.75) respectively.

Table 5: Frequency of use of selected social media platforms by students

Types of Social Media Sites	Very Often (F (%))	Often (%)	Occasionally (F (%))	Rarely (F (%))	Never (F (%))	Mean
Facebook	10 (3.1)	12 (3.8)	18 (5.6)	92 (28.8)	168 (58.8)	1.64
Twitter	56 (17.5)	28 (8.8)	56 (17.5)	68 (21.2)	112 (35.0)	2.52
Youtube	150 (46.9)	98 (30.6)	62 (19.4)	6 (1.9)	4 (1.2)	4.20
WhatsApp	96 (30.0)	112 (35.0)	66 (18.8)	40 (12.5)	12 (3.8)	3.75
Instagram	136 (42.5)	112 (36.5)	48 (15.0)	4 (1.2)	20 (6.2)	4.06
Telegram	152 (47.5)	100 (31.2)	52 (16.2)	12 (3.8)	4 (1.2)	4.20
LinkedIn	46 (12.5)	26 (8.1)	66 (20.6)	30 (15.6)	138 (43.1)	2.31
WeChat	-	4 (1.2)	6 (1.9)	4 (1.2)	306 (95.6)	1.09
Snapchat	76 (23.8)	62 (19.4)	56 (17.5)	50 (15.6)	76 (23.8)	3.04

Skype	-	2 (6)	22 (6.9)	84 (26.2)	212 (65.2)	1.42
Zogo	-	4 (1.2)	46 (14.4)	10 (13.1)	260 (81.2)	1.36
Email	88 (27.5)	88 (27.5)	110 (34.4)	28 (8.8)	6 (1.9)	3.70

Out of all the social media platforms selected for this study, Youtube, Telegram, and Whatsapp were mostly patronized by students in the study area, perhaps due to the popularity of these platforms amongst students.

Relationship between Intense Use of Social Media and Perceived Bonding and Bridging Social Capital Dimensions

Table 6 shows the relationship between the intense use of selected social media platforms and perceived online bonding and bridging social capital dimensions. In terms of bonding capital, Facebook (.226) had the highest positive correlation, followed by LinkedIn (.242) and Wechat (.173).

Table 6: Relationship between intense use of social media and perceived bonding and bridging online

Intense Use of Social Media	Mean	Cases	Bonding (Online)	Capital	Bridging Capital (Online)
Facebook	1.64	320	.266*		.111*
Twitter	2.52	320	-.002		.159*
Youtube	4.20	320	-.002		-.048
WhatsApp	3.75	320	.062		-.007
Instagram	4.06	320	-.006		.210*
Telegram	4.20	320	0.28		-0.86
LinkedIn	2.31	320	.242*		.135*
WeChat	1.09	320	.173*		.213*
Snapchat	3.04	320	-0.95		.196*
Skype	1.42	320	.018		.056
Zogo	1.36	320	.076		.054
Email	3.70	320	.096		.016

However, there was no correlation between the intense use of some SMPs and perceived online bonding capital such as WhatsApp (.062), Instagram (-.006), and Telegram (0.28) among others. On the other hand, in terms of bridging capital, WeChat (.213) had the highest positive correlation, followed by Instagram (.210) and Snapchat (.196) among others.

On the whole, Facebook, LinkedIn, and WeChat had a positive correlation with bonding and bridging social capital.

Difference in Perceived Online/Offline Bonding Social Capital Dimensions between Male and Female Students

Table 7a reveals no significant difference in perceived online bonding capital between males and females. Mean scores for males on perceived online bonding capital indicated (M=14.1, SD=2.72) and females (F=14.5, SD=2.78; t (318) =-1.103, p= .269 (two-tailed, significant at .05 level).

Table 7a: Difference in perceived online bonding capital between male and female students

Gender	N	F	T	Df	Mean Diff	SD	Sig (2 tailed)
Males	182	.364	-1.103	318	14.1	2.72	.269
Females	138				14.5	2.78	

Therefore, the P value is greater than .05 shows no significant difference in perceived online bonding capital between male and female students. The null hypothesis was accepted. Table 7b also reveals no significant difference in perceived offline bonding capital between males and females.

Table 7b: Difference in perceived offline bonding capital between male and female students

Gender	N	F	T	Df	Mean Diff	SD	Sig (2 tailed)
Males	182	2.304	2.203	318	19.7	3.66	.025
Females	138				18.7	4.26	

Mean scores for males on perceived offline bonding indicated (M=19.7, SD=3.66) and females (F=18.7, SD=4.26; t (318) =2.203, p= .025 (two tailed, significant at .05 level). Therefore, the P value is greater than .05 showing no significant difference in perceived offline bonding capital between male and female students. The null hypothesis was accepted.

The Difference in Perceived Online/Offline Bridging Social Capital Dimensions Between Male and Female Students

An independent T-test was conducted to test the difference in perceived online and offline bridging capital between male and female students. Results (see Table 8a) reveal no significant difference in perceived online bridging capital between males and females.

Table 8a: Difference in perceived online bridging capital between male and female students

Gender	N	F	T	Df	Mean Diff	SD	Sig (2 tailed)
Males	182	3.642	1.712	318	18.4	4.04	.081
Females	138				17.5	4.72	

Mean scores for males on perceived online bridging capital indicated (M=18.4, SD=4.04) and females (F=17.5, SD=4.72; t (318) =1.712 p=.081 (two-tailed, significant at .05 level). Therefore, the P value is greater than .05 showing no significant difference in perceived online bridging capital between male and female students. The null hypothesis was accepted.

Table 8b: Difference in perceived offline bridging capital between male and female students

Gender	N	F	T	Df	Mean Diff	SD	Sig (2 tailed)
Males	182	5.129	-1.582	138	17.3	5.01	.121
Females	138				18.2	4.39	

Table 8b also reveals no significant difference in perceived offline bridging capital between males and females. Mean scores for males on perceived offline bridging capital indicated (M=17.3, SD=5.01) and females (F=18.2, SD=4.39; t (318) =-1.582 p= .121 (two tailed, significant at .05 level). Therefore, the P value is greater than .05 showing no significant difference in perceived offline bridging capital between male and female students. The null hypothesis was accepted.

no significant difference in perceived offline bridging capital between males and females. Mean scores for males on perceived offline bridging capital indicated (M=17.3, SD=5.01) and females (F=18.2, SD=4.39; t (318) =-1.582 p= .121 (two tailed, significant at .05 level). Therefore, the P value is greater than .05 showing no significant difference in perceived offline bridging capital between male and female students. The null hypothesis was accepted.

The Relative Contribution of Intense Use of Social Media Platforms on Perceived Online Bonding Social Capital Dimensions among Students.

Table 9a shows the relative contribution of the intense use of each of the social media to perceived online bonding capital using Multiple Regression Analysis.

Table 9a: Relative contribution of intense use of social media to perceived online bonding capital among students

Model	B	Beta	AdjustedR2	T	Sig
(Constant)	12.801			10.835	.000
Facebook	.666	.236*	.111	3.684	.000
Twitter	-.229	-.123	.111	-1.979	.049
Youtube	-.023	-.008	.111	-.132	.895
WhatsApp	.122	.050	.111	.900	.369
Instagram	.038	.015	.111	.244	.807
Telegram	-.273	-.092	.111	-1.533	.126
LinkedIn	.371	.191	.111	2.709	.007
WeChat	.275	.044	.111	.703	.482
SnapChat	-.217	-.199	.111	-1.913	.057
Skype	-2.56	-.060	.111	-1.023	.307
Zogo	.338	.095	.111	1.531	.127
Email	.268	-.100	.111	1.438	.151

Results revealed the relative contribution of each of the social media with Facebook ($\beta=.236$, $t=3.684$, $P<.05$), Twitter ($\beta=-.123$, $t=-1.979$, $P>.05$), Youtube ($\beta=-.008$, $t=-.132$, $P>.05$), WhatsApp ($\beta=.050$, $t=.900$, $P>.05$), Instagram ($\beta=.015$, $t=.244$, $P>.05$), Telegram ($\beta=-.092$, $t=-1.533$, $P>.05$), LinkedIn ($\beta=.191$, $t=2.709$, $P>.05$), WeChat ($\beta=.044$, $t=.703$, $P>.05$), Snapchat ($\beta=-.199$, $t=-1.913$, $P>.05$), Skype ($\beta=-0.60$, $t=-1.023$, $P>.05$), Zogo ($\beta=.095$, $t=1.531$, $P>.05$), Email ($\beta=-.100$, $t=1.438$, $P>.05$). However, only Facebook made the strongest and significant contribution to bonding social capital while the other social media made no significant contribution to bonding social capital.

Relative Contribution of Intense Use of Social Media Platforms on Perceived Online Bridging Social Capital Dimensions Among

Table 9b shows the relative contribution of intense use of social media to perceived online bridging capital using Multiple Regression Analysis.

Table 9b: Relative contribution of intense use of social media to perceived online bridging capital among students

Model	B	Beta	AdjustedR2	T	Sig
(Constant)	15.947		.103	8.455	.000
Facebook	-.176	-.039	.103	-.609	.543
Twitter	.109	.037	.103	.589	.556
Youtube	-.386	-.080	.103	-1.381	.168
WhatsApp	-.120	-.031	.103	-.556	.579
Instagram	.814	.203*	.103	3.252	.001
Telegram	-.462	-.098	.103	-1.623	.106
LinkedIn	.459	.148	.103	2.096	.037
WeChat	1.742	.175	.103	2.790	.006
Snapchat	.345	.119	.103	1.907	.057
Skype	-.161	-.024	.103	-.404	.687
Zogo	.163	.029	.103	.462	.645
Email	-.336	-.079	.103	-1.127	.261

Results revealed the relative contribution of intense use of each of the social media platforms: Facebook ($\beta=.039$, $t=-.609$, $P>.05$), Twitter ($\beta=-.037$, $t=-.589$, $P>.05$), Youtube ($\beta=-.080$, $t=-1.381$, $P>.05$), WhatsApp ($\beta=-.031$, $t=-.556$, $P>.05$), Instagram ($\beta=.203$, $t=3.252$, $P<.05$), Telegram ($\beta=-.098$, $t=-1.623$, $P>.05$), LinkedIn ($\beta=.148$, $t=2.096$, $P>.05$), WeChat ($\beta=.175$, $t=2.790$, $P>.05$), Snapchat ($\beta=.119$, $t=1.907$, $P>.05$), Skype ($\beta=-.024$, $t=-.404$, $P>.05$), Zogo ($\beta=.029$, $t=.462$, $P>.05$), Email ($\beta=-.079$, $t=-1.127$, $P>.05$). However, only Instagram made the strongest and significant contribution to bridging social capital while the other social media made no significant contribution to bridging social capital.

Discussion of Findings

This study investigated the relationship between social media use and perceived social capital dimensions among students at Covenant University, Ota, Nigeria. The empirical findings of this study, therefore, support the diverse theoretical underpinnings of social capital as reflected in the literature (Dinda, 2008; Loss et al., 2018). This study has succeeded in bridging the gap, and translating theory into practice by revealing that intense use of popular SNSs contributed to bonding and bridging capital among students; which depicts that not all SNSs drive bonding and bridging capital. The findings of this study are hereby discussed in line with extant literature and the objectives earlier stated.

The first objective was to investigate the frequency of use of selected social media sites among students of Covenant University, in Nigeria. Findings revealed that students in the study area mostly used SNSs such as Youtube (4.20), Telegram (4.20) Instagram (4.06), and WhatsApp (3.75). Besides, other social media sites were sparingly used by students in varying

degrees. The result of this study depicts that students in HEIs use social media based on their individual choices, usefulness, and relevance to their social circles.

The second objective was to determine whether a relationship exists between the intense use of social media Platforms and perceived bonding and bridging online social capital dimensions among students of Covenant University, Nigeria. Findings revealed that intense use of the three topmost social media sites had a positive correlation with bonding and bridging social capital. For instance, Facebook (.226), LinkedIn (.242), and WeChat (.173) had a positive correlation with bonding capital. On the other hand, WeChat (.213) Instagram (.210), and Snapchat (.196) had a positive correlation with bridging capital. This result is in line with past studies that have established that bonding and bridging capital accrue within online networks (Tiwari, et al., 2019; Arampatzi et al., 2018; Pang, 2018b). However, in this study, not all SNSs had a positive correlation with bonding and bridging social capital, perhaps, because students restricted themselves to some preferred social media sites over others.

The third objective was to determine whether a significant difference would exist between male and female students of Covenant University, Ota, Nigeria in their perceived online/offline bonding and bridging social capital dimensions. Findings revealed no significant difference between male and female students in their perceived online/offline bonding and bridging social capital dimensions. This result contradicts findings on gender differences in social media use. Studies have proven that males use social media more than females, however, this study has shown that there are no significant differences between male and female students in their perceived online and offline bonding and bridging social capital. This finding contradicts past studies that have found significant differences between males and females in their social media usage (Chakraborty, 2016; Ajayi, n.d.).

The fourth objective was to determine whether the intense use of each of the social media platforms will relatively contribute to perceived online bonding and bridging capital among students at Covenant University, Nigeria. Results revealed that Facebook made the highest and most significant contribution to bonding social capital among Covenant University students in Nigeria while Instagram made the highest and most significant contribution to bridging social capital. The null hypothesis was therefore rejected. This result is in line with past studies that have established a relationship between Facebook users and social capital formation (Brown & Michinov, 2019; Kahai & Lei, 2019; Pang 2018a)

Conclusion and Recommendations

On the whole, this study has shown that students are selective in their choice of social media which simultaneously, drives the intensity of usage. For instance, findings revealed a positive correlation between the intense use of some popular social media sites and their perceived social capital dimensions among students of Covenant University, Ota, Ogun State, Nigeria. Again, the intense use of Facebook, LinkedIn, and WeChat had a positive correlation with bonding online capital; while the intense use of WeChat, Instagram, and Snapchat had a positive correlation with bridging capital. This study found no significant difference between males and females in their perceived online/offline bonding and bridging social capital dimensions, therefore depicting that gender do not play any role in the social capital formation or accumulation as reflected in this study. However, in terms of the relative contribution of social media use to social capital dimensions, Facebook made the highest and most significant contribution to online bonding social capital; while Instagram made the highest and most significant contribution to bridging social capital.

Based on the foregoing, the following recommendations are hereby made: Management of HEIs should support the adoption of social media by providing an enabling environment for quick accessibility and subsequent accumulation of online bonding and bridging social capital

by students. Developers of social media sites should improve on existing applications and incorporate new features that would help in building and maintaining bonding and bridging capital online. The positive side of social media use in terms of bonding and bridging dimensions of social capital should be emphasized and promoted among students in HEIs; while the negative side of social media use should be discouraged through the enforcement of stringent rules to curb excessive use among students in HEIs.

Implications and contributions

The implications of this study for future researchers are very germane due to its vital contribution to the extant literature on the influence of social media usage on social capital formation and accumulation among students in Nigeria HEIs. This study has been able to bridge the gap between theory and practice, in the sense that, the findings of this study have shown clearly that not all relationships on SNSs drive bonding or bridging capital, however, the intensity of use of popular social media sites among students play a major role. It also points to the fact that students are selective in their choice of social media, which determines their intensity of use, quick formation, and accumulation of bonding and bridging capital. The findings of this study have therefore contributed to the literature in the following ways:

- i. A positive relationship was established between the intensity of use of some popular social media sites and online bonding and bridging capitals.
- ii. There were no significant differences between males and females in their perceived online/ offline bonding capital.
- iii. There were no significant differences between males and females in their perceived online/ offline bridging capital.
- iv. In terms of relative contribution, Facebook made the strongest contribution to bonding capital; while, Instagram made the strongest contribution to bridging capital.

References

- Ahmad, S. (2014). Social networking site usage as a tool for social capital and academic adjustment in the Nigerian context. 21st Century Academic Forum Conference at Harvard – 2014, Official Conference Proceedings, Boston, MA USA.
- Ajayi O. T. (n.d.). Use of social networking sites among Tertiary Institutions in Oyo State Master, Degree Project, Africa Regional Centre for Information Centre, University of Ibadan, Nigeria.
- Allameh, S. M. (2018). Antecedents and consequences of intellectual capital: The role of social capital, knowledge sharing and innovation. *Journal of Intellectual Capital*, 19(5), 858-874.
- Arampatzi, E., Burger, M. J., & Novik, N. (2018). Social network sites, individual social capital and happiness. *Journal of Happiness Studies*, 19(1), 99–122.
- Ansari, J.A.N., Khan, N.A. (2020). Exploring the role of social media in collaborative learning the new domain of learning. *Smart Learning. Environment*, 7(9). <https://doi.org/10.1186/s40561-020-00118-7>
- Baccarella, C., Wagner, T. M., & Kietzmann, J. (2018). Social media? It's serious! understanding the dark side of social media. *European Management Journal*, 36(4), 431-438.
- Bourdieu, P., & Wacquant, L. J. (1992). *An invitation to reflexive sociology*. The University of Chicago Press.
- Burke, M., & Kraut, R. E. (2016). The relationship between Facebook use and well-being depends on communication type and tie strength. *Journal of Computer-Mediated Communication*, 21(4), 265–281.

- Burt, R. S. (2005). Structural holes and good ideas. *The American Journal of Sociology*, 110(2), 349–399.
- Brown, G., & Michinov, N. (2019). Measuring latent ties on Facebook: A novel approach to studying their prevalence and relationship with bridging social capital. *Technology in Society*, 59, 101176.
- Chakraborty, D. (2016). Social networking sites and social capital: A Chandigarh-based study of undergraduate and postgraduate students. *Amity Journal of Media & Communication Studies*, 6(2), 29-39.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95–S120.
- Darcy, S., Maxwell, H., Edwards, M., Onyx, J., & Sherker, S. (2014). More than a sport and volunteer organization: Investigating social capital development in a sporting organization. *Sport Management Review*, 7(4), 395–406.
- Dinda, S. (2008). Social capital in the creation of human capital and economic growth: A productive consumption approach. *The Journal of Socio-Economics*, 37(5), 2020-2033.
- Domahidi, E. (2018). The associations between online media use and users' perceived social resources: A meta-analysis. *Journal of Computer Communication*, 23, 181–200.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends": Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143–1168.
- Ellison, N. B., Vitak, J., Gray, R., & Lampe, C. (2014). Cultivating social resources on social network sites: Facebook relationship maintenance behaviors and their role in social capital processes. *Journal of Computer-Mediated Communication*, 19(4), 855–870.
- Gikas, J., & Grant, M. M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones and social media. *Internet and Higher Education Mobile*, 19, 18–26.
<https://doi.org/10.1016/j.iheduc.2013.06.002>.
- Horgan, A., McCarthy, G., & Sweeney, J. (2013). An evaluation of an online peer support forum for university students with depressive symptoms. *Archives of Psychiatric Nursing*, 27(2), 84–89.
- Johnston, K., Tanner, M., Lalla, N., & Kawalski, D. (2013). Social capital: The benefit of Facebook 'friends'. *Behavior and Information Technology*, 32, 24-36.
- Kahai, S. S. & Lei, Y. (2019). Building social capital with Facebook: Type of network, availability of other media, and social self-efficacy matter. *International Journal of Human Computer Studies*, 130, 113–129.
- Kaplan, A. M. & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizon*. 53, 59–68.
- Kwon, S. W., & Adler, P. S. (2014). Social capital: Maturation of a field of research. *Academy of Management Review*, 39(4), 412–422.
- Lenhar, A. & Madden M. (2011). Social Networking Websites and teen.
<http://www.pewinternet.org/Report/2007/>.
- Lin, D., Ainsworth, S. E., & Baumeister, R. F. (2016). A meta-analysis of social networking online and social capital. *Review of General Psychology*, 20(4), 369–391.
- Loss, J., Weigl, J., Ernstberger, A., Nerlich, M., Koller, M., & Curbach, J. (2018). Social capital in a regional inter-hospital network among trauma centers (trauma network): Results of a qualitative study in Germany. *BMC Health Services Research*, 18(1), 137.

- Nahapiet, J., & Ghoshal, S. (2009). Social capital, intellectual capital, and organizational advantage. In *Knowledge and Social Capital* (pp. 119–158). <https://doi.org/10.2307/259373>.
- Ochonogor, W. C., & Okite-Amughoro, F. A. (2018). Building an effective digital library in a University Teaching Hospital (UTH) in Nigeria. In *Handbook of Research on Managing Intellectual Property in Digital Libraries*, IGI Global (pp. 184-204).
- Olatokun, W. & Ilevbare, G. (2014). Probing university students' adoption and utilization of social networking websites in Nigeria. *Annals of Library and Information Studies*, 61(1), 15-23.
- Pang, H. (2017). Is smartphones creating a better life? Exploring the relationships of smartphone practices, social capital and psychological well-being among college students. *International Journal of Advanced Media and Communication*, 7(3), 205–223.
- Pang, H. (2018a). Exploring the beneficial effects of social networking site use on Chinese students' perceptions of social capital and psychological well-being in Germany. *International Journal of Intercultural Relations*, 67, 1–11.
- Pang, H. (2018b). How does time spent on WeChat bolster subjective well-being through social integration and social capital? *Telematics and Informatics*, 35(8), 2147–2156.
- Phua, J., Jin, S. V., & Kim, J. (2017). Uses and gratifications of social networking sites for bridging and bonding social capital: A comparison of Facebook, Twitter, Instagram, and Snapchat. *Computers in Human Behavior*, 72, 115–122.
- Putnam, R.D. (2000). *Bowling Alone: The collapse and revival of American Community*. In Simon S. & Stegner, B. (2022). Seven negative effects of social media on people and users. <https://www.makeuseof.com/tag/negative-effects-social-media/>
- Subrahmanyam, K., Reich, S. M., Waechter, N., & Espinoza, G. (2008). Online and offline social networks: Use of social networking sites by emerging adults. *Journal of Applied Developmental Psychology*, 29(6), 420–433.
- Tiwari, S., Lane, M., & Alam, K. (2019). Do social networking sites build and maintain social capital online in rural communities? *Journal of Rural Studies*, 66, 1–10.
- Trepte, S., Dienlin, T., & Reinecke, L. (2015). Influence of social support received in online and offline contexts on satisfaction with social support and satisfaction with life: A longitudinal study. *Media Psychology*, 18(1), 74–105.
- VanMeter, R. A., Grisafffe, D. B., & Chonko, L. B. (2015). Of “likes” and “pins”: The effects of consumers' attachment to social media. *Journal of Interactive Marketing*, 32(C), 70–88.
- Wang, T., Yeh, R. K. J., Chen, C., & Tsydypov, Z. (2016). What drives electronic word-of-mouth on social networking sites? Perspectives of social capital and self-determination. *Telematics and Informatics*, 33(4), 1034-1047.
- Williams, D. (2006). On and off the net: Scales for social capital in an online era. *Journal of Computer Communication*. 11, 593–628.
- Williams, J. R. (2019). The use of online social networking sites to nurture and cultivate bonding social capital: A systematic review of the literature from 1997 to 2018. *New Media and Society*, 21(11–12), 2710–2729.
- Woolcock, M. (1998). Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society*, 27, 151-208.
- You, L., & Hon, L. (2019). How social ties contribute to collective actions on social media: A social capital approach. *Public Relations Review*, 45(4), 101771. <https://doi.org/10.1016/j.pubrev.2019.04.005>

- Zachos, G. Paraskevopoulou-Kollia, E. A. & Anagnostopoulos, L. (2018). Social media use in higher education: A review. *Educational Science*, 8(194), 1-13. www.mdpi.com/journal/education
- Zarina, S. (2009). *The use of social networking websites among Malaysian Teenagers*. Saints of Malaysia Press.