Determinants of Facebook usage among Polytechnic Students in South-East, Nigeria

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ABSTRACT

The study examined the determinants of Facebook usage among polytechnic students in south east of Nigeria. Specifically, the effects of perceived usefulness, perceived ease of use, perceived privacy, and peer group influence on Facebook usage were examined using a sample of 3,872 regular students obtained using the Gorg and Ball (1973) formula population of 39.490 of regular programmes including the ordinary national diploma (OND) and higher national diploma (HND) in government-owned polytechnics in the south-east Nigeria. The Facebook Usage Questionnaire (FUQ), a 5-point Likert type instrument designed for data collection, was tested reliable at 0.82 correlation coefficient. The tables and frequencies were used to analyses the characteristics of the variables while the Spearman's correlation coefficient. Was used to examine the relationship between Facebook Usage and the selected determinants. The results showed that Facebook usage and perceived usefulness has a very strong positive and significant (0.884, p. 0.001) correlation; Perceived ease of use has a strong and positive significant effect Facebook usage (0.964, p. 0.000) among Polytechnic students in south east Nigeria; Perceived privacy has a very strong positive and significant effect Facebook usage (0.909, p. 0.000) among Polytechnic students in south east Nigeria; and that Peer group influence has a strong and positive significant effect Facebook usage (0.994, p 0.000) among Polytechnic students in south east Nigeria. The study thus concluded that Facebook is capable is controlling a high wave of consumers and can be a veritable avenue for product marketing and image making. It is therefore recommended that marketers should consider the use of Facebook as advertising channel for their products, as products that appeal from the young and student audience can be successfully marketed using the Facebook.

INTRODUCTION
Background to the Study
Facebook has become very popular means of both interpersonal and public communication in Nigeria and the world at large. Facebook is one of the modern social networking sites through which people connect to one another, share ideas, experiences, pictures, messages and information of common interest (Ogedebe, Emmanuel, & Musa, 2012). Undergraduate students are one of the primary demographics using Facebook, with features such as photos, wall posts, and status updates becoming seemingly irresistible to those who want to connect with their friends. Such students in many cases can be seen living in two worlds, in the physical and in the realm of social networking websites such as Facebook. In most cases, these students will live somewhat parallel lives, accurately representing themselves in both realms, in other cases; they may be two totally separate identities, living almost a "second life" in the social networking realm. Social media and its subsequent social networking sites seem to be integrating themselves into the college environment, and the converse is becoming increasingly true, where many colleges are integrating social media into their classrooms (Mustafa & Hamzah, 2011) and campuses (Valenzuela, Park & Kee, 2009).

According to Mustafa and Hamzah (2011), the interactive aura of the Facebook confers an unprecedented popularity on it. As it applies to other social networking platforms, the Facebook has the capability of educating, informing, entertaining and 'inflaming' the audience. Above all, Facebook possesses a 'contagious and outreaching influence' which the conventional media lack. This potential is most likely what Mustafa and Hamzah (2011:52) refers to as 'unstoppable power of the social media'. As a novel phenomenon, it is necessary to examine how Nigerian students use the new means of communication. This is because students' contribution as youths can make or mar any nation. Okolloh cited by Essoungou (2010), explains that, "the new communication technology is one of the few ways that young Africans can bypass the inefficiencies in the system that allow the status quo to hold on. It lowers the barriers to entry for everyone to get involved and be heard."

As noted by Essoungou (2010), Facebook could be used for several purposes such as following photos, videos and events; develop, share and maintain romantic relationship; socializing with friends especially distant friends; sharing ones achievements, celebrations and events; chatting,

messaging and spending time; advertising, buying and selling; discussion and following social issues; sourcing school-related information, among others. In other words, people can be on Facebook for different reasons. Similarly, Bonds-Raacke and Raacke (2010) opined that developing addiction on the use of Facebook could also contribute to popular usage. The user who is addicted to the use of Facebook may not be driven by any gratification from the use of Facebook.

The use of Facebook being a technology innovation, can be affected by factors such as perceived usefulness, perceived ease of use, perceived privacy and even peer group influence. Perceived usefulness according to Davis (1989:320) noted "the degree to which a person believes that using a particular system would enhance his or her job performance" while perceived ease of use is the "the degree to which a person believes that using a particular system would be free of effort". On another note, users of technology innovation as the Facebook equally share concerns over their privacy on their personal information such as gender, interests, hometown, residence, mobile phone number, campus room, favourite stuff, among others (Lewis, Kaufman, & Christakis, 2008), and the potential for such information to possibly be misused (Young & Quan-Haase, 2013). As the users' attitudes toward privacy may influence the amount and the kind of information posted and shared on social networks such as Facebook (Acquisti & Gross, 2006), the level of privacy guaranteed by Facebook providers is capable of influencing its acceptance and usage. As billions of people now engage in social network sites, the need to meet with friends and attach with peers can influence the young generation on the use of Facebook site.

1.1   Statement of the Problem
Facebook in a very short time became one of the most popular social networking sites. According to Detailed (2018), there are 2.2 billion monthly users of Facebook globally. Estimating the usage of Facebook in Nigeria at about 16 million users per month, Quartz (2018) argued that Nigeria is Facebook largest market in Africa. According to Statcounter (2018), social networking site statistics in Nigeria indicates that Facebook usage amounts to 90.05% as against Twitter (3.59%), Pinterest (3.28%), Youtube (1.69%), Instagram (0.55%), and LinkedIn (0.51%). The knowledge on factors influencing the huge usage of the Facebook over other social media can be leveraged on to boost marketing of certain products in Nigeria. An array of studies has been carried out in Nigeria to examine Facebook usage, yet there is still a missing link in knowledge as to why social media users prefer Facebook.

1.2   Objectives of the Study
The broad objective of this study is to ascertain the determinants of Facebook usage among Polytechnic students in south-east Nigeria. The specific objectives include to:

A. Examine the effect of perceived usefulness as determinant of Facebook usage among Polytechnic students in south east Nigeria.
B. Ascertain the effect of perceived ease of use as determinant of Facebook usage among Polytechnic students in south east Nigeria.
C. Find out the effect of perceived privacy as determinant of Facebook usage among Polytechnic students in south east Nigeria.
D. Establish the effect of peer group influence as determinant of Facebook usage among Polytechnic students in south east Nigeria.

1.3   Research Questions
A. To what extent does perceived usefulness as affect Facebook usage among Polytechnic students in south east Nigeria?
B. What is the effect of perceived ease of use as determinant of Facebook usage among Polytechnic students in south east Nigeria?
C. What is the extent of perceived privacy effect on Facebook usage among Polytechnic students in south east Nigeria?
D. What is the effect of peer group influence as determinant of Facebook usage among Polytechnic students in south east Nigeria?

1.4   Research Hypotheses
Ho1 : Perceived usefulness does not have a significant effect Facebook usage among Polytechnic students in south east Nigeria.
Ho2 : Perceived ease of use does not have a significant effect Facebook usage among Polytechnic students in south east Nigeria.
Ho3 : Perceived privacy does not have a significant effect Facebook usage among Polytechnic students in south east Nigeria.
Ho4 : Peer group influence does not have a significant effect Facebook usage among Polytechnic students in south east Nigeria.

REVIEW OF RELATED LITERATURE
Facebook
Facebook is an American online social media and social networking service company based in Menlo Park, California. Its website was launched on February 4, 2004, by Mark Zuckerberg, along with fellow Harvard College students and roommates Eduardo Saverin, Andrew McCollum, Dustin Moskovitz, and Chris Hughes. Facebook is a popular free social networking website that allows registered users to create profiles, upload photos and video, send messages and keep in touch with friends, family and colleagues. Facebook site is available in about thirty-seven different languages. The site also includes public features such as marketplace, groups, events, pages and presences technology (which allows members to see which contacts are online and chat).

Figure2.1: Outlook of Personal Profile of Mark Zuckerberg's Facebook page

Within each member's personal profile, there are several key networking components. The most popular is arguably the Wall, which is essentially a virtual bulletin board. Messages left on a member's Wall can be text, video or photos. Another popular component is the virtual Photo Album. Photos can be uploaded from the desktop or directly from a smartphone camera. There is no limitation on quantity, but Facebook staff will remove inappropriate or copyrighted images. An interactive album feature allows the member's contacts (who are generically called "friends") to comment on each other's photos and identify (tag) people in the photos. Another popular profile component is status updates, a micro blogging feature that allows members to broadcast short Twitter-like announcements to their friends. All interactions are published in a news feed, which is distributed in real-time to the member's friends.

Facebook Usage

Ellison, Steinfield, and Lampe (2007) defined usage as a uniform practice or course of conduct followed in certain lines of business or professions that is relied upon by the parties to a contractual transaction. This definition of usage by Ellison *et al* (2007) has legal connotation. In other words, Ellison *et al* (2007) views usage as a way in which something is done, 'accepted' to be done in a particular field, profession or clime. Heiberger and Harper (2008) rather defined usage as the extent to which an individual or a group uses a facility or device to achieve a given goal. That is, usage implies utilization of a device or facility within the ambit of what is design to do. This definition raises two concerns.

First, availability of a device or platform does not presuppose use by the intended beneficiaries. For example, the availability of Facebook as a social network platform does not guarantee that people would use it for that purpose. According to Winter *et al* (2014), for a platform like Facebook to be used, people must be aware of its benefits (that is usefulness). User friendliness of the platform would also enhance usage. Another important consideration is the superiority of a given platform over other platforms.

Second, usage may be expressed in various degrees. The usage of platforms such as Facebook may be excessive due to addictivly of such platforms. As noted by Wang, Meister, and Gray (2013), when one is addictive to the usage of Facebook, he may not be driven by gratification or realization of substantial benefits. For him, it suffices that the uses the Facebook may also be abused. That is, it may be used extensively for purposes for which it is not primarily designed, such as fraud. However, the focus of this study is on what makes people use the Facebook in any degree and to whatever extent.

Theoretical Framework
Social Influence Theory (SIT)

Social Influence Theory (SIT) was popularized by Kelman (1958). The SIT posits that an individual's attitudes, beliefs, and subsequent actions or behaviors are influenced by referent others through three processes: compliance, identification, and internalization. Kelman (1958) observed that social influence brings about changes in attitude and actions, and that changes may occur at different "levels." This difference in the level of changes can be attributed by the differences in the processes through which individuals accept influence. Kelman (1958) delineated three primary processes of influence as described below:

➢ **Compliance** occurs when an individual perceives that a social actor wants him/her to perform a specific behavior, and the social actor has the ability to reward the behavior or to punish the non-behavior (Venkatesh & Davis, 2000)
➢ **Internalization** refers to the adoption of common self-guides for meeting idealized goals shared with others (Dholakia, Bagozzi, & Pearo, 2004).
➢ **Identification** occurs when an individual accepts influence because he wants to establish or maintain a satisfying self-defining relationship with another person or a group (Kelman, 1958).

Each of the three processes can be represented by a function of the following three determinants of influence: (a) the relative importance of the anticipated effect, (b) the relative power of the influencing agent, and (c) the prepotency of the induced response (Kelman 1958). However, for each process, these determinants are qualitatively different. So each process has a distinctive set of antecedent conditions; similarly each process leads to a distinctive set of consequent conditions.

Media System Dependency Theory (MSD)

Media system dependency theory (MSD) was developed by Ball-Rokeachand Defleur (1976). The theory is grounded in classical sociological literature positing that media and their audiences should be studied in the context of larger social systems. MSD ties together the interrelations of broad social systems, mass media, and the individual into a comprehensive explanation of media effects. At its core, the basic dependency hypothesis states that the more a person depends on media to meet needs, the more important media will be in a person's life, and therefore the more effects media will have on a person.

Figure 2.1 Conceptual Model of Dependency Theory
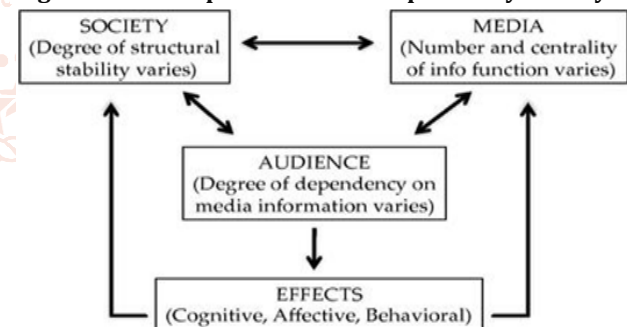
Source: Ball-Rokeach&DeFleur's (1976)

According to Ball-Rokeach and DeFleur (1976), dependency on media emerges from three relationships as shown in figure 2.1. the three relations are explained below:
1. **The relationship between the society and the media:** Within this relationship, media access and availability are regarded as important antecedents to an individual's experience with the media. The nature of media dependence on societal systems varies across political, economic, and cultural system.

2. **The relationship between the media and the audience:** This relationship is the key variable in this theory because it affects how people might use a mass medium. This relationship also varies across media systems.

3. **The relationship between the society and the audience:** The societies influence consumers' needs and motives for media use, and provide norms, values, knowledge, and laws for their members. Social system can function as alternatives to the media by offering similar services of the media.

As noted by Ha, Yoon and Zhang (2013), MSD has been extensively used in studies on online social networking sites ranging from MySpaceto Facebook and Twitter. MSD is considered apt for social media studies because it provides a framework for the many relationships through which information can flow in social media environment.

Uses and Gratifications Theory (UGT)

According to West and Tuner (2010), UGT was advanced by Katz (1959). UGT is an approach to understanding why and how people actively seek out specific media to satisfy specific needs. UGT is an audience-centered approach to understanding the use of social media. The UGT is predicated on the following assumptions. First, it assumes that the audience is active and its media use is goal oriented. Second, it assumes that the initiative in linking need gratification to a specific medium choice rests with the audience member. Third, the theory assumes that people have enough self-awareness of their media use, interests, and motives to be able to.

The main purpose of this theory is to explain the reasons that people choose a specific medium over alternative communication media and to elucidate the psychological needs that motivate people to use a particular medium. This theory assumes that users are goal-directed in their behavior and are aware of their needs. Purposive value, self-discovery, entertainment value, social enhancement, and maintaining interpersonal connectivity are the key values (or needs) that are widely adopted to determine the use of virtual communities (Cheung & Lee, 2009). Purposive value refers to the value derived from accomplishing some pre-determined informational and instrumental purpose. Self-discovery refers to the understanding and deepening salient aspects of one's self through social interactions. Maintaining interpersonal interconnectivity refers to the social benefits derived from establishing and maintaining contact with other people such as social support, friendship, and intimacy.

As noted by Leung (2013), UGT has been used in recent time to study social media behavior such as posting social content on Facebook, the relationship between gratifications and narcissism, and the effects of age on this relationship and these gratifications. Leung (2013) highlighted the motivation for the use of Facebook within the context of UGT to include cognitive needs, entertainment, recognition, the need to vent negative feelings, and the need for social affection.

Empirical Review

A number of studies have focused on Facebook usage among students. John, Donahue, & Kentle, (2008) studied personality traits as they relate to Facebook self-disclosure via the "Big Five" personality traits scale. These are neuroticism, agreeableness, openness, conscientiousness, and extroversion. The study found that those participants displaying higher levels of extroversion were more likely to join Facebook groups. Those that were highly open indicated a need to be more open on Facebook. Participants low in

neuroticism shared more photos, while those that were highly neurotic frequented the Wall function.

In another study, Ross, Orr, Sisic, Arseneault, Simmering and Orr, (2009) aimed to find out the factors that spur Facebook usage in Australian. The study revealed that Facebook users in general are more likely to be extroverted and narcissistic than those who do not use Facebook. The study showed that those scoring high on exhibitionism preferred to share photos and partake in status updates, while those who were more neurotic preferred the Wall function.

In the work of Hamburg (2010), the levels of neuroticism and extroversion with internet use was investigated. It was shown that those high in neuroticism were emotionally unstable, anxious, and insecure. These individuals identified with their true self through the Internet. Those high in extroversion identified their true selves with face-to-face interaction. Thus, the internet can be used as a tool to escape social anxiety and discomfort. When individuals are high in agreeableness, they will compromise in order to maintain a harmonious relationship. These individuals may exhibit more friends through friend requests because they often comply, whereas those high in extroversion likely will have less friends due to their need to state their opinions, rather than accepting others'.

Wise, Skues and Williams (2011) investigated Facebook usage among first year psychology students and reported that although the majority of the student (94%) had Facebook accounts and spent an average of one hour per day on Facebook, usage was found to be predominantly social. In their view, Facebook is more likely to operate as a distracting influence.

Schultz (2011) investigated the impact of Facebook inter personal friendship of females college student using survey research procedure. The findings of the study indicated that most respondents use Facebook because of its convenience, but still prefers face to face or over the phone communication. He also concluded that was also discovered that Facebook did add an element of conflict within some friendship.

Hag and Chand (2012) studied the pattern of Facebook usage and its impact in academic performance of university students using randomly selected university students. The study concluded that majority of the students use Facebook. It is equally popular among male and that female students feel insecure on sharing their personal information on their Facebook account. Due to this, most of them do not have their accounts in their real names or have not put their real picture on their profile.

Special and Li-Barber (2012) studied Facebook and self-disclosure using structured questionnaire and simple random sampling technique. The responses obtained were analysed using simple percentages. The study found that those who used Facebook for an entertainment outlet tended to disclose more information. Those that were even more prone to disclosure used Facebook primarily as a means to pass time.

In a similar study, Tosun (2012) obtained evidence that individuals who felt that they could disclose their "true

selves" online were more likely to utilize Facebook to establish new relationships, as well as to maintain romantic relationships. Tosun (2012) also used survey design. However, the study employed interview procedure and content analysis. Tosun (2012) therefore asserted that it is important to take into account predictor variables such as personality traits, sociological variables, and demographics which could lead to having an impact on self-disclosure on Facebook.

Utilizing self-reported questionnaires, Denti et al. (2012) surveyed 1011 Swedish Facebook users to examine which activities they consider important; how they express their personalities through sharing status updates, including status themes and reasons for updating statuses; and the relationship between Facebook usage to both self-esteem and well-being. The results reveal that a large majority of respondents indicated that their status updates are typically about both major and positive events in their lives. It was less common to generate updates about private or negative events, relationships, or negative feelings.

Lau (2013) evaluated student-to-student relationship on Facebook using structured questionnaire and a sample 250 students. The study analysed using frequency table and charts revealed that social interactions with fellow students are more strongly associated with identification than are interactions about class-related content, except in the case of interactions taking place with students who are in the same major department as the participant.

Alabi (2013) examined the dynamics of Facebook addiction level among selected Nigerian university undergraduates in the South West. The study employed questionnaire design in a survey 340 students selected using purposive sampling technique. The findings revealed that meeting peoples and chatting are the most frequently activities of undergraduates on face book and that "face book chat" "wall post" and picture uploading" were features used most.

Ogedebe, Emmanuel, and Musa (2012) carried out a study to investigate the effect of students' Facebook usage on academic performance. A 20 question questionnaire was designed and sent out to approximately 150 students of different Universities in Nigeria. To capture the main types of University, a Federal University, a State University and a Private University cut across the nation were chosen. Of the questionnaire sent out, 81% of them were within the age of 18 to 21. The Independent variables measured how actively students used Facebook, including how much time they spend on Facebook, how often they update their status, post on friends' walls, comment on others' pages, the level of their privacy settings, and how many friends and photo albums they have. In order to accurately measure students' academic achievement, we had student's self-report their in-class participation, attendance, as well as grade point average. Six pre-determined hypotheses were tested. First, the more time a student spends on Facebook, the lower grade point average the student has. Secondly, the higher a student's privacy settings are on Facebook, the higher that student's grade point average is. Thirdly, the more a student updates his or her Facebook status, the less likely they are to have good class attendance. Fourthly, the more time a student spends on Facebook, the less likely they are to participate in class. Fifthly, the more friends a student has on

Facebook, the more time he spends on Facebook. Lastly, that the more posts a student puts on Facebook, the less likely they are to participate in class. Data collected were analyzed and tested by using correlation tests through SPSS, a data analysis program. All the hypotheses were proven wrong.

Shava and Chinyamurindi (2018) investigated the relationship between knowledge sharing, habit and obligation in relation to social media usage among a sample of rural South African youth. The study was descriptive by design. Primary data were collected from 447 youths domiciled within a rural community in the Eastern Cape Province of South Africa using a self-administered questionnaire. The respondents to the study were all social media users. A combination of descriptive statistics and Pearson's correlation analysis was used to make meaning of the data. The study found a significant positive correlation to exist in all three independent variables (knowledge sharing, habit and obligation) with the dependent variable (social media usage) concerning Facebook usage among the sample of South African rural youth. Based on the findings of the research, recommendations and implications with regard to theory and practice are made.

Tsai, Chang, Chen, Chang (2017) examined the how user interface design affects older people's intention and attitude related to using SNSs. Fourteen user interface evaluation heuristics proposed by Zhang et al. were adopted as the criteria to assess user interface usability and further grouped into three categories: system support, user interface design and navigation. The technology acceptance model was adopted to assess older people's intention and attitude related to using SNSs. One hundred and one elderly persons were enrolled in this study as subjects, and the results showed that all of the hypotheses proposed in this study were valid: system support and perceived usefulness had a significant effect on behavioral intention; user interface design and perceived ease of use were positively correlated with perceived usefulness; and navigation exerted an influence on perceived ease of use.

Swidan, Al-Shalabi, Jwaifell, Awajan and Alrabea (2013) examined the level of social network sites (SNSs) usage among university students of four Jordanian universities distributed in different regions of the Kingdom. Seven hundred and twenty seven students were sampled and they completed a questionnaire based on the technology acceptance model. In addition, 16 participants, four from each university, were interviewed. The variance in the extent of SNSs usage in relation to university, faculty, gender, age, study level and socioeconomic background was investigated. This study employed a mixed-method model as interviews and questionnaires were employed. The data were qualitatively and quantitatively collected, sorted, analyzed and reported. The results of the qualitative analyses and the quantitative descriptive results suggested that the extent of SNS usage is high among the university students in Jordan. Chi-Square tests used to determine whether the equality use of social networks among Jordanian university according to various parameters for the top four social networks were done.

In a content analysis study, Wang, Burke, and Kraut (2013) utilized Latent Dirichlet Allocation (LDA) - a statistical generative method that looks for clusters of co-occurring

words to discover hidden topics - in order to classify topics from about half a million Facebook status updates and to define which topics receive more feedback from other users. Twenty-five status update themes emerged from this analysis: "sleep, food, clothing, home, work, weather/travel, family fun, girlfriend/boyfriend, birthday, Father's Day, sports, politics, love, thankfulness, anticipation, asking for support/prayers, medical, memorial, negativity about people, complaining, thoughts, Christianity, religious imagery, and slang and swearing" (Wang, Burke, and Kraut 2013: 32). A major drawback of this study is that LDA generates topics from the frequently co-occurred words automatically, which may not provide as deep an understanding of these topics as human judges manually annotating a smaller corpus. LDA also does not differentiate between topic style and substance.

Combining questionnaire and content analysis, Winter et al. (2014) related some of users' self-reported personality traits (i.e., extraversion, narcissism, self-efficacy, need to belong, need for popularity) to their use of Facebook status updates. They administered an online questionnaire to 173 European participants assessing personality variables and Facebook use. Participants were asked to post their last three original status updates (as textual messages) in text fields and each status update was categorised according to the following scheme: depth of self-disclosure, self-promoting content, appropriate content, disclosure of emotions, and topics. To assess the topical dimension of status updates, the authors developed a coding scheme comprised of eight categories: leisure time activities, social life/interpersonal relationships, entertainment, societal issues, work/school/university, congratulations, personal issues, and miscellaneous. The most frequent topics among the analysed status updates were personal issues, followed in order by social life/interpersonal relationships, entertainment, congratulations, leisure time activities, work/school/university, miscellaneous, and societal issues.

Summary/Gap in the Literature
Since the launch of Facebook, researchers have been grappling with understanding its impacts on communication and relationship dynamics among its users. Although early studies of Facebook focused mainly on its inclusion in a first language educational environment, some research has investigated how Facebook can be utilized in learning. Numerous studies on Facebook's inclusion in education environments have reported positive influences on student motivation, engagement, and attitudes. Among the studies conducted, Facebook has been shown to have an impact on motivation among students in higher institution. Other researchers have focused on the relationship between Facebook usage and personality traits. Studies such as Winter et al (2014), Twenge, Konrath, Foster, Campbell and Bushmalo (2008) and Ronay and Hippel (2010) related some of users' self-reported personality traits (i.e., extraversion, narcissism, self-efficacy, need to be long, need for popularity) to their use of Facebook status updates. However, there are limited studies on the determinants of Facebook usage among undergraduate students in the South East Nigeria. Similarly, there are limited studies on implication of gender and age differences for Facebook usage. Again, although the impact of Facebook on academic performance of students has been extensively studied, the questions of whether the level of academic performance determines how frequently and intensively students use Facebook has remained unanswered. These gaps in the literature constitute the motivation for this study.

METHODOLOGY
Research Design
The study adopted the descriptive survey research design. Descriptive research involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection (Glass & Hopkins, 1984). It is suitable for this study because the descriptive statistics will utilize data collection and analysis techniques that employed the measures of central tendency, variation, to describe the status of Facebook usage and its determinants, and used the correlation analyses to explain the relationships. This ability to combine characteristic summary and correlational statistics, along with its focus on specific types of research questions, methods, and outcomes is what distinguishes descriptive research from other research types (See http://members.aect.org/edtech/ed1/41/41-01.html).

Population of the Study
The population of the study consists of all the government owned polytechnics in South east of Nigeria. There are six (6) polytechnics in the south-east comprising three (3) state-owned and three federal owned as shown on Table 1.

Table1: List of government-owned polytechnics in southeast Nigeria.

SN	Name of Institution (Polytechnics)	Ownershp	Population	Sample (Proportion of the Population)
1	Federal Polytechnic Nekede, Imo State	Federal	8,878	870
2	Institute of Management & Technology, Enugu, Enugu State	State	9,321	914
3	Federal Polytechnic, Oko, Anambra State	Federal	6,213	609
4	Akanu Ibiam Federal Polytechnic, Unwana, Afikpo, Ebonyi State	Federal	5,432	533
5	Imo State Polytechnic, Umuagwo, Ohaji, Imo State	State	5,434	533
6	Abia State Polytechnic, Aba, Abia State	State	4,212	413
	Total		39,490.00	3,872

Source: Adapted from https://net.nbte.gov.ng/2018%20polytechnic%20ranking Retrieved 20 November, 2018, National Board for Technical Education, Kaduna, ranking table of Nigerian polytechnics, October, 2018.

Sample and Sampling Technique

The study adopted a random sampling technique to select 3,872 regular students of the government-owned polytechnics in the south-east Nigeria. Following that a larger sample increases the reliability of the study population and reduces a sample error (Nwabuokei, 2001). Thus the mathematical model developed by Gorg and Ball (1973) were used to determine the sample size: The formula is given as: n = (Za)^2 (e) (N). Where n = Sample size, Z = confidence level, usually 1.961, e = error factor (0.05) and N = population of the selected students (56,490). In this study the researcher will work on 95% confidence level. Applying the above model, we have: (1.961)^2 x 0.05 x 56,490 = 3,872.

Instrument for Data Collection

This study employed the use structured questionnaire. The questionnaire is Facebook Usage Questionnaire (FUQ) designed to capture the extent of Facebook Usage, and the determinants of usage including perceived usefulness, perceived ease of use, perceived privacy and peer group influence (see Appendix 1). The instrument adopted a 5-point Likert type of Very Low Extent (VLE), Low Extent (LE), Moderate Extent (ME), High Extent (HE) and Very High Extent (VHE).

Validity and Reliability of the Instrument

The instrument was face and content validated by giving some copies of the questionnaire to the supervisors to criticize. Their criticisms, comments, corrections and suggestions were used to modify the instrument into its present state.

The test-retest method was adopted in the reliability testing. The instrument was given to 20 students in Chukwuemeka Odumegwu Ojukwu University, Igbariam Campus to answer. The same students were again administered with the same questionnaire after two weeks. The two set of responses were collated. A correlation analyses was carried out the find out whether there is an association between the first the second responses. The result showed a 0.82 correlation coefficient which indicate very high relationship. Nunally (1978) argues that a reliability of 0.70 or higher is acceptable. This implies that the instrument is reliable.

Method of Data Analyses

The study employed the descriptive statistics such as tables, frequencies and Spearman's correlation coefficient. The Spearman's correlation is a non-parametric test for measures the strength of association between two variables and the direction of the relationship. In terms of the strength of relationship, the value of the correlation coefficient varies between +1 and -1. To interpret its value,

Rumsey (2014) suggested the following values for correlation *rho* should be interpreted as follows:

1. **Exactly –1.** A perfect negative linear relationship
2. **–0.70.** A strong negative linear relationship
3. **–0.50.** A moderate negative relationship
4. **–0.30.** A weak negative linear relationship
5. **0.** No linear relationship
6. **+0.30.** A weak positive linear relationship
7. **+0.50.** A moderate positive relationship
8. **+0.70.** A strong positive linear relationship
9. **Exactly +1.** A perfect positive) linear relationship

Decision rule: Reject the null hypothesis when the significant value is less than 5%; otherwise do not reject.

PRESENTATION AND ANALYSIS OF DATA
Presentation of Data

The responses obtained from the respondents through the administered questionnaire were summarized, analyzed and presented in this subsection. Out of the total of 3,872 questionnaire sample administered, 3350 were found to be duly completed and corrected filled for the study. This accounted for 86.52% return rate.

Descriptive Analyses

The analyses of the extent of Facebook usage and the factors that determines Facebook usage are presented on Tables 2 to 6. The results interpreted using the mean and standard deviations from a 5-point Likert type responses ranging from Very Low Extent (1), Low Extent (2), Moderate Extent (3), High Extent (4) and Very High Extent (5).

Table2: Habitual Facebook Usage

SN	Items	Mean	Standard Deviation	Decision
1	I do not think I am able to limit myself on how I utilise my Facebook	3.66	1.23	High extent
2	I am addicted to Facebook	3.21	2.12	Moderate extent
3	I must use Facebook	4.54	0.94	Very high extent
4	Using Facebook has become natural to me.	2.76	1.21	Moderate extent
	Cumulative mean score	3.54		High extent

Table3: Perceived Usefulness as Determinant of Facebook Usage

B		Mean	Standard Deviation	Decision
1	Facebook help me to share information of all kinds	4.34	2.34	High extent
2	Facebook keeps me connected to my classmates	3.46	0.89	Moderate extent
3	Facebook makes it easy for me to keep informed about social issues	4.36	2.43	High extent
4	Facebook makes it easy receive information about my school	2.43	1.54	Low extent
	Cumulative mean score	3.65		High extent

Table4: Perceived Ease of Use as Determinant of Facebook Usage

C		Mean	Standard Deviation	Decision
1	Learning to use the Facebook app was easy for me.	4.56	2.56	Very high extent
2	I found it easy to get the Facebook app to do what I want it to do to manage my medications.	2.56	0.98	Moderate extent
3	Using the Facebook app was clear and understandable.	4.67	0.45	Very high extent
4	I found the Facebook app to be flexible to use.	3.65	2.43	High extent
5	It was easy for me to become skilful at using the Facebook app.	4.98	0.86	Very high extent
6	I found the Facebook app to be easy to use.	4.87	0.67	Very high extent
	Cumulative mean score	4.22		High extent

Table5: Perceived Privacy as Determinant of Facebook Usage

D		Mean	Standard Deviation	Decision
1	I am concerned that the information I submit to Facebook could be misused.	3.44	2.32	Moderate extent
2	I am concerned that others can find private information about me from Facebook.	4.89	1.23	Very high extent
3	Providing Facebook with my personal information would involve many unexpected problems.	4.87	2.56	Very high extent
4	I would feel unsafe giving personal information on Facebook.	4.77	0.35	Very high extent
	Cumulative mean score	4.49		Very High extent

Table6: Peer Group Influence as Determinant of Facebook Usage

E		Mean	Standard Deviation	Decision
1	I keep so many friends through the Facebook	4.41	3.23	High extent
2	I miss my friends if I do not visit the Facebook	3.43	2.12	Moderate extent
3	I share a lot of information with friends through Facebook	2.34	0.87	Low extent
4	I received trendy news from friends through Facebook	3.54	1.35	Moderate extent
5	Facebook brings me close to my peers	2.54	0.94	Moderate extent
	Cumulative mean score	3.25		Moderate extent

Based on the results on Tables 2, the mean cumulate score of Facebook usage is 3.54 which indicate "high extent". The state of the determinants of Facebook Usage ranging from perceive usefulness (Table 3), perceived ease of use (Table 4), perceive privacy (Table 5) and peer group influence (Table 6) revealed a cumulative mean score of 3.65, 4.22, 4.49 and 3.25 respectively. This suggests that privacy ranked the highest with a very high extent (4.49) while peer group influence ranked lowest with moderate extent (3.25) influence on Facebook usage.

Model Estimation
The correlation analyses was performed to show the relationship between Facebook Usage (FU) and the determinants (perceive usefulness (PU), perceived ease of use (PEU), perceive privacy (PP) and peer group influence (PGI).

Table7: Correlation coefficient of the relationship between Facebook Usage and its determinants

			FU	PU	PEU	PP	PGI
Spearman's rho	FU	Correlation Coefficient	1.000				
		Sig. (2-tailed)	.				
		N	3350				
	PU	Correlation Coefficient	.884**	1.000			
		Sig. (2-tailed)	.001	.			
		N	3350	3350			
	PEU	Correlation Coefficient	.964**	.744*	1.000		
		Sig. (2-tailed)	.000	.014	.		
		N	3350	3350	3350		
	PP	Correlation Coefficient	.909**	.810**	.860**	1.000	
		Sig. (2-tailed)	.000	.005	.001	.	
		N	3350	3350	3350	3350	
	PGI	Correlation Coefficient	.994**	.865**	.957**	.902**	1.000
		Sig. (2-tailed)	.000	.001	.000	.000	.
		N	3350	3350	3350	3350	3350

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Correlation between Facebook Usage and Perceived Usefulness Research Question One: To what extent does perceived usefulness as affect Facebook usage among Polytechnic students in south east Nigeria?

Hypothesis One: Perceived usefulness does not have a significant effect Facebook usage among Polytechnic students in south east Nigeria.

The result on Table 7 showed the coefficient of correlation between Facebook Usage (FU) and Perceived Usefulness (PU) as 0.884 with a probability value of 0.001. The coefficient is above 0.07 and thus indicate a very strong correlation between PU and FU. This implies that perceived usefulness has a strong positive correlation with Facebook usage. Since the p.value is less than 0.05, the study conclude that there is a very strong positive relationship between Facebook usage and perceived usefulness of Facebook application.

Correlation between Facebook Usage and Perceived Ease of Use Research Question Two: What is the effect of perceived ease of use as determinant of Facebook usage among Polytechnic students in south east Nigeria?

Hypothesis Two: Perceived ease of use does not have a significant effect Facebook usage among Polytechnic students in south east Nigeria.

The result of the coefficient of correlation on Table 7 for the correlation between Facebook Usage and Perceived Ease of Use is 0.964 with a probability value of 0.000. The result of the coefficient is above 0.7 and thus shows that Facebook Usage has a very strong and positive correlation with Perceived Ease of Use. This implies that increased ease of use will lead to more Facebook usage for students in polytechnics. Since the p.value is less than 0.05, the study rejected the null hypothesis and thus conclude that there is a significant correlation. This suggests that perceived ease of use has a very strong positive and significant relationship with Facebook usage.

Correlation between Facebook Usage and Perceived Privacy Research Question Three: What is the extent of perceived privacy effect on Facebook usage among Polytechnic students in south east Nigeria?

Hypothesis Three: Perceived privacy does not have a significant effect Facebook usage among Polytechnic students in south east Nigeria.

The coefficient of correlation of Facebook Usage and Perceived Privacy is 0.909. This indicate that Facebook Usage and Perceived Privacy has a very strong positive correlation. Probability value of the coefficient is 0.000.Since the p.value is less than 0.05, we reject the null hypothesis and thus posit that perceived privacy has a significant effect Facebook usage among Polytechnic students in south east Nigeria. The study implies that perceived privacy has a very strong positive and significant effect Facebook usage among Polytechnic students in south east Nigeria.

Correlation between Facebook Usage and Peer Group Influence Research Question Four: What is the effect of peer group influence as determinant of Facebook usage among Polytechnic students in south east Nigeria?

Hypothesis Four: Peer group influence does not have a significant effect Facebook usage among Polytechnic students in south east Nigeria.

The coefficient of the correlation between Facebook Usage and Peer Group Influence is 0.994 with probability value of 0.000. The coefficient value indicate a strong positive correlation between Peer Group Influence and Facebook Usage. Since the p.value is less than 0.05, the study rejected the null hypothesis and thus conclude that peer group influence has a strong and positive significant effect Facebook usage among Polytechnic students in south east Nigeria.

Discussion of Findings
Facebook has been found to perceived usefulness, perceived ease of use, perceived privacy and peer group influence variously have a strong positive and significant relationship with Facebook usage among polytechnic students in south east of Nigeria. Usefulness indicates that a product or service provides a solution to a problem. The study suggests that students who finds the Facebook more useful tends to visit Facebook. This is in line with the theories postulated in this study. For instance, the theory of Social Influence Theory (SIT) follows that the need to socialize with peers is the essence of Facebook usage. It also follows that the effect of perceived usefulness Facebook usage is addressed in Uses and Gratifications Theory (UGT) and Media system dependency theory (MSD). These theories, as captured in the present study, are of the view that usefulness determines the extent of technology acceptance.

Conclusion and Recommendations
Facebook usage is high among polytechnic students in south east of Nigeria. Facebook usage has a strong positive and significant relationship with perceived usefulness, perceived ease of use, perceived privacy and peer group influence of the Facebook social media. Thus, it can be said that improved features of Facebook technological innovation is responsible for the improved Facebook usage among polytechnic students in south east Nigeria. Thus Facebook is capable is controlling a high wave of consumers and can be s veritable avenue for product marketing and image making.
The study has recommended as follows:
1. That since Facebook has a bee-hive of student audient, marketers should consider the use of Facebook as advertising channel for their products. Products that appeal from the young and student audience can be successfully marketed using the Facebook.
2. The government, policy makers and NGOs should embrace the Facebook as catchment point for the young adults. Advertising aimed at social change and reorientation can be sponsored through the Facebook.
3. It is also recommended that product developers, especially technology innovative ones, should consider the tenets of product usefulness, ease of use, privacy of user as well as social (peer) effects on the consumer.

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