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Social networking, identity and sexual behaviour of undergraduate students in Nigerian universities

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Abstract

Purpose – The purpose of this study was to examine how the identity of undergraduates who use social networking sites in selected Nigerian universities influences the prediction of their sexual behaviour.

Design/methodology/approach – A questionnaire survey was used to collect data from 388 students from three public universities in Nigeria.

Findings – Sex and age exerted sufficient influence on the youth's sexual behaviour, but the identity variables seemed only to increase the tendency of younger males to form intimate relationship with partners. Specifically, young males who maintain high level of social relationships have a high tendency of developing intimate relationship with partners.

Research limitations/implications – This study that deployed identity variables provides wide-ranging information on how identity moderates sexual behaviour in the presence of traditional predictors of demographic characteristics and social networking.

Practical implications – This study demonstrates that identity has a very strong influence of the predictive power of sex and age on sexual behaviour.

Originality/value – This study is the first that examined sexual behaviour, identity and social networking together.

Keywords Electronic media, Internet, Social networking, Social media, Nigeria, Computers, Sexual behaviour

Paper type Research paper

Introduction

Technology-assisted social networking has blossomed rapidly in the past decade, particularly with the development of Web 2.0, which has led to tremendous changes in how people meet and relate in person-centred, convenient, meaningful and valuable ways (Blanchard, 2011). Whether using the proxy of alumni album and friend-finding and friend-making in Facebook, the professional purpose-built and office deputation facility of LinkedIn, dating sites, such as Badoo, or a personal blog, relationship building has become easier and cheaper. Prior to these online developments, young people exploited various face-to-face strategies in specific physical places and physical community spaces, such as schools, churches, parties, pen-pals, clubs, etc. to meet up, make friends and hang out (Gobble, 2012). The launch of smartphones and mobile devices with internet capabilities and the technical convergence of computer and mobile networks have opened great opportunities for synergy between social networking sites and mobile social network software through supporting social networking activities anytime and anywhere (Lugano, 2008). These social



networking technologies have increased the opportunities for young people to engage in regular interaction with their friends and families. Social networking sites facilitate this practice by permitting members to create their own profiles containing what they want their prospective friends and others to know about them. By doing this, young social network users are able to connect with other people whose interests are similar to theirs and with whom they then interact to exchange comments, private messages, and pictures, among others things (Chan and Ghose, 2014; Danah and Nicole, 2008; Sherry, 2011).

Social networking is occurring in Nigeria as in most places. Nigeria is the largest internet mobile market in Africa, and 35 million of the 115 million mobile telephone subscribers in the country are using handheld devices to access internet data services. A recent survey carried out by BusinessDay (2013) found that social media accounted for, by far, more traffic of Nigerian youth on the internet than any other services and that sex-related activities are the major attraction.

Use and choices of activities, as well as relationships, in the social networks will be expected to be related to people's identities. In its basic meaning, *identity* describes who people perceive themselves to be, what they wish to be and who they wish to relate with (Pearson, 2011). Identity is a relational and contextual label that distinctly identifies and characterizes an individual. It is cultivated through interrelationship with family and the environment, and it encompasses issues about people who an individual wishes to emulate and those that need to be avoided. Some scholars have studied the concept of online identities, seeking to understand the character or identity of an individual, while presenting the self in a social network (Baym, 2010; Ellison, 2013; Ganda, 2014). Very importantly, identity relates to sexual behaviour (Cheek, 1989; Galupo *et al.*, 2014).

A healthy feeling of wanting to be admired, touched, loved and cared for by another person is natural and is expected to develop in young people as they grow (Alubo, 2000). Social networks create opportunities for young people to engage in discussions that may lead to the satisfaction of these needs. Social networking sites provide a unique atmosphere conducive for expression and discussions of all forms of sexuality, without the traditional oversight of parents, family members and others in society. This is because these interactions may be taking place through mobile phones which have been assessed to be convenient for person-centred and person-defined in a defined manner. Participants are not constrained by barriers imposed by face-to-face contact or place or location. However, the associated risks associated with using social networks, such as exposing young adults to cyber-bullying, harassment and sexting, may lead to depression and the risk of HIV/AIDS and other sexually transmitted diseases. Also, membership and friendship in a social organization or group is a factor that may predisposes adolescents to risky sexual behaviours (Hayes, 2010).

Evidently, there is a link between adolescent exposure to sexual media content and their sexual activities because many teens have reported various media among their primary sources of information about sexual behaviour (Hoff *et al.*, 2003). There is strong support that viewing sexual content in media contributes to increased sexual activity among adolescents (Collins *et al.*, 2004; Hennessy *et al.*, 2009; Pardun *et al.*, 2005). Brown *et al.* (2006) and Bleakley *et al.* (2008) studied the relationship between adolescent sexual behaviour and the type of media used. They used content analysis to determine the amount of sexual content in the media listed by the teens. The study found that teens exposed to a heavier sexual content across media were more likely to have had sexual intercourse in the time between interviews than those who were less exposed to such content.

With specific respect to social media, facts are already emerging that online social networking positively relates to sexual risk behaviours, such as formation of an intimate sex

relationship and indulgence in risky sexual practices, such as unsafe sex and multiple sex partnerships. Understanding how the use of social media influences sexual risk behaviour is an important first step in designing programmes to reach the overwhelming numbers of youth with online sex education and behaviour change programmes. The lessons people learn from social networks relate to the length of time they engage in social networking, an observation that is also related to how attractive the features of the social network sites are (Moreno *et al.*, 2012). Social networks are fraught with sexual lessons (Young and Rice, 2010), and youth all over the world are learning tremendous sexuality lessons from social networks. In Nigeria, the studies of Adebayo *et al.* (2006), Ajayi (2010), Ilevbare (2011), Idakwo (2010), Iwokagh *et al.* (2014) and Kujuni (2012) support that electronic media predispose youth to risky sexual behaviour.

Statement of the problem and objectives of the study

Several studies have been carried out in Nigeria to examine the effect of social media on adolescent sexuality. Many of these studies, for instance, Ajayi (2010), Idakwo (2010) and Ilevbare (2011), focus on the general use of technologies. However, early in the development of social networking, Adebayo *et al.* (2006) examined the relationship among gender, internet use and sexual behaviour orientation among young Nigerians. Their study provided support for the influence of gender and internet use on sexual behaviour. They demonstrated that as the use of the internet increased, male participants reported a greater extent of risky sexual behaviour orientation than their female counterparts. Kujuni's (2012) study is most related to this present study. The results of the study showed that when young persons are exposed to sexuality-related information on the internet and/or involved in online sexual activities, their sexual mores are shaped by the information to which they have been exposed. Beyond the relationship between the electronic media and sexual behaviour, these studies demonstrate that social networking among youth in Nigeria is an issue of current interest to scholars.

However, there is no study, either in Nigeria or elsewhere, that has investigated the relationship among identity, social networking and sexual behaviour, a contribution that makes this study important. Much of the research on influencers of adolescent sexual behaviour has focused on parent and peer influences (Huebner and Howell, 2003; Sieving *et al.*, 2006). There is also evidence that adolescents are influenced by interaction and communication within social domains. These technologies notwithstanding, it is a fact that adolescents will eventually develop their own ways of relating to people, including sex partners, and making decisions about potential partners, as well as actually participating in romantic and sexual liaisons (Giordano *et al.*, 2009; Major and Mancini, 1992).

Basically, this opinion is important as sexuality actions by adolescents are not routinized and generally occur outside of the immediate purview of their reference groups – parents, siblings and others. In this regard, therefore, identities may combine with adolescent social experiences, other individual qualities and biographical characteristics to influence their sexual behaviour. There exists ample emphasis within the symbolic interactionist tradition which provides a general theoretical basis for exploring adolescent identities and sexual behaviour. Many studies relating to sexual behaviour with identity focus mainly on sexual identities and orientation (Bailey *et al.*, 2003). In their study on risky sexual behaviour in Ethiopia, Tefera and Mulatie (2014) observed that there is a paucity of interest to examine the extent to which personal identity of adolescents shape their risky sexual orientations. On the basis of this observation, this present study examines the social networking behaviour, identity and the sexual behaviour of the respondents with the ultimate goal of finding out how the relationship among social networking behaviour, identity and sexual behaviour is moderated by adolescent demographic characteristics.

Literature review

Adolescent sexual behaviour

Alubo (2000) described *sexuality* as the social expressions of one's social and biological being through mannerisms, mode of dress, interaction patterns and physical sexual intercourse. Sexuality is more than just the act of sex or gender. Adolescent sexuality is a complex idea that involves physical make-up, self-image (i.e. how an adolescent thinks about himself or herself) and their feelings towards others and the society he or she lives in (Benson, 2011). It can be influenced by many factors, including gender, sexual orientation, culture and how the body develops. It is also inextricably linked to the development of one's identity and unfolds within specific socio-economic and cultural contexts (UNESCO, 2009). Adolescents and young adults develop a sense of their own sexuality and sexual identity, which will lead to the display of certain sexual behaviour (Giles, 2008).

Sexual behaviour includes sexual activities or practices that refer to the manner in which humans experience and express their sexuality (Marcus, 2011). It refers to any activity, whether solitary, between two persons, or in a group, that induces sexual arousal and subsequent indulgence in sexual activities. This does not necessarily imply sexual intercourse, but rather a variety of sexual acts which people engage in from time to time and for different reasons. Sexual activities are usually intended to display one's sexuality and often to gain the sexual attention of others. Strategies to find or attract partners include sending messages, making constant calls to stay in touch, and so on, and are all parts of sexual activities.

Apart from the natural sexual response patterns inherited and manifested by every human being, sexual behaviour among youths can be determined by many factors, including the types of influence that the society exerts on the individual (Hayes, 1987). This influence results in various levels of sexual activities ranging from mild to high risk and solitary or social sexual indulgences (GPA, 1994). Global Programme on AIDS has listed indicators of risky sexual behaviour as type of sexual partner, condom use, age at first sex, number of partners, commercial sex and age mixing in sexual relationships. Social media expose adolescents to various forms of sexual opportunities, such as creating linkages with possible partners and the availability of sexual content. Media has generally been linked to sexual indulgences (Rideout *et al.*, 2010). Adolescents use a variety of media and increasingly engage with these media on diverse platforms and are, therefore, exposed to encountering various sexual content across these platforms.

Identity

Identity is a very complex concept in social psychology. Generally, *identity* is defined as self-definition or self-image (Erickson, 1995). The term has been used to describe culture, particularly in respect to race (Helms, 1990); politics; organization (Albert and Whetten, 1985); education (Chickering, 1969); citizenship (Habermas, 1992); etc. The term *identity orientation* is very common in the literature and refers to the relative importance that individuals place on various identity attributes or characteristics when constructing their self-definitions (Cheek, 1989). HIV Counselor Perspective (2005) has discussed sexual identity or sexual orientation as the ways in which people incorporate sexual desires into their sense of self as sexual beings. Sexual identity is the result of a process through which people come to terms with their sexual desires and are often labelled as homosexual, heterosexual or bisexual. Gender identity has also been defined as an individual's inner and private definition of self in respect of being a male or female (Giles, 2008).

Cheek (1989) deconstructed identity holistically from a purely social psychology perspective as consisting mainly of personal, social and collective identity. This idea is very

popular and most applicable to this study. According to [Cheek \(1989\)](#), *personal identity* is private self-conceptions and subjective feelings which an individual has about their self. They consist of idiosyncratic characteristics of the individual, such as bodily attributes, abilities, psychological traits, etc. Personal identity consists of what makes an individual unique and the way an individual defines him or herself. [Chisholm \(1976\)](#) suggested that one's identity could be contingent; that is, one may have had a different identity from the one he or she presently has. One can also swap identity for a different one altogether or even get by without any identity at all. Personal identity relates to personhood – what does a person consider necessary and sufficient to be considered a person or non-person? Within the concept of personal identity is the question of persistence or what has been known as personal identity over time. As a person exists over time, what determines the past and future *beingness* of the person? What makes one what he or she is today in comparison with what he or she was some time in the past? Personal identity is also concerned with the continuous effort by human beings to find out who they are in the actual sense. Personal identity questions whether one would have been someone else: could one, for instance, have had different parents? Are one's conditions and circumstances presently the best for him or her ([Williams, 1974](#)).

Social identity describes the public image of an individual, as well as the social roles and relationships the individual maintains. [Tajfel \(1979\)](#) proposed that the groups which people belong to are an important source of pride and self-esteem. These groups may include social class, family, football teams, etc. Human beings define themselves in terms of group membership and seek to have their group valued positively relative to other groups. As a result, if a person defines himself or herself in terms of nationality, then the person would want that country to be valued more than others. However, we live in an unequal world and many groups are devalued in comparison with others. Individuals may consider their identity as either permeable or impermeable. That is, they may feel that their social group does not present any obstacle to their progress in society and then they distance themselves from their group. They may also consider their group as impermeable, in which case they will identify with the group and act collectively with fellow group members to improve their situation ([Ellemers et al., 1999](#); [Tajfel and Turner, 1986](#)).

Collective identity defines membership and identification with different social groups, such as religious or ethnic groups. Collective identity is an individual's cognitive, moral and emotional connection with a broader community, category, practice or institution. It is a perception of a shared status or relation, which may be imagined rather than experienced directly, and it is distinct from personal identities, although it may form part of a personal identity. Usually, collective identity may be first constructed by outsiders who may still enforce it, but it depends on some acceptance by those to whom it is applied. According to [Polletta and Jasper \(2010\)](#), collective identities are expressed in cultural materials – names, narratives, symbols, verbal styles, rituals, clothing, and so on – but not all cultural materials express collective identities. Collective identity carries with it positive feelings for other members of the group.

[Cheek \(1989\)](#) posited that every individual has each of these conceptions. However, there are variations within each individual about how these different aspects of identity would manifest in the individual's daily life ([Carpenter and Karakitapoglu-Aygün, 2005](#)). [Razmjoo \(2010\)](#) reviewed many studies conducted on the effects of the various aspects of identity on an individual, as well as their relationship in social and other contexts.

Identity will inextricably relate to a person's use of social networking and sexual behaviour. The way people express their sexuality may vary according to their identity and circumstances ([Pearson, 2011](#)). For instance, an individual may not be passively receiving

messages from peers, but may play an active role in filtering and reacting to these communications. This is exactly the thesis of Corsaro (1990) and Eder and Nenga (2003) in which they elaborated the interpretive perspective of adolescent peer cultures. When interacting and communicating with friends, people draw on elements of their identities, inevitably constructing new worlds that are distinctive in multiple respects (Giordano *et al.*, 2009). Inevitably, social networks have, therefore, changed the way people construct their identities (Holmes and Jones, 2011).

Social networking

Modern social networking practices in social media available on multitasking electronic platforms, such as cell phones and computers, guarantee private exposure and deny parents and guardians their roles as character influencers (Roberts *et al.*, 2005). Using the portability of media ensures that messages, such as those that promote risky sexual behaviour, may have a greater influence on those youth who use them. Also, one can be using a medium, such as a cell phone, while engaging in other non-media activities, thus compressing activities into a short time period. A growing number of studies link sexual content in media with adolescents' attitudes and sexual activities. In particular, three longitudinal studies Hennessy *et al.* (2009), Rideout *et al.* (2010), and Roberts *et al.* (2005) demonstrate prospective relationships between prior exposure to sexual content in the media and subsequent changes in sexual behaviours, after controlling for likely confounding variables.

Young and Rice (2010) evaluated the association between online social networking and sexual health behaviours among homeless youth in Los Angeles, with survey data from 201 homeless youth accessing homecare services. The researchers used logistic models to assess whether the use of online social networking technologies affect HIV knowledge, sexual risk behaviours and testing for sexually transmitted infections. Their result suggests that online social networking and the topics discussed on these networks can potentially increase or decrease sexual risk behaviours depending on how the networks are used. Chan and Ghose's (2014) study of the relationship between online information resources and HIV transmission is also informative in this regard. Alam *et al.* (2011) identified the attitudes of young adults towards online social networks and online dating sites usage and also examined the different behaviour between male and female online daters. Their study showed that most young adults have a Facebook ID and just over 10 per cent of them date online. One major finding is that females are searching for their long-term partners through online dating sites, while the males are mainly interested in building casual relationships.

Moreno *et al.* (2012) conducted a pilot evaluation of older adolescents' sexual preference displays on public Facebook profiles of undergraduate freshmen identified within a large US university Facebook network. They found that sexual references displayed on Facebook profiles of college freshmen were associated with their intention to become sexually active. However, they did not find a significant association between online display of sexual references and either sexual experience or risky sexual behaviour. Moreno *et al.* (2012) found an association between display status and likelihood of having engaged in oral sex. The findings from the study suggest that the display of sexual preferences on Facebook is a developmental marker of the emergent adult as a sexual person.

Giordano *et al.* (2009) investigated the social and behavioural characteristics of male adolescents who self-identify as players, focusing the claim that this social role is inextricably linked with poverty and minority status. Their results showed that African-American respondents with liberal peers and young men who initially report a relatively high number of sexual partners are more likely to resonate with this identity label. They posited that the player identity is a significant predictor of later variations in

self-reported sexual behaviour. However, the results from their interviews contradicted their quantitative findings, suggesting rather that young men's perceptions of identity are not as uniformly positive as Anderson's depiction might lead us to believe.

Theoretical framework

Human sexual behaviour and its relationship with media generally have attracted the attention of many researchers who have also theorized on the subject matter. The social learning theory and social cognitive theory (Bandura, 2002) posit that screen-media exposure leads to the cognitive acquisition of behaviours along with their expected social, emotional and cognitive consequences. The integrative model of behaviour change (Fishbein, 2000) builds on social cognitive theory and integrates it with other theories, such as the theory of reasoned action (Ajzen and Fishbein, 1980), to predict that media exposure will influence behaviour through shifts in behavioural intentions, which are themselves a function of attitudes, norms and perceptions of self-efficacy acquired through media and other sources. Thus, media users are likely to learn the outcome of sexual activity and also whether others engage in it or approve of it, and then decide whether they are more or less able to engage in similar activities.

The media practice model (Steele, 1999) argues that media use is selective, with users focusing on content related to the predominant issues of interest to them. Thus, adolescents whose interest in sex is growing as a result of puberty and other forces are more likely to select media with sexual content. The model posits that the process of media selection, interaction and application constantly shapes and is shaped by identity (Steele, 1999; Steele and Brown, 1995). Young people are generally believed to be selective in their media and creative in their choices and interpretations of media content, and they are active users of media materials (Sullivan, 2009).

The uses and gratification (U&G) theory (McQuail, 1983) is also relevant in the study. U&G is concerned with how people use media for their needs and gratification and not necessarily the effects of the media on the users. U&G considers media users as active and user/audience-centred; it posits that people consciously and deliberately resort to media to meet their information needs. U&G classifies the common reasons for using media into four: information, personal needs, integration and social interaction and entertainment. Implicit in U&G theory is the concept of identity – U&G suggests that people are capable of deciding what they want from media and use media to meet those needs.

Generally, these theories have implications that individuals acquire a diverse and ordered set of behaviours as a result of exposure to media. Individuals not only learn whether a behaviour is common and whether it will result in positive outcomes but also are presented with a series of events describing how and when it is appropriate to enact the behaviour. These lessons learned may not always be used until events or circumstances in the environment, such as a kiss, a first date, or such, trigger them.

Research framework

The research framework for this study (Figure 1) is influenced by the media practice model and the U&G theory. Figure 1 shows that demographic variables – namely, age and sex – have a relationship with the use of social networking. A series of surveys carried out by Pew Research Centre (2014) support this observation. In their study on the contemporary media use landscape, age is a major driver of internet use and those aged 15-24 are four times more likely than those 35 and older to have gone online in the past week (Broadcasting Board of Governors, 2014). Social media use is also associated with age with most recent studies. Perrin (2015) suggested that the gap between men (76 per cent) and women (84 per cent) in

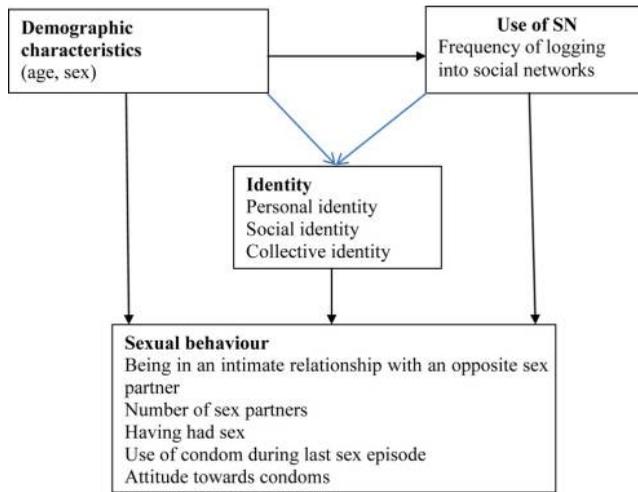


Figure 1.
Research framework

respect of use of social media is closing. Demographic variables have an historical relationship with identity and also with sexual behaviour.

However, no studies have examined the relationship between social media use and identity. There are also no studies that have examined how the relationship between demographic variables and sexual behaviour is mediated by identity.

Methodology

This study was based on data collected from three universities in Nigeria, namely, the University of Ibadan, the University of Uyo and the University of Nigeria. The study locations were chosen based on convenience; all the universities are public institutions known to have a near equal mix of student populations from different social strata (Nwagwu, 2012).

Research design sampling procedure and data collection

This study was guided by a sample survey research design. A sample survey is used to seek the opinions of individuals on a particular problem such that the consensus of opinions is expected to provide a solution to the problem (Aina, 2002). This design is also suitable to observe or obtain information about facts, behaviours, attitudes and feelings of individuals in a given population from a large aggregate or population by selecting and measuring a sample of that population.

The researcher considered the three institutions in the study as constituting three strata as they are located in culturally disparate parts of the country; thus, a stratified sampling method was adopted. A sample size of 500 students from each of the universities was gathered. Efforts were made to ensure that equal proportions of male (250) and female (250) students from each of the universities were involved in the sampled population. To select respondents, a sampling frame for each institution was considered, but this effort was marred by long protocols, coupled with the fact that the institutions were at different stages in their academic programmes. An accidental sampling system with assistant researchers visiting the students' hostels in the evenings for data collection was adopted instead.

Questionnaire development and measures

A structured questionnaire guided the data collection. A questionnaire was considered suitable because it suits the nature of the study, which involves disclosure of sensitive information such as their sexuality. The administration of the questionnaire was carried out during June-August 2013 by the researcher and three assistants, after permission was obtained from each of the universities. Section A in the questionnaire consisted of items to gather information about the socio-demographic characteristics of the participants, including age, gender and ethnicity. Section B focused on the number of hours spent social networking, categorised as less than 1 h, 1-5 h, 6-10 h, 11-16 h and constantly logged in. The measures of these variables were designed heuristically, but the result of the pretest of the questionnaire did not indicate any misunderstanding of the variables. This section also examined why respondents used social networking sites and the features of social networks that draw them to use the networks. To understand why students use social media, a set of gratification variables used in a study by [Nwagwu \(2012\)](#) were used and measured as strongly agree, agree, undecided, disagree and strongly disagree. The question of useful features of social networks was also taken from the same source and measured as very true, true, I can't say, somewhat true and not true. The measurements of the variables "why students use social media" and "useful features of the social media" are ordinal and were, therefore, summarized with central tendencies.

Section C focused on identity. [Cheek's \(2003\)](#) identity questionnaire which operationalised identity into personal, social and collective identity was adopted. The variables were measured on a five-point Likert scale of not important, slightly important, somewhat important, very important and extremely important. To increase the chances that the respondents are not unnecessarily influenced in their responses, the identity variables were not categorized as personal, social and collective. Rather, the variables were mixed up and later disaggregated accordingly after data collection into three main categories:

- (1) Personal identity orientation:
 - My personal values and moral standards;
 - My dreams and imagination;
 - My personal goals and hopes for the future;
 - My emotions and feelings;
 - My thoughts and ideas;
 - The way I deal with my fears and anxieties;
 - My feeling of being a unique person;
 - Knowing that I continue to be essentially the same inside even though life involves many external changes;
 - My self-knowledge, my ideas about what kind of person I really am; and
 - My personal self-evaluation.
- (2) Social identity orientation:
 - My popularity with other people;
 - The way in which other people react to what I say and do;
 - My physical appearance: my height, my weight, and the shape of my body;
 - My reputation, what others think;
 - My attractiveness to other people;
 - My gestures and mannerisms, the impression I make on others; and
 - My social behaviour, such as the way I act when meeting people.

(3) Collective identity orientation:

- Being a part of the many generations of my family;
- My race or ethnic background;
- My religion;
- Places where I live or where I was raised;
- My feeling of belonging to my community;
- My feeling of pride in my country (being proud to be a citizen);
- My commitments on political issues or my political activities; and
- My language, such as my regional accent or dialect, or a second language that I know (Source: [Cheek \(2003\)](#)).

For ease of presentation, the identity variable groups were summed and classed into categories: low, medium and high. Section D was designed to collect data about the sexual behaviour of the respondents. This dependent variable, was described by:

- being in an intimate relationship, measured with a “yes” or “no” response;
- having ever had sex, measured with a “yes” or “no” response; and
- use of a condom during last sexual episode, measured with a “yes” or “no”.

These variables were among those validated for international use in [Slymaker's \(2004\)](#) study on indicators of sexual behaviour.

Pretesting the instrument and data collection

Because of the sensitivity of the subject matter, it was considered necessary to pretest the questionnaire to ensure that the results would be reliable ([Catania et al., 1995](#)). To achieve this, the first draft of the questionnaire was administered by hand to 20 students in each of the universities. The respondents of 7 of the 20 copies of the questionnaire did not supply responses to the questions on sexual behaviour. To address this, the authors had discussions with two senior guidance counselling experts from the University of Ibadan who advised that the final questionnaire be enclosed in an envelope and slipped into the rooms of the students, with an appeal for participation accompanying the questionnaire.

Following this approach, a letter introducing and soliciting for consent and pledging anonymity was appended to the questionnaire and delivered to the students' rooms while they were away at classes. The letter also requested that the envelopes be sealed after completing the questionnaire and returned to the porters' offices anonymously. A total of 542, 509 and 528 copies of the questionnaire were administered at the University of Ibadan, University of Uyo and University of Nigeria, respectively, and 388, 364 and 344 copies were returned, giving a return rate of 72.0, 71.6 and 65.0 per cent, respectively, or an overall return rate of 70 per cent, a considerably good result for an unsolicited survey. The first diagnostic test was to uncover whether the three samples have similar characteristics across age, gender and ethnicity, and χ^2 was used to do this; a χ^2 value of $\chi^2 = 2,309.12$, $p = 0.205$ were obtained, indicating that the respondents could be considered to come from the same population.

Data analysis

Data analysis was carried out using the hierarchical binary logistic regression method. Hierarchical regression method is used when one wishes to specify a fixed order of entry of

variables to control for the effects of covariates or to test the effects of certain predictors independent of the influence of others. A hierarchical logistic regression model is often used for studying data that has group structure and binary response variables. The structure of the group is defined by the presence of micro observations that are embedded within contexts (Wong and Mason, 1985).

As is the usual case, the variables are entered according to existing knowledge on how the covariates relate in the system. With particular respect to this study, sex and age are known predictors of sexual behaviour (Stallworth *et al.*, 2004; Ugoji, 2011). There is also evidence that identity (Pearson, 2011) and use of social networking sites relate to sexual behaviour (Adebayo *et al.*, 2006; Idakwo, 2010), but there is no evidence about how these two categories of variables together predict sexual behaviour. These authors measured sexual behaviour with intimate relationship, number of sex partners, ever had sex, use of a condom during last sex and attitude towards condoms, recoded in binary forms where otherwise indicated. Hence, the application of hierarchical regression approach is capable of revealing how the covariates relate to the phenomenon under study.

Results

Demographic characteristics of the respondents

The mean, median and modal ages of the respondents are 19.5, 19.7 and 19.3 years, respectively. Males constitute a higher proportion of the participants (53.7 per cent) than females (46.3 per cent).

Social networking

Almost all the respondents (99.7 per cent) reported belonging to a social network. Figure 2 shows that Facebook is the site to which most of the respondents belonged. BlackBerry World's 2go is the next most popularly used social network among the respondents.

More than 10 per cent of the respondents reported using 2Go and BlackBerry Messenger, each, while those who reported using other social networks (WhatsApp, Nairaland, Badoo, E-Buddie and Twitter) were fewer than 10 per cent for each social networking site.

Time spent on social networks

Another question inquired how many hours per week the respondents spent on the social networks they were members. On average, the students reported spending about 2.46 h

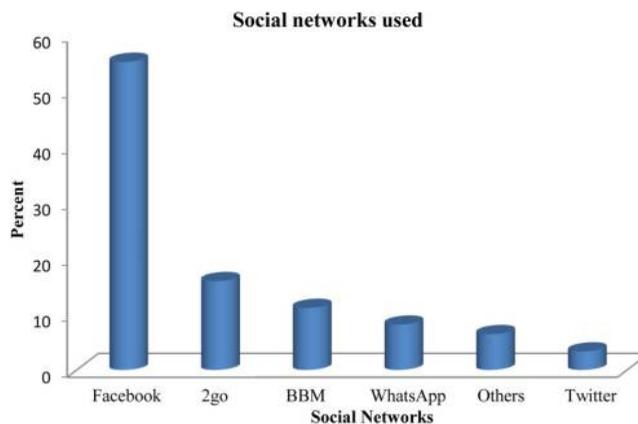


Figure 2.
Use of social networks

(SD = 1.41) a week in a social network. Specifically, the highest proportion of respondents (31.7 per cent) reported a weekly time-range of 11-16 h. This is closely followed by 31.2 per cent, who reported that they stayed on the network for less than 1 h per week. A little less than 16.0 per cent reported that they are logged in for 6-10 h, with about 10 per cent reporting all the time (Table I).

Why you use social networking sites?

Table II presents the respondents' answers on the gratifications they derive from the social network that motivates its use. On a Likert scale of 1 = strongly disagree and 5 = strongly agree, the gratification that has the highest mean rank is the ability to connect with old friends wherever they are (M = 4.73, SD = 2.89), followed by ease of use (M = 4.59, SD = 2.22). The mean ranks of M = 4.39, SD = 2.79 and M = 4.19, SD = 1.85 refer to the responses of those who merely agreed with the statements that social networks make them accessible to others all the time and are cheap.

Useful features of mobile social networks

Table III presents the features that make social networks attractive to the respondents, measured on a Likert scale of 1 = not true and 5 = very true. Finding new friends (M = 4.81, SD = 3.17), meeting old friends (M = 4.69, SD = 1.18), user friendliness (M = 4.59, SD = 2.02) and discussing matters freely (M = 4.56, SD = 1.35) were deemed the most agreeable attractive features by the respondents.

The respondents also merely agreed (M < 4.5) with the statements that the social network serves the purpose of leisure, companionship, sending messages to selected individuals, uploading pictures, chatting with just anyone and updating status messages. The mean responses with respect to using social networks to find sex partners is very low (M = 2.19, SD = 2.39). None of responses to the questions had the mean ranks that tended towards undecided or strongly disagreed.

Amount of time	Frequency (yes)	(%)
Less than 1 h	342	31.2
1-5 h	102	9.3
6-10 h	175	16.0
11-16 h	347	31.7
All the time	107	9.8
Don't know	23	2.1
Total	1,096	100

Table I.
Time spent on social networks

Gratification variables	Agree %	Undecided %	Disagree %	Mean	SD
I am able to connect with existing friends anytime and anywhere	64.25	3.51	32.28	4.73	2.89
It is easy to use	55.65	9.23	35.12	4.59	2.22
I express myself freely and better (no face-to-face discussions)	54.89	7.99	37.12	4.59	3.33
It makes me accessible almost all the time	53.24	4.24	42.52	4.39	2.79
It is cheaper for me	50.26	5.16	44.58	4.19	1.85
Overall mean				4.50	2.62

Table II.
Reasons for using social networking sites

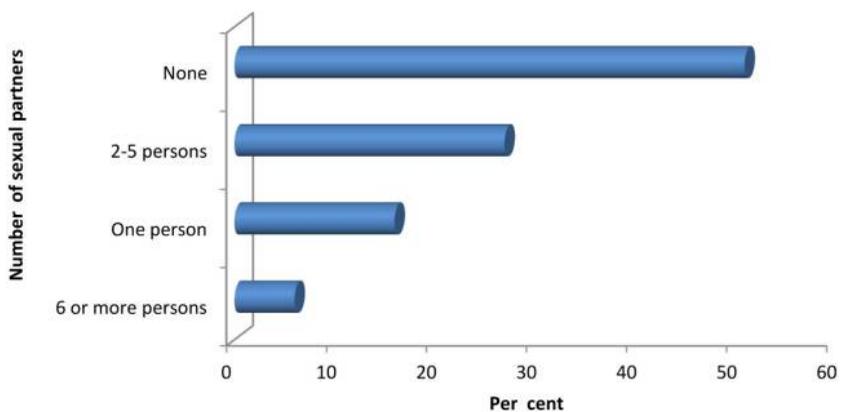
Table III.Useful features of
favourite social
network sites

Enabling features	Mean	SD
Good for finding new friends	4.81	3.17
Enables me to meet my old friends	4.69	1.18
It is user friendly	4.59	2.02
I can discuss matters freely just to release my emotions	4.56	1.35
A source of leisure when I am alone	4.39	3.53
I can send messages to selected individuals	4.39	1.72
Easy for uploading pictures	4.33	1.35
Good for chatting with anyone	4.19	3.11
I can update status messages	4.11	2.19
Can be used to find sexual partners	2.19	2.39
Total	4.23	2.20

Sexual behaviour

It can be classified as follows:

- *Being in an intimate relationship with a sex partner:* More than half of the respondents (56.7 per cent) reported that they were not in an intimate relationship with a partner of the opposite sex.
- *Number of sex partners ever in intimate relationship(s) with a sex partner:* Figure 2 shows that 48.0 per cent of the respondents reported having been in an intimate relationship with only one person, 22.2 per cent have been in an intimate relationship with two-five persons, while 3.2 per cent reported an intimate relationship with six or more partners. About 27.0 per cent of the respondents reported not to have been in an intimate relationship with a member of the opposite sex before (Figure 3).
- *Having ever had sex:* More than half of the participants (59.6 per cent) reported not to have ever had sexual intercourse, with 40.4 per cent reporting at least one sexual experience.

Number of opposite sex partners ever been in intimate relationship with**Figure 3.**
Number of
heterogeneous sex
partners

- *Use of a condom during last sex episode*: More than a quarter of the respondents (26.4 per cent) reported using a condom during their last sexual episode while 16.5 per cent did not; others rather reported having not had sex (57.1 per cent).
- *Attitude towards condom use*: Less than half of the respondents (47.3 per cent) always used a condom; 26.8 per cent never used condoms, 15.7 per cent used condoms most of the time, 5.3 per cent used condoms sometimes and 4.9 per cent used condoms rarely.

Relationship between identity, social networking and sexual behaviour

Hierarchical logistic regression analysis was used to address the relationship between identity, social networking and sexual behaviour. Table IV relates to the means and standard deviations of these relationships. The table shows that on a five-point scale, social identity falls into the “slightly important” category, while the category of “personal identity” was considered very important.

Table V shows that all the correlations were weak, ranging between 0.000 and 0.05, and this indicates that multi-collinearity may not be a problem. Furthermore, the correlation between the predictors and sexual behaviour is significant indicating normality.

Specifically, age ($r = -0.09, p < 0.01$) and sex ($r = -0.34, p < 0.01$) have inverse correlation with intimate relationship. Social identity ($r = 0.04, p < 0.01$) and collective identity ($r = 0.02, p < 0.01$) have a positive relationship with intimate relationship. Personal identity, social identity and collective identity have a significant relationship with all the sexual behaviour variables, each. Social networking has a positive and significant relationship with intimate relationship ($r = 0.228, p < 0.05$) and number of sex partners ($r = 0.127, p < 0.05$); intimate relationship has a significant relationship with all other sexual behaviour variables, but the relationship is negative with condom use during last sex and number of sex partners. Number of sex partners itself has a significant and positive relationship with ever had sex ($r = 0.411, p < 0.05$) and condom use during last sex ($r = 0.311, p < 0.05$). Ever had sex has a significant relationship with all the variables except social networking, while the relationship between condom use during last sex and all the other variables was significant, except with ever had sex and social networking, while attitude towards condoms has a significant relationship with all, except condom use during last sex. Generally, all the variables have low bivariate correlations, showing that they are actually independent; they are different constructs and can, therefore, be good predictors of dependent variables.

For the final analysis, gender and age were entered for analysis, and then next identity variables were entered, followed finally by social networking. The whole essence is to know whether the addition of identity variables to age and sex will improve the prediction of social networking on sexual behaviour of the respondents. It was deliberate to first know how each of the groups of variables predicts sexual behaviour before interrogating the effects of addition of the groups of variables. The result of the analysis is shown in Table V.

Intimate relationships

The negative slope of sex ($\beta = -3.05, p < 0.05$) and positive slope of age ($\beta = 0.75, p < 0.05$) show that older male respondents had a higher extent of intimate relationships (Table VI). Personal identity and collective identity did not predict intimate relationship (Model 1), but social identity did ($\beta = 0.07, p < 0.05$) (Model 2).

Social networking statistically predicted intimate relationship ($\beta = 0.74, p < 0.05$) (Model 3). The positive slope suggests that higher social identity is associated with a higher likelihood of having developed an intimate relationship with a partner of the opposite sex.

Table IV.
Means and standard
deviations of
relationships

	Age	Social identity	Personal identity	Collective identity	Social networking	Intimate relationship	No. of sex partners	Ever had sex	Condom use during last sex	Attitude towards condoms
Mean	23.562	1.808	3.880	1.483	2.46	–	2.322	1.760	1.67	3.251
SD	1.901	0.400	0.341	0.541	4.020	1.440	0.370	0.459	0.599	1.330
Cronbach alpha	–	0.569	0.611	0.590	0.612	0.611	0.553	0.609	0.610	0.658

Note: * = significant at $p \leq 0.05$

	1	2	3	4	5	6	7	8	9	10	11
1. Age	1										
2. Sex	-0.234	1									
3. Social identity	0.018	-0.033	1								
4. Personal identity	0.004	0.015	0.378**	1							
5. Collective identity	0.023	-0.069**	0.348	0.320**	1						
6. Social networking	-0.050	0.002	0.032	0.096	-0.039	1					
7. Intimate relationship	-0.088**	-0.337**	0.035	-0.017**	0.020	0.228**	1				
8. No. of sex partners	0.382**	-0.127**	0.101**	-0.117**	0.210**	0.127**	-0.216**	1			
9. Ever had sex	0.298**	-0.117**	0.115**	-0.272**	0.231**	0.422	0.291**	0.411**	1		
10. Condom use during last sex	-0.288**	0.111**	-0.035**	-0.107**	0.302**	0.218	-0.218**	0.311**	0.118	1	
11. Attitude towards condoms	-0.222**	-0.191**	-0.035**	-0.123**	0.100**	0.201	-0.020**	0.228**	0.222**	0.427	1

Undergraduate
students

Table V.
Zero-order correlation
coefficients

Table VI.
Hierarchical binary
logistic regression of
influence of
demographic
characteristics, social
networking and
identity on sexual
behaviour

Demographic characteristics Model	Intimate relationship	No. of sex partners	Ever had sex	Condom used during last sex	Attitude towards condoms
	<i>Yes = 1</i> <i>No = 0</i>	<i>1 = 0</i> <i>>1 = 1</i>	<i>Yes = 1</i> <i>No = 0</i>	<i>Yes = 1</i> <i>No = 0</i>	<i>Used = 1</i> <i>Not used = 0</i>
1 Sex (Female = 1)	-3.045*	-0.165*	-0.104*	-0.304*	-0.088*
Age	-0.750*	0.457	1.211*	-0.174*	-1.171*
2 Social identity	0.067*	-1.328*	-0.063	0.216	0.709*
Personal identity	-0.010	-0.686*	-0.600*	0.247	-0.410*
Collective identity	-0.067	-0.616	-0.703*	1.041*	-0.017
3 Social networking	0.740*	0.165*	0.104*	0.304*	1.401*
4 Sex	-3.049*	-0.256*	0.276*	0.310	-0.955*
Age	-1.749*	0.455*	0.366*	-0.024	-0.101
Social identity	0.017*	-3.311*	-1.631	0.121	0.709
Personal identity	-1.200	-0.161	-0.611*	1.707	0.410*
Collective identity	2.674	1.006	-0.173*	1.201*	1.612
5 Sex (Male = 0)	1.985*	-0.782*	1.028	1.205	-1.481*
Age	-0.732*	0.102	-0.117	-0.312*	-2.708*
Social identity	0.027	-0.165*	0.151	0.272	0.171
Personal identity	-0.514	-0.449	1.544*	0.432	-0.314
Collective identity	0.157	2.426	-0.940	-1.622	0.175
Social networking	1.710*	0.705*	0.194*	0.930*	1.323*

When sex and age were introduced together with the identity variables (Model 4), an interesting result manifested: the likelihood that males would form an intimate relationship with a sex partner increased marginally ($\beta = -3.05, p < 0.05$), while the likelihood that younger respondents would be involved in an intimate relationship increased more rapidly ($\beta = -1.75, p < 0.05$). However, the magnitude of prediction of social identity reduced ($\beta = 0.017, p < 0.05$). The introduction of social networking (Model 5) yielded an interesting result. The slope for females forming an intimate relationship became significant and positive ($\beta = 1.99, p < 0.05$). None of the identity variables is a significant predictor at this stage, but social networking positively and significantly predicted formation of an intimate relationship ($\beta = 1.71, p < 0.05$).

Number of sex partners

In the same way, the significant and negative slope of sex ($\beta = -0.17, p < 0.05$) suggests that male respondents had a higher number of sexual partners in comparison with females (Model 1). Lower personal ($\beta = -1.33, p < 0.05$) and social identity ($\beta = -0.69, p < 0.05$) relate significantly but negatively with a higher number of sex partners (Model 2), just as indulgence into social networking ($\beta = -0.17, p < 0.05$) (Model 3). When sex ($\beta = -0.26, p < 0.05$), age ($\beta = 0.46, p < 0.05$) and the identity variables were introduced together in Model 4, sex and age normally predicted number of sexual partners, but only social identity did for this study ($\beta = -3.31, p < 0.05$). Only males ($\beta = -0.78, p < 0.05$), social identity ($\beta = -0.17, p < 0.05$) and social identity ($\beta = 0.71, p < 0.05$) predicted the number of sexual partners positively when the influence of sex and age were examined together with the identity variables (Model 5).

Ever had sex

The odds of ever having had sex are in favour of male respondents ($\beta = -0.104, p < 0.05$); also, each additional year increases the odds that males would report having ever

had sex ($\beta = 1.211, p < 0.05$) (Model 1). In Model 2, the odds of personal identity explaining ever had sex is negative ($\beta = -0.600, p < 0.05$), while the relationship is positive for collective identity ($\beta = 0.703, p < 0.05$). Also, Model 3 shows strong indications that increased social networking behaviour relates positively with ever had sex. When examined together in Model 4, females ($\beta = 0.28, p < 0.05$) and age ($\beta = 0.37, p < 0.05$) predicted ever had sex; social identity did not predict ever had sex, but personal identity ($\beta = -0.61, p < 0.05$) and collective identity ($\beta = -0.17, p < 0.05$) did. The addition of social networking revealed that personal identity ($\beta = 1.54, p < 0.05$) and social networking itself ($\beta = 0.19, p < 0.05$) predicted ever had sex (Model 5).

Condom used during last sex

With respect of using a condom during the last sexual intercourse, the positive slope of female ($\beta = 0.304, p < 0.05$) in Model 1 shows that the odds of the female respondents using condoms during last sexual episode increases with increasing age ($\beta = 0.17, p < 0.05$). The slope of collective identity ($\beta = 1.04, p < 0.05$) in Model 2 is positive, just as that of social networking ($\beta = 0.30, p < 0.05$) in Model 3. Age ($\beta = -0.024, p < 0.05$), but not sex, predicted use of a condom during last sexual act, when age and sex were joined with the identity variables (Model 4). At this stage, only collective identity ($\beta = 1.20, p < 0.05$), of the three identity variables, predicted use of a condom during last sexual encounter. In conjunction with social networking ($\beta = 0.930, p < 0.05$), males and not females were most likely to have used a condom during last sex ($\beta = -0.132, p < 0.05$) (Model 5).

Attitude towards condoms

Model 1 shows that the influence of males ($\beta = -0.09, p < 0.05$) increases with age ($\beta = 1.17, p < 0.05$). The odds of social identity explaining attitudes towards condoms is also negative ($\beta = -0.10, p < 0.05$), but the odds are positive with social identity ($\beta = 0.71, p < 0.05$) and negative with personal identity ($\beta = -0.410, p < 0.05$) (Model 2). Next, the social networking in Model 3 positively explained a positive attitude towards condom use ($\beta = 0.14, p < -0.05$). Following the procedure adopted in this study, the influence of sex and age on attitude towards condoms was investigated together with the identity variables (Model 4). Males ($\beta = -0.995, p < 0.05$) who have positive personal identity predicted a positive attitude towards condom use. Finally, the introduction of social networking resulted in males ($\beta = -1.481, p < 0.05$) who are young ($\beta = -2.71, p < 0.05$) and social networking ($\beta = 1.32, p < 0.05$) significantly predicting positive attitude towards condoms (Model 5).

Discussion

This study examined how the identity of undergraduates in selected Nigerian universities mediated the influence of their use of social networking on their sexual behaviour. Sex and age are generally established determinants of sexual behaviour of youth (UNESCO, 2009). With almost all the respondents reporting belonging to social networking sites, social networking has become a necessary part of the lives of students. The average age of students in this study is a little bit higher than the popular average in most studies involving undergraduate students (Odimegwu, 2005). The number of respondents that reported belonging to social networks can be considered very high and, increasing in comparison with Adebayo *et al.* (2006) and Kujuni (2012), suggesting that social networking sites have fast become an inevitable infrastructure required by students.

The findings in this study support previous findings that Facebook is the most popular social network among students in Nigeria (Onah and Nche, 2014). Facebook provides mobile applications for a wide variety of mobile phones and comes pre-installed on most mobile phones. This quality makes the platform accessible to almost all persons who have access to

mobile phones. Of all the social networking sites which the respondents reported that they belonged to, only Nairaland is an indigenous site, while Badoo is the only site known to be a dedicated dating site. Basically, social networks, irrespective of the goal of the designer, could serve sexuality purposes as long as they connect people. About three of every ten students in the study spent more than 2 h per day on social networks, while more than 9 per cent reported being in the social network all the time – the period spent on social networks can be considered sufficiently long enough to suggest addiction.

The utility and gratification variables of interaction and social integration, followed by ease, freedom, accessibility and cost are the major reasons for young people to engage in social networking. Generally, the common knowledge that youth are known to be active media users who deliberately and consciously rely on the media for information of all kinds is confirmed in this study. The result on social network use by the respondents supports the dominant use of Facebook by respondents in Nigeria (CP-Africa.com, 2013), as Facebook is popularly renowned for connecting people with their old friends, as well as creating new ones. Linking up with friends made in schools and colleges, as well as churches and associations, in the course of a life time in view of the itinerant nature of human lives is an expectation that Facebook fulfils satisfactorily (Ljepava *et al.*, 2013). Another study is required to examine the extent to which connecting with old friends relates to creating sexual partnerships in comparison with new friendship relationships. For example, the difference in people's connection with old friends relates with the intention to initiate a sexual relationship.

The sexual behaviour of the respondents differs somewhat from that reported by other researchers (Isiugo-Abanihe, 2005; Odimegwu, 2005). In line with Odimegwu (2005), male students in this present study were more likely to have had sex and to engage in unsafe sex. However, this study finds that males reported a higher number of sex partners than females, unlike Odimegwu's study which reported that there were no obvious differences between the genders in the numbers of same-sex partners. The number of persons who reported being in an intimate relationship with a sex partner or ever had sex in this study is less than those who did the same in Odimegwu's study. The two studies, however, focussed and collected data from different universities and at different times.

Sex and age consistently predicted all the sexual behaviours (except number of sex partners, which was not predicted by age). For the later part of this finding, this result is consistent with the findings of previous studies (Odimegwu, 2005; UNESCO, 2009). Indulgence into sexual activities is a natural expectation from maturing youth, and they initiate these activities according to their individual circumstances. Social networking, alone or alongside other variables, also consistently predicted sexual behaviours, an observation that underpins the heavy role social networks play in sexual activities among youth. Social networks provide an unmonitored environment in which youth explore, experience and express their sexuality (Marcus, 2011). Ljepava *et al.* (2013) added a new dimension to the discourse of social networking and sexuality by showing that close offline friendships also extend to social networks and contribute to a feeling of closeness and intimacy between friends in both online and offline contexts.

The discussion so far somewhat appears to buttress what is already known about sexual behaviour of adolescents, namely, that sex and age (UNFPA, 2003), social networking (Adebayo *et al.*, 2006; Kujuni, 2012) and identity independently influence sexual behaviour. However, combining these variables with identity variables (Model 4) shows that the influence of sex and age on intimate relationships was only marginal, but the influence of social identity on intimate relationships also increased somewhat. It would appear that sex and age exert sufficient influence on a youth's sexual behaviour, but the identity variables

seemed only to increase the tendency of younger males to form intimate relationships with partners. Specifically, young males who maintain a high level of social relationships have a high tendency of developing intimate relationships with partners. Basically, the formation of intimate relationships will be expected of maturing youth, but a significant information piece here is the influence of social identity on young males in this regard. The inclusion of the identity variables in the model increased the chances of males having negative attitudes towards condom use. The inclusion of the identity variables did not affect the prediction of attitude towards condom use. Across all identity types, the respondents appear to have been conscious of the significant role of condoms in sexual health.

The identity variable increased the predictive power of sex (females) on the number of sexual partners, while social identity's prediction of this same variable rose very markedly. Social identity relates to a belonging of social group or class, thus exposing the adolescents to a higher array of friends and potential sex partners. Personal identity and collective identity did not make individual contributions to the number of sex partners maintained by the respondents' model.

When social networking was introduced to Model 4, an intriguing result emerged. Younger females who engage in social networking reported intimate relationships with their partners, irrespective of the identities. Males who have low social identity and engage in social networking have the tendency of having multiple sex partners. Females who engage in social networking and have a positive personal identity are most likely to have ever had sex than the others. Younger males who engage in social networking are most likely to have negative attitudes towards condoms.

Conclusions, limitations of the study and recommendations

The broad objective of this study was to examine how the identity of undergraduates who use social networking sites in selected Nigerian universities predicted their sexual behaviour when their demographic backgrounds are taken into consideration. As would be expected, sex, age and social networking consistently predicted sexual behaviour. Identity variables influence this result, but social identity specifically predicted the dependent variables more consistently.

The course of discussing the result of this study revealed that identity appears to be a complex issue to deploy in a small study. This may be why there are few studies linking identity with sexual behaviour. Rather, the identified studies focused on the relationship between sexual behaviour and other issues and specific identity concepts, such as sexual identity, internet addiction, the player identity, political identity and similar concepts. However, a broad deployment of identity variables, as was done in this study, provides wide-ranging information on how identity moderates sexual behaviour in the presence of traditional demographic characteristics and social networking. This study excluded socio-economic and cultural contexts of the relationship between social networking and sexual behaviour, variables that have been shown to be linked (UNESCO, 2009). This study also omitted some of the variables that the Global Programme on Aids considers very important in understanding sexual behaviour, such as type of sexual partner, age at first sexual encounter, age mixing in sexual relationships, etc.

The results of this study have multifaceted implications on society and scholarship. We know that humans develop notions about whom and what they are, what they want in life, how to go about life, and so on, through interactions with family and society, and that the notions they develop influence their ultimate achievement in many areas of life. This study has shown how the use of social networking for meeting sexual needs is intermediated by adolescents' identities and demographic characteristics. Intervention activities and

programmes on the appropriate use of social networking by young people should hitherto consider the identity and demographic characteristics of the adolescents. More practically, this report shows that adequate sexuality education of young people should be developed according to the identity of the youth. Although most young people are known to be averse to condom use during sex, this study shows that young people who have a positive identity about themselves would use condoms and then would be less exposed to challenges accompanying the non-use of condoms. In further respect to research and practice, the finding that the identity variables increases the tendency of younger males to form intimate relationships with partners invites research focusing on peer education and relationship formation.

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