Analysis of the Influence of the Internet on Sexuality Education and Sexual Behaviour among Adolescents in Nigeria Universities: The Case of University of Lagos

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Abstract

Adolescence, defined as ages 10 and 24 years, is a period of development related with sexual discovery, exploration, and risk taking. Internet's appeal as a sex education resource has increased in this digital age. This study seeks to explore the internet as a source of sexuality education and its influence on sexual behaviours among adolescent students of the University of Lagos, Nigeria. The multistage sampling technique was used to recruit the participants for this study. A self-administered questionnaire was used to collect data from 399 students. The reliability of the questionnaire was tested using Chrobach's Alpha and the coefficient was 0.72 which showed that the instrument was reliable. Data were analyzed using descriptive statistic tools and the Spearman correlation (at p < 0.05). Results showed that tendencies to use the internet as a source of sex education was more among the examined adolescents (75%) and 58% had regular access to the internet mostly on their cell phones. With an overall mean of 72%, the respondents had good knowledge of sexuality education. Also, with an overall mean of 81%, the considered factors (peer pressure, availability of information from parents and teachers, ease of internet access and satisfaction from online-sourced information on sex) played a major role in motivating adolescents to seek sex information through internet. Most of the respondents (57%) perceived that the internet influences adolescent sexual behaviour. The result of the interrelation between internet use, knowledge about sexuality education and sexual behaviour showed use of internet significantly influenced knowledge about sexuality and adolescents' sexual behaviour. The study recommends more efforts to be made by educational institutions and health policy makers in addressing the peculiar present age needs of the adolescents in regards to sex education information delivery and the monitoring of proper use of the internet.

Keywords: Adolescents, Sexuality education, Internet, Sexual behaviours, Nigeria

1. Introduction

Adolescents' sexual behaviour is rapidly emerging as a public health concern (Aji, Ifeadike, Emelumadu, Ubajaka, Aji, Nwabueze. et al 2013). Secondary sexual growth, changes in hormonal secretion, emotional, cognitive and psychosocial development result in sexual curiosity and experimentation (Okpani, 2000). Adolescence is a period of development where sexual discovery, exploration, and risk taking are significantly high (Abma, 2004; Forhan, 2009). This development does not begin on a blank slate; adolescents use cues from previous experiences they undergo to create sexual manuals as guide posts for forthcoming behaviour (Gagnon and Simon, 2005). Adolescents usually engage in unhealthy sexual behaviour, often characterized by early age at sexual initiation, unsafe or unprotected sex (having sex without using condoms) and multiple sex partners (Aji, et al 2013). The increase in adolescent pre-marital sexual activity in concurrence with the multiplicity of sexual partners have led to an increase in the incidence of unintended pregnancies, sexually transmitted infections (STI) and diseases (STD) (ARFH, 1997).

The National Adolescent Health Policy (NAHP) in Nigeria defined adolescents as individuals between ages 10 and 24 years (Odeyemi, Onajole and Ogunowo, 2009). It is estimated that nearly two-third of premature deaths and one-third of the total disease burden in adults are associated with sexual risk behaviour that began in young people (WHO, 2008). Some of the determinants or sources of risky sexual behaviour among adolescents include: Internet use, religion/culture, family relationship, peer influence, early marriage, age and other socio-economic factors.

Sexuality education is of great importance for all adolescents and young adults especially those who are at utmost risk of unhealthy sexual behaviour (Obiekea, 2013). Sexuality education simply means the presentation of all aspects of the sexuality of an individual just as it is and preparing the individual with all available choices to create a better understanding of individual sexuality in its holistic manner (Obiekea, 2013). It is also a planned process of education that fosters the acquisition of factual information, the formation of positive attitudes, beliefs and values and the development of skills to cope with the biological, socio-cultural and spiritual aspects of human society (Dienye, 2011). Sex education, as expected to be provided in school curriculum and different forms of public health outreaches, should gives information which adolescents can use to protect themselves when engaging in sexual behaviour (Dawson, 1986; Kirby, 2002). In many developing countries, this objectives are far from being met. According to Rosen, Murray and Moreland (2004) the objectives of sexuality education include:

- 1. Reduced sexual activity (including postponing age at first intercourse and promoting abstinence);
- 2. Reduced number of sexual partners;
- 3. Increased contraceptive use, especially use of condoms among adolescents who are sexually active for prevention of unintended pregnancies, HIV/AIDS and other sexually transmitted infections (STIs);
- 4. Lower rates of child marriage;
- 5. Discourage abortions; and
- 6. Improved nutritional status.

In Nigeria, adolescents' involvement in assessing internet information is likely to be because sexuality education is yet to be completely incorporated as a full subject in secondary and tertiary education curricula (Obiekea, 2013; Fawole, 2011). Schools do not teach comprehensive sexuality education, owing to some factors which include lack of professional teachers or counselors in relation to the this field of study; governments' failure to draw policy directives on sexuality education as a subject in the curricula; cultural biases; religion and lack of training for teachers in this field (Obiekea, 2013).

The distressing increase of rape, adolescent pregnancies, septic abortions, and sexually transmitted infections, especially human immunodeficiency virus (HIV), among adolescents in Nigeria (Olasode, 2007) highlight the issues concerning their involvement in risky and unhealthy sexual behaviour with influence probably from exposure to internet sex education.

Research has shown that adolescents want to constantly receive sexual information from their parents and teachers (Akande, 2007). However, parents, in most African countries, are either shy to discuss sex-related issues with their adolescent children or they think the discussion would encourage them to indulge in sexual activities (Mturi, 2003; Moran, 2000; Kendall, 2012). In contrast, the internet is perceived as a more private and anonymous platform where young people can view sexually explicit materials (SEM), try on new identities, and practice (Barak and Fisher, 2001; Bond, Hefner and Drogos, 2009; Peter and Valkenburg, 2006; Valkenburg and Peter, 2008). Internet's appeal as a sex education resource may therefore be based on the Internet's ease of use, its availability to increasingly large numbers of adolescents, and its perceived anonymity regarding sensitive topics which makes it unique in the delivery of sexual information in this digital age (Laura, 2013).

As a social context, the Internet enables multiple communication functions, such as e-mail, instant messaging (IM), chat, and blogs, which appeals to adolescents and young adults to participate and co-construct their own environments. The Internet has its advantages in terms of providing necessary information for adolescents and young people on sexual health and healthy sexual relationships, (Brown, 2002) but some studies have proposed that internet may negatively influence adolescents and young adults in their sexual behaviour (Stern and Handel, 2001; Werner-Wilson, 2004). Most often sex related information on the net are not well guided or tailored towards education. Even when undesired, the internet can randomly connect user to sexually explicit cites that are unwholesome and purely for entertainment. Findings of Kunnuji, (2012) revealed that 44% of adolescents using the internet had found themselves at websites with sexual contents without intending to do so while 46% said they had been involved in sexual activities which include willingly viewing pornography online, taking part in sexually stimulating acts such as sex chats and satisfying their sexual urge online through cyber surfing initiated by random pop up websites. The big question therefore is can we trust the internet as a source of sexuality education and how does it influence sexual behaviour among adolescents?

Previous studies have revealed that one reason why adolescents' involve in assessing internet information on sexuality is because sexuality education is yet to be completely incorporated as a full subject in secondary education curricula and also in the curricula of Nigerian tertiary institutions (Obiekea, 2013; Fawole, 2011). Schools do not teach comprehensive sexuality education, owing to some factors which include lack of professional teachers/subject teachers or counselors in relation to the field of study; governments' failure to draw policy directives on sexuality education as a subject in the curricula; cultural biases; religion and lack of training for teachers in this field (Obiekea, 2013).

The distressing increase of rape, adolescent pregnancies, septic abortions, and sexually transmitted infections, especially human immunodeficiency virus (HIV), among adolescents in Nigeria (Olasode, 2007) highlight the issues concerning their involvement in risky and unhealthy sexual behaviour with influence probably from exposure to internet sex education. Therefore, this study seeks to explore the internet as a source of sexuality education and its influence on sexual behaviour among adolescents in Nigeria using the University of Lagos as case study.

1.1 Theoretical and conceptual Framework

The framework in this study will emphasize intentions of adolescent's involvement in sexual behaviour and factors that influences these intentions. According to the Integrative Model of Behaviour Change (IBM model), any given behaviour is most likely to occur if one has a strong intention to perform the behaviour, if a person has the necessary skills and abilities required to perform the behaviour, and if there are no environmental constraints preventing behavioural performance. Indeed, if a person has formed a strong intention to perform a given behaviour and has

the necessary skills and abilities to perform the behaviour, and if there are no environmental constraints to prevent the performance of that behaviour, there is a high probability that the behaviour will be performed (Fishbein, 2000; Fishbein et al., 2002).

The first construct category in this model is Attitude. Attitudes measure the respondent's feelings toward that behaviour. It answers the question, "Does he or she have an unfavorable or favorable beliefs towards performing that behaviour" (Montano & Kasprzyk, 2008). In the Integrative Model of Behaviour Change IBM, Attitudes are based on Experiential and Instrumental Attitudes. Fishbein (2007) associates Experiential Attitude to affect. These attitudes are based on the respondent's feelings about the behaviour. In this case, if the person had a favorable response in the past to performing a behaviour, then he or she is more likely to perform it in the future. Past behaviour is an important component of Experiential Attitude and will help dictate future behaviour. Similar to the Attitude towards Behaviour, Instrumental Attitude is formed from Behavioural Beliefs. This construct is knowledge based and accounts for their behaviour beliefs about the outcomes of performing a behaviour.

The second construct category is Perceived Norm and is based on social acceptance. This approval can be from a family member, significant other, or friend. Injunctive Norms, in this model, are similar to Subjective Norms in the Theory of Planned Behaviour (TPB). Injunctive Norms measure what the beliefs of your referents are; Descriptive Norms take into account what their referents behaviours are. This is important for two reasons. One, it answers the question, "do your referents participate in a particular behaviour you are interested in?", and two, how often do they participate in a particular behaviour? This is important because the higher the perceived prevalence of peers participating in the behaviour, the more likely the respondent will also participate in that behaviour.

The third construct, Personal Agency, measures Perceived Control and Self efficacy. Perceived Control is the perception a respondent has towards the environment around them, and the effect the environment has on their ability to perform a particular behaviour. If Perceived Control is rated high by a respondent, then the participant believes he/she can perform a behaviour without environmental influences affecting him/her. Self-Efficacy, conversely, is a measurement of individual belief in his/her ability to perform a particular behaviour.

1.2 Conceptual application of the Integrative Model of Behaviour Change (Fishbein, 2000)

Following Fishbein (2000), the IBM model is applied to this study. Distal variables such as demography, culture, personality, perceived risk and general attitude towards the use of internet influenced respondents' attitude towards using internet for sexuality education, perceived norm and self efficacy which in turn influenced their behaviour along with other factors such as their skill in using the internet and the environmental constraints. The core explanatory variables which include attitude towards using internet for sexuality education, perceived norm and self efficacy are further discussed.

Attitude: Favorable attitude on the use of internet for sexuality education is likely influence the intentions to engage in its use and eventually their involvement in certain sexual behaviour which was also established by Madu, Otuka and Adebayo (2011) that having positive attitudes toward the use of internet is an essential condition for its effective use.

Perceived Norm: Adolescents' perceptions of themselves and their perceptions of peer norms regarding sexual activity, and their beliefs about the consequences of engaging in risky sexual behaviour can influence or motivate them to use internet not only to learn what is likely to be the outcome of sexual activity, but also whether others engage in it or approve of it, and come to see themselves as more or less able to engage in similar activities themselves. According to Selvan, Ross, Kapadia, Mathai and Hira (2001) perceived norms and perceived peer group norms are linked with adolescents' intended sexual behaviour.

Self-Efficacy: The relationship between the use of internet for sexuality education and adolescents' sexual behaviours could be explained by changes in adolescents' ability to negotiate sexual situations (safe sex self-efficacy) which is likely to be influenced by exposure to sexual content on the internet. The available tool used for accessing the internet can also make internet use for sexual information convenient and easy. This relationship was similar to a study that showed the influence of media as a source of sexual information was limited to self-efficacy (Bleakley et al. 2010).

2. Methodology

The population for this study comprised of undergraduate students of the University of Lagos, Nigeria who were adolescents between the ages of 17 and 24 years. The University of Lagos was established in 1962 and comprised of approximately 35,000 students with as at the time of data collection in 2015. Some 48.6% of these students were between the ages of 17 and 24 years. These students included students in the full-time undergraduate studies, the Distance Learning Institute (DLI). The academic units in the school are as follows:

- Faculty of Arts comprising of 9 departments
- Faculty of Social Sciences comprising of 12 departments
- Faculty of Business Administration comprising of 13 departments

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- Faculty of Law comprising of 7 departments
- Faculty of Science comprising of 28 departments
- Faculty of Environmental Sciences comprising of 11 departments
- Faculty of Engineering/ Technology comprising of 9 departments
- School of Clinical Sciences comprising of 13 departments
- School of Basic Medical Sciences comprising of 8 departments
- School of Dental Sciences comprising of 5 departments
- Faculty of Pharmacy comprising of 6 departments
- Faculty of Education comprising of 35 departments
- Faculty of institutes/Centers/ Academic Establishments comprising of 25 schools/ institutes
- The sample size was calculated following Adeyemo and Williams (2010) thus

For a population above 10,000;

Where n = minimum sample size,

Z = standard normal variance = 1.96 at 95% confidence interval

P = proportion of adolescents in study population = 48.6%

q = 1 - p

d = Absolute standard error = 0.05

 $\mathbf{n} = \underline{Z^2 pq} \qquad (1)$

d²

 $n = \frac{1.96^2 \times 0.486 \times 0.514}{0.05^2}$

$$= 384$$

To take care of non-response, an attrition (non-response) rate of 10% was added thus:

$$= (\frac{1}{1-0.1}) \times 384$$
 = 427 respondents

The multistage sampling technique was used to recruit the respondents for this study. Five faculties were randomly selected namely

- Faculty of Environmental Sciences
- Faculty of Engineering/ Technology
- Faculty of Science
- Faculty of Education
- Faculty of Arts

In the second stage, 1 department was randomly selected from each of the 5 faculties by balloting. The selected departments included

- Quantity Survey department (374 students)
- Mechanical Engineering department (360 students)
- Chemistry department (317 students)
- Guidance and counseling department (642 students)
- Philosophy department(627 students)
- Finally, students from each department were selected proportionately to size thus:

Number of Respondents = $\frac{No \ of \ students \ in \ considered \ department}{No \ of \ students \ in \ all \ departments} X \ sample \ size \ \dots \ (2)$

Therefore, the following numbers of respondents were recruited and interviewed using structured questionnaire:

- 1. Quantity Survey department (69 participants)
- 2. Mechanical Engineering department (67 participants)
- 3. Chemistry department (58 participants)
- 4. Guidance and counseling department (118 participants)
- 5. Philosophy department(115 participants)

However, in the end, 399 questionnaires were found useful for analysis. Reliability of the instrument (questionnaire) was determined through pilot-testing of the questionnaire in Babcock University, Ilishan Remo, Ogun state, Nigeria using 20 respondents of similar characteristics as the target population and the Cronbach's test of reliability was done which is 0.72 showing that the questionnaire was reliable.

Data collected was coded and analyzed using SPSS (Statistical Package for Social Science) version 21. Descriptive analysis and Correlation were carried out to interpret data collected.

Informed consent of all participants was obtained in written form in order to protect the right of the study participants. Ethical Clearance was obtained from Babcock University Health Research Ethics Committee (BUHREC).

3. Results and Discussion

3.1 Socio Demography Characteristics

A total of 399 students at the University of Lagos completed the self-administered questionnaire. The socio demography characteristics of respondents are presented in Table 1. The majority of the participants were less than 21 years old (70.7%) meaning that they were still minors according to Nigerian laws and should be under special guidance. Majority of the respondents were Christians (81.7%) and of the Yoruba ethnic group (67.4%). Their norms regarding sexual education and beliefs regarding the influence sexual activities on behaviour will likely be influenced by the Christian beliefs and the Yoruba culture. The female respondents (55.9%) were more than the males. Females are expected to show less technical acquaintance with the internet compared to the male students. Most of the respondents were single (76.2%) however, some 23.8% were married. Most of the respondents (62.7%). Majority of the respondents sourced sexuality education mostly from the internet (38.4%). This result is consistent with the findings of Laura (2013) and Klein (2003). Udigwe et al. (2014) supporting this finding, posited that uncontrolled or unguided sourcing of sexuality information especially from sources such as the internet and the mass media is on the increase and of great concern.

| Demographic variables | Frequency | % |
|-------------------------------------|-----------|------|
| Age | 1 2 | |
| 17-18 | 142 | 35.6 |
| 19-20 | 140 | 35.1 |
| 21-22 | 62 | 15.5 |
| 23-24 | 55 | 13.8 |
| Religion | | |
| Christianity | 326 | 81.7 |
| Islam | 66 | 16.5 |
| African traditional | 2 | 0.5 |
| Others | 5 | 1.3 |
| Ethnic group | | |
| Yoruba | 269 | 67.4 |
| Igbo | 69 | 17.3 |
| Hausa | 8 | 2.0 |
| Others | 53 | 13.3 |
| Sex | | |
| Male | 176 | 44.1 |
| Female | 223 | 55.9 |
| Marital Status | | |
| Single | 304 | 76.2 |
| Married/ever married | 95 | 23.8 |
| Living arrangements | | |
| Living with both parents | 250 | 62.7 |
| Living with father only | 10 | 2.5 |
| Living with mother only | 37 | 9.3 |
| Guardian | 22 | 5.5 |
| Sexual partner | 11 | 2.8 |
| Colleagues in hostel | 69 | 17.3 |
| Major Source of Sexuality education | | |
| Family | 62 | 15.5 |
| School | 59 | 14.8 |
| Friends | 51 | 12.8 |
| Hospital | 6 | 1.5 |
| Multimedia | 68 | 17.0 |
| Internet | 153 | 38.4 |

Table 1: Demographic and personal characteristics of the respondents (N =399)

Source: Computed from field survey data (2015)

3.2 Level of Knowledge on Sexuality Education

The information that young people receive on sexuality education is important because they influence not only their knowledge and attitudes, but also their capabilities to shun negative effects on their sexual behaviour. Respondents' knowledge of sexuality education was measured by their responses to set knowledge statement and result presented in Table 2. Measured on a 10-point scale, overall mean knowledge was 7.20±2.61 meaning more than fifty percent of the respondents agreed to all the statements with an overall mean of 72% which is above

average mark. This shows that the respondents have fairly good knowledge of sexuality education. Since most of the respondents accessed these information via the internet we can infer that reliable sexuality education information are also online. This result is opposed to the study of Laura (2013) which suggests that positive and more user-driven messages may be missing from online sexuality education resources and also the findings of Isaacson (2006) which suggested that sexual health information Web sites aimed at adolescents have a tendency to lack information about certain marginalized topics, like sexual orientation.

Table 2: Knowledge of adolescents on sexuality education

| Variables/ statements | | Agree | |
|--|-------|-------|--|
| | Freq* | % | |
| Sexuality education is a lifelong process of acquiring information and forming attitudes, beliefs and values about identity, relationships and intimacy of young people. | 352 | 88.3 | |
| Sexuality education is a process of education that fosters the acquisition of factual information on sexual matters. | 269 | 67.3 | |
| Information addressing abstinence, use of contraception, pressures to become prematurely involved in sexual intercourse and other sexual health measures relates to sex education. | 229 | 57.3 | |
| The use of condom during sexual intercourse will give protection against pregnancy and STDs | 348 | 87.3 | |
| Sexuality education exposes one to information on abortion, masturbation and sexual relationships | 230 | 57.7 | |
| Mean score | | 8% | |

Source: Computed from field survey data (2015) *multiple response

3.3 Frequency and reasons for internet use

Results in Table 3 show the frequency, tools and reasons for internet access. From the result gathered, 93% of the student claimed they use the internet for messaging and chatting, 85% use internet for school assignments and academic purposes and 75% use the internet for accessing information on sexuality education and pornographic movies. Most of the respondents (58%) often have access to the internet this frequency of access must have been due to the fact that majority can access the internet conveniently using personal cell phones. The paradigm shift in the frequency and ease of internet access generally in the developing countries like Nigeria has been as a result of more access to affordable devices that provides connection to the net such as cell phones and i-pads (Asekun-Olarinmoye et al., 2014). Several reports have shown that the internet make sexually explicit materials more accessible to youth than before (Kanuga, 2004; Thompson and Yokota, 2004; Bufkin and Eschholz, 2000; Oliver and Kalyanaraman, 2002; Rich 2008) thus, there is the possibility of the internet influencing sexual behaviour among youth more that before and increasing trend is imminent.

Table 3: distribution of respondents by frequency, tools and reasons for internet access

| Variables | Freq | % |
|---|------|------|
| Main Reasons for internet use*: | | |
| School assignment | 339 | 85.0 |
| Messaging and chatting | 369 | 92.5 |
| News and Sports | 178 | 45.1 |
| Sexuality information, movies and pornography | 300 | 75.2 |
| Frequency of internet use: | | |
| Often | 230 | 57.6 |
| Occasional | 113 | 28.4 |
| Rarely | 56 | 14.0 |
| Tools used to access online information*: | | |
| Personal Phone | 353 | 88.5 |
| Friend's Phone | 221 | 55.4 |
| Laptops | 300 | 75.2 |
| Cyber Cafe Services | 61 | 15.3 |

Source: Computed from field survey data (2015) *multiple response

3.4 Factors that motivate Adolescents to Seek Sex Information on Internet

Influence from friends, unavailability of information from parents, less information from teachers, easy internet accessibility and satisfaction from online-source information on sex were the considered motivating factors in this study. With an overall mean of 4.04 ± 1.20 (80.7%) for the level of the factors considered to motivate adolescents

to seek sex information on internet (measured on a maximum 5-point scale), all the factors were relevant in motivating the participants to seek sex information on the internet. Interestingly, ease of access was reported as motivating factor by 85% corroborating the previous result (Table 3). Some 89.5% of the respondents agreed that influence from friends motivated them more as compared to other factors. Peer influence with respect to sexuality information is well reported in literature (Ibiyemi, 2015; Morhason-Bello, 2008). More worrisome is the fact that over 65% of the respondents claimed that their motivation was created by lack of information from parents (77%) and teachers (68%).

Table 4: Factors that motivate Adolescents to Seek Sex Information on Internet

| Factors | Yes | No |
|---|-------------|-------------|
| Influence from friends | 375 (89.5%) | 42 (10.5%) |
| Unavailability of information from Parents | 308 (77.2%) | 91(22.8%) |
| Less information from Teachers | 272 (68.2%) | 127 (31.8%) |
| Easy internet accessibility | 339 (85%) | 60 (15%) |
| Satisfaction from online information on sex | 334 (83.7%) | 65 (16.3%) |
| Mean 4.04+ 1.20 (SD) | | |

Source: Computed from field survey data (2015)

3.5 The Influence of Internet Information on Adolescents' Sexual Behaviours

The respondents' perceived influence of internet information on their sexual behaviour was measured on an 18point maximum point scale. Results in Table 5 shows an overall mean of 10.33 ± 2.64 for the level of influence of sex information via the internet on adolescents' sexual behaviour meaning the participants have a 57.38% (relatively good) perception that the internet influences adolescent sexual behaviour. Table 5: The Influence of Internet Information on Adolescents' Sexual Behaviours

| Adolescents' Sexual Behaviours | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|-------------------|----------------|----------------|------------------------|
| Online sex information encourages healthy sexual behaviour | 97 (24.3%) | 148 (37.1%) | 124 (31.1%) | 30 (7.5%) 22 (5.5%) |
| Internet pornography encourages early age of involvement in sexual intercourse | 151 (37.8%) | 172 (43.1%) | 54 (13.5%) | 100 (25.1%) |
| Internet pornography demonstrates use of condom during sexual intercourse | 50 (12.5%) | 136 (34.1%) | 113 (28.3%) | 50 (12.5%) |
| Online sex information encourages the use of condom during sexual intercourse | 69 (17.3%) | 196 (49.1%) | 84 (21.1%) | 23 (5.8%) |
| Social networking sites such as Facebook, WhatsApp, BBM, Twitter, MySpace, etc serve as meeting grounds to initiate contact with more than one sex partner | 116 (29.1%) | 181 (45.4%) | 79 (19.8%) | 47 (11.8%) |
| Social networking sites such as Facebook, WhatsApp, BBM, Twitter, MySpace, etc provides a platform for young people to meet themselves and older adults for sexual relationship transactions involving exchange of money and gifts for sex | 131 (32.8%) | 163 (40.2%) | 58 (14.5%) | |

Mean 10.33± 2.64

Source: Computed from field survey data (2015) *multiple response

3.6 Interrelationship between internet use, knowledge about sexuality education and sexual behaviour

The interrelation between internet use (measured as frequency of access and exposure to sex related materials on the internet), knowledge about sexuality education (scale measure) and sexual behaviour (measured as sexually active) was done and presented in Table 6. Significant positive relationship existed between internet use and knowledge about sexuality (r = 0.114, p < 0.05). This confirms that the internet is a significant source of knowledge about sexuality education for adolescents and consistent with previous descriptive result (Table 1) and literature (Asekun-Olarinmoye et al., 2014; Megan. 2010). Result also showed positive significant relationship between internet use and exposure to sex related materials such as pornographic pictures, texts and movies (r = 0.171, p < 0.05). This confirms what has been previously reported concerning the internet and sexually explicit cites. Exposure to sex related materials online also significantly influence knowledge about sexuality (r = 0.149, p < 0.05). Further result shows positive and significant relationship between respondents' exposure to sex related materials

online and sexual behaviour (r = 0.521, p<0.05). The coefficient of correlation *r* is greater than 0.5 showing strong relationship. Previous studies have reported that adolescent sexual activities have been found to be likely influenced by their consumption of sexually explicit material especially on the internet (Kanuga, 2004; Thompson and Yokota, 2004; Megan. 2010). This result confirms these previous inferences. The result however shows that there is no significant relationship between respondents' knowledge about sexual ity and sexual behaviour. This result lends to debunking the myth that sex education predisposes the youth to early sexual activities, which is a common belief among parents in Nigeria.

Table 6: Pearson correlation matrix for the Interrelationship between respondents' internet use, knowledge about sexuality education and sexual behaviour

| Internet use | Knowledge about | Exposure to sex | Sexual |
|----------------|---------------------------------------|---|--|
| | sexuality | related materials | behaviour |
| | | online | |
| 1 | | | |
| 0.114* (0.023) | 1 | | |
| 0.171* (0.001) | 0.149* (0.003) | 1 | |
| 0.231* (0.03) | 0.037 (0.463) | 0.521* (0.002) | 1 |
| | 1 0.114* (0.023) 0.171* (0.001) | sexuality 1 0.114* (0.023) 1 0.171* (0.001) 0.149* (0.003) | sexuality related materials online 1 |

Source: Computed from field survey data (2015)

4. Conclusion and Recommendations

Adolescents are in a period of riot and exploration in their sexual life. Their level of exposure at different intervals influences their corresponding involvement in certain sexual behaviour. This study was conducted among adolescents in the University of Lagos to ascertain if the internet is a relevant source of sexuality education and its corresponding influence on sexual behaviour among them. Use of internet was found to influence knowledge about sexuality and their sexual behaviour. Based on the results, the following recommendations have been made:

- 1. Reproductive health policy targeting the youth should be more deliberate about provision and implementation of sex education in schools.
- 2. Parents are the principal sexual educators of the adolescents. Parents should be sensitized on the significance of providing a helpful home environment for their teenagers; sustaining strong ties with them and giving correct information on sexual issues according to their ages. This will bring about a level of family connectedness that will effect positive changes in the sexual behaviour of the adolescents.
- 3. Programs and interventions should be organized by government agencies, non-governmental agencies to effectively address the influence of peer groups, social norms and factors that put pressure on adolescents to have sex including internet pornography.

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