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Demographic Predictors of Sexual Risk Susceptibility among Undergraduates in Two Universities in Nigeria

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1. **Purpose** : This study investigated gender, religious affiliation, institution of learning and academic level as factors predicting sexual risk susceptibility among university undergraduates drawn from two Universities in South-Western Nigeria.
2. **Methods** : Using an ex-post facto survey research design and random sampling methods, a total of 320 participants were selected for the study. 118 (36.9%) were male, 202 (63.1%) were female. Validated scale was used for data collection. Four hypotheses were stated, two of which were analyzed using t-test of independent means, while the remaining two were analyzed using a univariate analysis of variance.
3. **Results** : Result of analysis showed that gender, religious affiliation and institution of learning were significant predictors of sexual risk susceptibility respectively, ($df = 318$, $t = 3.2$, $p = <.05$; $df = 2$, $ms = .81$, $F=3.41$, $p <.05$; $df = 318$, $t = -2.96$, $p = <.001$). However, academic level did not have a significant influence ($df = 3$, $ms = .24$, $F= 1.02$, $p >.05$).
4. **Conclusion** : The research thus established that demographic variables are significant predictors of sexual risk susceptibility among undergraduates.

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1. INTRODUCTION

An observation of events as they unfold on a global scale has constantly affirmed that the Human Immune Deficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) are global health problems with serious medical, social, economic and psychological implications. The World Health Organization estimated that about 33.4 million people worldwide are infected with HIV (WHO, 2000). The pathetic side of the story is that, 22.5 million of the estimated people who are infected live in the sub-Saharan Africa. It has been reported that, although Sub-Saharan Africa contains only 10% of the world's population, it accounts for more than two thirds of the world's HIV infected people (DeCock, Mbori-Ngacha, & Marum, 2002).

In establishing the fact that Africa has been hit hard by the 'hydra-headed monster' of HIV/AIDS, Adam and Mutungi, (2007) have also noted further that; of the more than 25 million people who have died from HIV/AIDS worldwide, more than 14 million are from Africa. In other words, 56% of the total death from HIV/AIDS worldwide is from Africa. Within the West African sub-region the HIV prevalence rate ranges between 2% - 8%, with the exception of Cote d'Ivoire and Togo, reporting rates of 8% - 32%. Senegal, on the other hand, is below 3%. However, the likelihood of adults in sub-Sahara Africa becoming HIV infected is ten times greater than for an adult in North America and 20 times greater than an adult in Western Europe (WHO, 2000). This therefore portends that it is a problem that demands urgent attention in order to forestall further spread of the virus.

With a population of about 150 million people, Nigeria is the most populous African nation and in Nigeria, research has shown that the HIV epidemic is growing at an alarming rate, with sero-prevalence rates increasing from 0.9% in 1990 to 1.8% in 1992, 3.8% in 1994, 4.5% in 1996, and 5.4% in 1999 (Federal Ministry of Health, 1996). In specific sub-populations the rates are very significantly higher. For example, Esu-Williams et al (1997) reported that in 2,300 subjects from five states in Nigeria, HIV appears in over 60% of female commercial sex workers, 8% of male clients of commercial sex workers, 8% of blood donors, 9% of truck drivers, and 21% of STD patients. While the HIV epidemic may have been slower to impact Nigeria than many other African countries, these rates suggest that HIV prevalence is high and widely distributed in Nigerian society (Ezedinachi et al., 2002).

Because of their sexual behaviors, Nigerian youths between the ages of 15 and 24 years, like their counterparts in the West, are the most vulnerable groups to HIV/AIDS. Although the data may be a decade old, it is still disturbing to learn of a 10% prevalence rate among Nigerian youths ages 15-24 years (Makinwa, Adebuseye & Pauline, 1991) and there is no reason to believe that the rate today is not significantly higher. Similarly, Olayele et al (1993) found the highest prevalence rate in their study sample among 20-29 year olds. In the absence of extensive HIV sentinel studies, no one is sure of the accurate rate of HIV

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infection in Nigeria. At the current rate of transmission, the outlook is quite gloomy.

Based on the foregoing, it is established that the most vulnerable set of people to HIV/AIDS are the youths. In fact, college/university students have been particularly identified as the most at risk for engaging in sexually risky behaviours (Cohen, 2009). Approximately 80-90% of college students report being sexually active and only one third report using condoms on a regular basis (Abbey, Parkhill, Buck & Saenz, 2007 and Eisenberg, 2001). Abbey, et al., (2007) and Eisenberg (2001) reported that college students are likely to have multiple sexual partners, averaging six or more partners, which invariably increases their sexual risk susceptibility. According to Gullette and Lyons (2006), college students may engage in unprotected intercourse, have multiple sex partners, attend wild parties, seek novel social experiences and thereby expose themselves to serious risks and dangers. It is therefore necessary to pay attention to them, with the aim of helping them out of their risky sexual behaviours and for them to live a wholesome life.

While many populations in Nigeria are at risk for HIV infection, college and university students, due to unsafe sexual behaviors, experimentation with alcohol and drugs, and failure to see themselves at risk of infection, are particularly vulnerable to this disease (Ubuane et al., 1999). The poor economic conditions in Nigeria exert great pressure on young people to engage in unsafe sexual activities and many youths, especially females who are in the universities, have turned to commercial sex work to supplement their income (e.g., to help pay their fees at school, take care of themselves and lots more). In many cases, wealthy older men, referred to as "sugar daddies," entice these young women with money to have unprotected sex. Such circumstances may have contributed to HIV/AIDS infection among youths (Eke-Huber, 2000).

Risky sexual behavior among university students remains a serious problem and these behaviors may even be on the increase (Pluhar, Fongillo, Stycos & Dempster-McClain, 2003). Casual sex is common on university campuses and hook-ups are considered a normal sexual practice among this category of students too (Grello, Welsh & Harper, 2006; Paul & Hayes, 2002). A significant percentage of college students have reported engaging in risky sexual behavior, such as not engaging in safe sex communication, using drugs or alcohol prior to or during sexual activity, having sex with multiple partners and inconsistently using condoms during sexual intercourse (Baldwin & Baldwin, 2000; Plannery, Ellingson, Votaw & Schaefer, 2003 and Gullette & Lyons, 2006). Although, the report given above is from the West, it can be generalized based on the influence of Globalization, a phenomenon that has transferred a lot of foreign

practices to the developing countries in the name of civilization and Westernization.

It is no longer news that sexual risk taking can lead to a number of negative consequences, which may include damage to social reputations, health problems, unintended pregnancies and sexually transmitted infections (STIs), including HIV/AIDS. In 2001 in the United States of America, the rates of unintended pregnancies were highest among women aged 18-24years, compared to other age groups, with 1 out of 10 women reporting an unintended pregnancy (Finer & Headshaw, 2006). This is particularly pathetic because; pregnant adolescents may become adolescent mothers, who drop out of school and face economic disadvantage. Similar outcomes (as reported above) may occur in less-developed countries such as Nigeria where this present study is carried out.

Because sexuality is an important aspect of one's life and can alter an individual's familial, societal, and cultural environment as a whole (Askun & Ataca, 2007), studying risky sexual behaviors is important because they (such risky behaviors) can threaten both physical well-being and social interactions (Miller et al., 2004). The choice of university students as participants in this study has been because they have been identified as a vulnerable group (Adam and Mutungi, 2007). Secondly, university students represent the future business, educational, and government leaders of any country; the potential to multiply the impact of an effective intervention in university students is high because they will graduate and move into all regions of the country (Adam, and Mutungi, 2007). The study will be significant in using the findings to provide data regarding the predisposing characteristics to sexual risk susceptibility among university students with the view to suggesting steps to reducing or eliminating sexual risk susceptibility among this set of population.

II. THEORETICAL BACKGROUND

Adolescent risk-taking behavior can be analyzed from several different perspectives. Risk-taking theories based on dispositional traits examine individual differences between persons that might account for a propensity to take risks (Kaplan, 1980; Botvin, 1986; McCord, 1990; Petersen, Compas, Brooks-Gunn, Stemmler, Ey, & Grant, 1993). However, although it is established that an individual's dispositional traits can greatly influence his risk taking propensity, most of the researches in this area are not conclusive enough to state that dispositional traits are causal factors in adolescent risk-taking (Milistein & Igra, 1995).

Biological models of adolescent risk-taking examine genetic factors, neuro-endocrine influences, and pubertal events (Irwin & Millstein, 1986; Cloninger, 1987; Udry, 1988, 1990). Another approach entails using the developmental perspective to explain risk-taking in

light of the bio-psychosocial changes that occur during adolescence. Risk-taking is seen as a way of coping with normal developmental tasks such as exploration and achieving autonomy (Lavery, Siegel, Cousins, & Rubovits, 1993; Millstein & Igra, 1995) and difficulties adolescents face in making decisions (Furby & Beyth-Marom, 1992).

Another perspective is to examine stable differences such as sensation-seeking or locus of control (Zuckerman, Eysenck, & Eysenck, 1978; Millstein & Igra, 1995). Bronfenbrenner's (1979) ecological theory describes the social world of adolescents in several microcosms of contact. Parental monitoring of adolescent behavior has also been associated with adolescent risk-taking (Millstein & Igra, 1995). In reviewing the theories, it appears that none offers conclusive insight into the risk-taking behavior of adolescents, hence, the eclectic approach is applied regarding the theoretical application.

III. REVIEW OF EMPIRICAL STUDIES

In general, involvement in high-risk activities has been positively associated with personality factors, such as social maladjustment, and with perceived benefit of risk (Lavery, Siegel, Cousins, & Rubovits, 1993). Researchers reported that persons who engaged in high-risk behaviors had higher scores on such variables as: affiliation, desirability, dominance, exhibition, and self-esteem and they exhibited significantly higher sexual risk, smoking risk, driver and passenger risk, venturesomeness, and impulsiveness (Jackson, 1984; Moore & Rosenthal, 1993). In other words, these researchers are of the opinion that personal psychological factors of an individual as well as the perceived benefit to be derived from the risk taken can motivate the person into risky behaviors.

In a study conducted by Adam and Mutungi, (2007) to examine sexual risk behavior among Kenyan university students; a total of 1,917 participants were sampled and they reported that more males than females had earlier sexual debut than their female counterparts. In other words, they are more at risk than the females. These authors also found that students' year at the university affected their sexual behaviour, for both genders rates of sexual activity varied with their year at the university.

In a study by Adam and Mutungi, (2007); Fischtein, Herold, and Desmarais (2007), the researchers concluded that men thought about sex more frequently than did women, were more likely to engage in oral sex, and lost their virginity at a younger age. Specifically, those persons who were single, had higher education, and did not attend religious services on a regular basis were more likely to engage in risky sexual practices. (In other words, what Fischtein et al. (2007) are saying is that, participants' marital status,

academic level, and level of religiosity influenced their sexual risk susceptibility) The progression from thoughts of sexual activities and reality was not discussed. The researchers also noted that a larger difference exists between the number of lifetime partners between males and females, with males reporting higher numbers of sexual partners than females. However, it is important to note that the researchers found that men and women may be using different strategies to determine the number of partners with whom they have had intercourse, and, therefore, this discrepancy may account for some of the gender differences within the literature.

Based on the foregoing, the following hypotheses were stated and tested in this study.

- Undergraduates who are males will be significantly more susceptible to sexual risk than female undergraduates.
- Religious affiliation of students will significantly predict their sexual risk susceptibility
- Students' institution of learning will significantly influence their susceptibility to sexual risk.
- Students' academic level will have significant influence on their sexual risk susceptibility.

IV. METHOD

a) Design

The study adopted an ex-post facto survey research design which was seemed appropriate for the study because no variable was consciously or deliberately manipulated in the study, they had already occurred and were measured as such.

b) Participants

Participants in this study were 320 undergraduates who were randomly selected from two Universities in South-Western Nigeria.

c) Instrument

Instrument of data collection used for this study was the 4-item, Sexual Risks Scale - Perceived Susceptibility (SRSP), which was developed by DeHart and Birkimer (1997). The scale is in the likert format, with responses ranging from Strongly disagree (1), Disagree (2), Neutral (3), Agree (4), Strongly agree (5). The authors reported an Alpha reliability co-efficient of .84, while for this study an Alpha reliability co-efficient of .78 was recorded. Demographic data was collected in the first part of the questionnaire which was included for the purpose of this study. A mean score and scores below the mean are interpreted as low sexual risk susceptibility, while a score above the mean is regarded as high sexual risk susceptibility.

d) Research Ethics Committee Approval

Before the administration of the questionnaires on participants, the proposed work was submitted to the University's Research Ethics Committee for approval.

The approval was given for the conduct of the research and this was used in the two schools where samples were drawn for the study. Though it took about three weeks before the committee gave the approval, which eventually elongated the proposed time-line for the conduct of the research.

e) Administration of Questionnaire

Contacts were made in the Universities that were used in this study, and assistance was sought from lecturers in speaking with the students and seeking their willingness to participate in the research. Those who indicated interest in participating were included in the research. Research instrument was administered to students on an agreed date. This was possible because the students had already been approached and intimated with the research aims and objectives and those who indicated interest in participating in the study were informed of the date and venue of the test. On the agreed date, test instrument was administered to participants and retrieved on the same day.

V. RESULTS

Four hypotheses were stated in all, the t-test for independent samples was used to analyse hypotheses 1 and 2, while the univariate analysis was done for hypotheses 3 & 4. The result of analysis is presented in this section. The result shows that gender is a significant predictor of sexual risk susceptibility among undergraduates ($df = 318, t = 3.2, p = <.05$). The mean difference showed that male students were more susceptible to sexual risk than females. In other words, male undergraduates are more ready to take sexual risks than their female counterparts. The second hypothesis was also accepted; i.e. religious affiliation was a significant predictor of sexual risk susceptibility ($df = 2, ms = .81, F=3.41, p <.05$). The third hypothesis which stated that Students' institution of learning will significantly influence their susceptibility to sexual risk was accepted also ($df = 318, t = -2.96, p = <.001$). However, the fourth hypothesis which stated that Students' academic level will have significant influence on their sexual risk susceptibility ($df = 3, ms = .24, F= 1, 02, p >.05$) was rejected since the result of analysis did not show any significant influence. It therefore follows that the level in which a student is (i.e. whether first, second, third or fourth year) does not necessarily influence his level of sexual risk susceptibility.

VI. DISCUSSION

More males than females are more susceptible to sexual risk. The mean difference showed significant difference between male and female undergraduates. This is in line with the findings of Adam et al., (2007) and Fischtein et al., (2007) who in different researches, carried out at different locations reported that male

students are more prone to sexual risk than their female counterparts. One may deduce from the findings that, sexuality of young people appears to be the same all over the world, despite differences in location, culture and other such variables. In other words, the possibility of generalizing possible solution for the amelioration of sexual risk behavior is high. Because of their adventurous nature, male ego and possibly the cultural practice that has always put the male above the female; male students may see themselves as manifesting their masculinity and sociability (as it is more or less supported and portrayed in the culture), by having many sex partners. It is not news that men in most African setting marry more than one wife at the same time, while it is considered an absurdity for a woman to be married to more than one husband at the same time. This is more of the practical manifestation of Bandura's Social Learning theory. One can say that the male undergraduates have learnt vicariously from the models they have in the society i.e. married men who have more than one sex partners, hence their vulnerability to sexual risks than their female counterparts.

The result of data analysis also showed that those who did not affiliate with any religious organization, or did not show any serious religious commitment are more susceptible to sexual risk. This is also in line with the previous finding of Fischtein et al. (2007) who have reported that an individual's level of religiosity will significantly influence his sexual risk behavior. For the present study, it was discovered that those who are not affiliated with any religious group are significantly more susceptible to sexual risk than those who have religious affiliation. Although, there is a dearth of literature on this particular variable in relation to sexual risk susceptibility, yet it seems logical to explain that religion plays a very significant role in the inculcation of moral values in its adherents. Every religion (Christianity, Islam and Traditional), teaches morality and sanctity, particularly with regard to one's sexual life and practices. It is taught with such emphasis that sexual promiscuity attracts severe punishment from God. Hence it is not expected of any faithful to get involved in sexual immorality. This way, religion has attempted to curb or reduce sexual risk among its adherents and this could therefore explain the finding that more people who do not have religious affiliation are significantly more susceptible to sexual risk than those who have religious affiliation.

Result also showed that the third hypothesis is accepted, i.e. Institution of learning significantly influenced participants' sexual risk susceptibility. As mentioned above, samples for the study were drawn from two universities in Southwestern Nigeria. One of the Universities operates and enforces dress codes for the students, while the other university does not. It was discovered that more participants from the university where dress code was not in used were significantly

higher on sexual risk susceptibility than those who are in the university where there is dress code. It is only logical to say that, since the school authorities are monitoring students' dressing, to the point that whoever is caught flaunting the rule is punished severely, many students (particularly females) were deterred from dressing indecently and this invariably reduced if not completely eradicated provocative dressing on campus hence the eradication of rape and other forms of sexual harassment on campus. On the other hand, on a campus where everyone is free to dress 'anyhow', more students dressed provocatively and thereby increase the incidences of rape, sexual assault and similar offences on campus. The result thus suggests that dress code in the university may significantly influence sexual risk behavior of university undergraduates.

Finally, the fourth hypothesis was rejected. This is because the result of analysis showed that students' academic level did not significantly influence their sexual risk susceptibility. This implies that, the class of a student i.e. whether in first year (100level) or second year (200level) or even higher levels (300 and 400levels) is not a significant factor that influences undergraduates' sexual risk susceptibility. It sounds more like sexual risky behavior is not a behavior that is acquired on campus per se, it is more of a thing that must have been innate in the individuals involved. Care has to be taken however not to overlook the possibility of peer influence on students on campus (although that is beyond the scope of this present study, it could be a suggestion that such variable as peer influence could be included in further studies).

VII. RECOMMENDATIONS

I will love to suggest that university authorities should pay more attention to male students on campus in order to educate and re-orientate them for cognitive and behavioral change that will be geared towards reducing their sexual risk susceptibility. This does not however mean that the females should be completely left out.

It is also recommended that university authorities should consider the introduction of dress code on campus with the aim of reducing provocative dressing that has been found to account for sexual harassments and other offenses on campus.

Although religion has generated so much crisis and brouhaha at different times and different parts of the country, the fact remains that if it is well practiced, it has its own advantages, particularly in the area of moral development and the teaching of virtues that are opposed to sexual promiscuity.

VIII. CONCLUSION

It is interesting to conclude that demographic variables of sex, religious affiliation, and institution of

study are significant predictors of sexual risk susceptibility among university undergraduates. However, level of students in school does not have significant influence on their sexual risk susceptibility.

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