
IMPACT OF PERSONALITY ON SEXUAL RISK BEHAVIOUR AMONG UNDERGRADUATES

Menkiti, Bernadette Uzoamaka Ph.D.
Sociology and psychology Department
Godfrey Okoye University, Enugu

Isiwu Prisca Ifeoma
Sociology and psychology Department
Godfrey Okoye University, Enugu

Abstract:

The aim of the study was to examine the impact of personality on sexual risk behaviour among undergraduates. Cross-sectional design was adopted in the study among 260 participants. Data was sourced using data source through the use of sexual risk behaviour survey (Jessica, Turchik, Walsh & Marcus, 2014), big five personality inventory (John, Donahue & Kentle, 1990). The hypothesis was tested using step wise Multiple Regression was employed in the analysis of data. The result shows that the five dimensions of personality did not have significant relationship with participant's sexual risk behaviour. The five dimensions of personality were equally not significant predictors of participant's sexual risk behaviour, although they accounted for 1% of the variance in sexual risk behaviour ($\Delta R^2 = .01$). It was concluded that that risk behaviour is found in people of different personality characteristics other than just one type.

Keywords: Dimensions of Personality, Sexual Risk Behaviour, Extraversion personality, Agreeableness personality, Conscientiousness personality, Neuroticism personality



Introduction

Sexual risk behavior is a major public health problem across the world, with well-documented risk factors. Globally, sexual risk behavior is composed of the increased risk of negative outcomes, which can take two pathways (sexually transmitted diseases and unwanted pregnancy). It is a known fact that unsafe sexual practices are still occurring with sufficient frequency such that sexually transmitted diseases and unwanted pregnancies remain significant public health concerns (Durant, Bauer, Midden, Gaskell, & Liakopoulos, 2000). The World Health Organization reported in 2002 that unsafe sex was second among the top ten risk factors in the global burden of all diseases. Highly alarming, twelve million Americans are infected with STD annually. Forty-three million have viral STDs which cannot be cured and so infect an individual for life. Sexually transmitted diseases cost society more than 3.5 billion annually (WHO, 2002). A critical look at this WHO report about America will leave us here in Nigeria with serious concerns. If a country like America with all her highly improved technological supports in fighting diseases can still be affected by STD in such a large number, then what hope have is left for Nigeria health institutions which are far less functional.

It is however noticed that some of WHO are bereft of the dimensions of personality that projects this menace higher in our society. It is likely that all or some dimensions of personality are more responsible. Personality is defined as the distinguishing characteristics of an individual which differentiate him/her from others when displayed in a wide variety of situations and circumstances especially social settings. In fact, the development of personality which is the outcome as previously mentioned of interaction between genetic makeup of an individual and his environment, starts prenatally or even before conception since genetics has something to do with it. In children, personality has a considerable potential for growth and changes that is, very flexible, but it is rigid that is; unalterable in adults (Broadus, Levin, & Bryan, 2009).

Personality and its development are under the influence of some determinants. Environment is considered the major extrinsic one. Cultural, racial, socioeconomic, educational, social, guidance and health conditions could be environmental factors playing a crucial role in personality development. The intrinsic factors could be biological drives, such as the homeostasis, social, defensive assimilatory drives, and hereditary temperamental differences



(Wingood, & Dickmente, (2010). Parental education, health and emotional states, social interactions are other factors which influence personality development.

Till date, the predictors of sexual risk behavior among young people confined within welfare institutions are numerous with many not well known. Interestingly, abstaining entirely from sexual activity will completely eliminate these risks. But, the key challenging issue remains, how possible this is, since for most consenting adults, abstinence is not a reasonable goal or choice. The risk-taking behaviour research has focused more on one type of risk behaviour; little research has been conducted to find out the predictors characteristics of sexual risk behaviours' involved in a multiple risk behaviours. However, little research has been conducted on socio demographic factors or the effect of addictive substances on sexual behaviour, especially in relation to personality, therefore, when implementing interventions it is necessary to take into account sexual behaviour patterns, socio-demographic factors and personality. Sexual risk behaviour is preventable by a coordinated effort between families, schools, health, and education agencies and community organizations; so as to learn more about sexual risk behaviour. The study aims at examining personality as a predictor of sexual risk behaviour in order to plan future health interventions.

Therefore, the present study specifically aims at examining if;

1. Extraversion personality would statistically significantly predict sexual risk behavior among undergraduates
2. Agreeableness personality would statistically significantly predict sexual risk behavior among undergraduates
3. Conscientiousness personality would statistically significantly predict sexual risk behavior among undergraduates
4. Neuroticism personality would statistically significantly predict sexual risk behavior among undergraduates
5. Openness to experience personality would statistically significantly predict sexual risk behavior among undergraduates

Literature Review

Theoretical Review

Theoretical perspectives include; cognitive approach and personality trait approach that explain risk taking are reviewed.

Cognitive Approach

According to cognitive (decision making) approach, a risky behaviour can be defined as an action requiring some chance of a loss (Beyth-Maron, Austin, Fischuff, Palmgren & Jacobs-Quandrel, 1993). From a decision theory perspective, choosing a risky or non- risky action is rational if the choice reflects the relevant values and beliefs of the decision maker. Individuals who have different values and beliefs make different decisions and actions under the same condition. To compare or evaluate the rationality of their behaviour, one needs to examine the components of their respective decision-making process (Raiffa, 1998; as cited in Beyth-Maron, 1993).

In contrast to personality theorists, cognitive theorists suggest that understanding the reasons of the risk-taking is more significant than considering the consequences of these behaviours (Shapiro, 1998). This perspective focuses more on underlying decision making process of engaging in risky behaviour. In other words, rather than just analyzing consequences of the behaviour, decision making approach discusses why and how individuals get involved in such behaviours. On the other hand, decision-making perspective emphasizes the differences between the adults and adolescents evaluation process about engaging in risk taking behaviours. Cognitive theory of risk taking such as Ajzen & Fischbein (1980) theory of reasoned action and James & Mann's (1977) decisional balance theory suggested that under normal conditions individuals can decide whether they involve in the risk behaviour or not (Siegel, 1994). Perception of risks identifies the value and the benefits of the risks. Cognitive theories assume that having knowledge associated with costs and benefits of risky behaviours protect the individuals from engaging in those potentially harmful behaviours. For this reason, this approach focuses more on examining the perception and benefits when making a decision about engaging or not engaging in a risky activity. A great majority of researches are on the contribution of risk perception and perceived benefits to risk. Risky behaviour suggests that risk perception significantly and negatively, and the perceived benefit is strongly and positively related to involving in risky behaviour.

In other words, involvement in risk taking behaviour is inversely related to perceived risk and directly related to perceived benefits (Essau, 2004).

As a result, cognitive theories have contributed to adolescent risk taking research in terms of examining the decision making style of adolescents and have tried to find the underlying factors of risk-taking behaviours. However, Parsons, Siegel, & Cousins, (1997) argue that cognitive theories ignore the emotional motives that drive an individual to engage in risky behaviours. Therefore, a purely cognitive approach in explaining the adolescent risk-taking may be inadequate.

Personality Trait Approach

In this approach, risk making is a personality characteristic that differentiates an individual from the others. In other words, risk taking is regarded as a trait peculiar to an individual like sensation-seeking and self esteem. Research on risk taking in terms of its relation to personality factors indicates that there exists a significant role of different characteristics of personality including sensation-seeking (Robbins, & Bryan, 2004), self esteem (Wild, Fischer, Bhana & Lombard, 2004), locus of control (Robinson, 2007), egocentrism (Greene, 2000) and five-factor of personality (Essau, 2004), in explaining risk-taking behaviour.

According to Zuckerman (1994), sensation-seeking is a personality trait that provides individuals with satisfying their needs of risk-taking. Furthermore, one personality characteristic alone is not adequate for explanation of risk taking behaviours investigated, personality as a whole was also examined in terms of its effects on risk-taking behaviours. For example, Essau (2004) investigated the role of five factor model of personality using the Goldbergs five-factor model of personality using the Goldbergs five-factor personality inventory.

Similarly, Zuckerman and Kuhlman (2000) examined the effects of personality on risk-taking using the Zuckerman five-factor personality questionnaire. As a result, personality-approach studies the relations between risk taking behaviour and variety of personality characteristics, including the variables such as sensation seeking, self-esteem, impulsivity, egocentrism, and locus of control. Except for the studies that examine the role of only one or several personality characteristics, there exist some other kinds of risk taking studies that investigate the relationships between risk-taking and personality as a whole as well.



Empirical Review

Empirical studies on Personality and Sexual Risk Behaviour

Zietsch, Verweij, Bailey, Wright, and Martin (2010) focused on genetic and environmental influence on risky sexual behaviour and its relationship with personality. The study tested the viability of this perspective by analyzing data from identical and non-identical twins (N = 4,904) who completed a questionnaire assessing sexual attitudes and behaviour as well as personality. Using genetic modelling of the twin data, it was found that risky sexual behaviour was significantly positively correlated with impulsivity ($\gamma = .27$), extraversion ($\gamma = .24$), psychoticism ($\gamma = .20$), and Neuroticism ($\gamma = .09$), and that in each case the correlation was due primarily to overlapping genetic influences. These findings suggest that the genetic influences that shape our personality may also predispose us to risky sexual behaviour.

Wiley & Son, Ltd, and Schmitt (2004) examined the big five related to risky sexual behaviour across 10 world Regions: differential personality association of sexual personality & relationship heredity.

As part of the international sexuality description project, 16362 participants from 52 nations responded to measures of the Big five and “risky” sexuality. It was expected that low levels of agreeableness, and conscientiousness would be universally associated with relationship infidelity. Sexual positively relate to extraversion and neuroticism. Analyses across 10 world regions revealed relationship infidelity was universally associated with low agreeableness and low conscientiousness. Sexual promiscuity was somewhat related to these traits as well, but was more highly related to extraversion across many, but not all, world regions. Both forms of risky sexual behaviour were generally unrelated to neuroticism and openness across cultures.

Vollrath, Knoch and Cassano (1999) examined the relations between personality (five-factor Model), risky health behaviours, and perceptions of susceptibility to hypothesis that personality would affect perception of susceptibility to health risks in two ways: directly, irrespective of risky health behaviours and indirectly, through the effects of personality on risky health behaviours. In path-analytical models we found that expected direct and indirect effects. The personality dimensions of agreeableness and conscientiousness had negative direct effects on perceptions of susceptibility as well as negative indirect effects through risky health behaviours. Neuroticism was the only personality dimension to show positive direct effects on perceptions of susceptibility as well as negative indirect effects.

Hoyle, Fejifar, and Miller, (2000) focused on personality and sexual Risk Taking: A quantitative Review. Focal sexual risk taking behaviours were number of partners, unprotected sex, and high-risk sexual encounters (e.g. sex with a stranger). A comprehensive search produced 53 studies relevant to the review. A striking feature of the result is the paucity of research on domains of normal personality and sexual risk taking for all domains other than sensation seeking which accounted for 64% of the effect size. The preponderance of studies (81%) took the psychobiological perspective and was published since 1990. Among the substantive findings were effects for sensation seeking, impulsivity, and agreeableness on all social risk-taking behaviours considered. Additionally, there were effects on specific behaviours for neuroticism and conscientiousness.

Research Methodology

Research Design

The design is a cross-sectional design.

Population of the Study

The population of this study is made up two hundred and forty eight (248) students comprising one hundred and twenty three (123) males and one hundred and twenty five (125) females. The participants were drawn from the population of Godfrey Okoye University students across various disciplines. The institution has a vast population of students which the study is targeted at. Participants' ages ranged from 16 to 30 years.

Sources of Data

The data required for this study was be sourced from the primary data source through the use of sexual risk behaviour survey (Jessica, Turchik, Walsh & Marcus, 2014), big five personality inventory (John, Donahue & Kentle, 1990). Information about participant's demographics such as age, ethnic group and religion were obtained using the questionnaire.

Description of the Instruments

Sexual Risk Behavior Survey (Jessica, Turchik, Walsh & Marcus, 2014) (Appendix A)

The Sexual Risk Behaviour Survey (SRS) was developed by Jessica, Turchik, Walsh, & Marcus (2014). The instrument was designed to comprehensively assess sexual risk taking among college students. It comprised 23 items that has been found to be a reliable measure of sexual risk behaviour among youths. The SRS was validated by the developers using a sample of U. S Midwestern University Students and the factor structure and reliability were found to be valid and reliable (Jessica et. al., 2014). The developers reported internal consistency reliability index of .90 using the student samples; indicating that the instrument is reliable and a good measure of sexual risk behaviour. As recommended by the researchers, information to assist researchers with the standardized scoring of the SRS is presented below: For the items that require the number of partners; 0 = 0 partners, 1 = 1-2 partners, 2 = 3-4 partners, 3 = 5-9 partners and 4 = 10 partners and above. For the items requiring number of times; 0 = 0 times, 1 = 1-3 times, 2 = 4 - 14 times, 3 = 15-50 times, and 4 = 51 times and above. Ugwuozor (2015) validated the instrument for use among Nigerian undergraduate students using 130 University of Nigeria, Nsukka undergraduate students from the faculty of Art and the Social Sciences. He reported a reliability coefficient index of .94 and a split-half reliability of .86.

Big five Personality Inventory (John, Donahue & Kentle, 1991) (Appendix B)

This is a 44-item inventory developed by John, Donahue and Kentle (1990). The inventory assesses personality from five distinct dimensions: Extraversion (8 items), Agreeableness (9 items), Conscientiousness (9 items), Neuroticism (8 items), and Openness to experience (10 items). As stated by Omoluabi (2002), BFI was adapted for the use of professionals in Nigeria after several years of research at re-standardizing it, in order to enhance its suitability and relevance for Nigerians. The developers (John, Donahue & Kentle 1990) reported a Cronbach alpha coefficient reliability of .80 and a 3 month test retest reliability of .85. The developers equally reported mean convergent validity coefficient of .75 and .85 with the Big Five Instruments authored by Costa and McCrae (1992), and Golberg (1992) respectively. Using a Nigerian sample, Umeh (2004) obtained the following divergent validity coefficients with University Maladjustment Scale (Kleinmontz, 1961): Extraversion = .05, Agreeableness = .13,



Conscientiousness = .11, Neuroticism = .39, and Openness to Experience = .24. According to Umeh (2004), the low correlation coefficients obtained when the scores of the participating students on BFI was correlated with their score on Maladjustment Scale shows the divergent nature of the instruments. Thus, it is an evidence of BFI's cross-cultural validity. Sample items in the BFI includes; I see myself as: Someone who is full of energy (extraversion), someone who has a forgiving nature (agreeableness), someone who is reliable worker (conscientiousness), someone who gets nervous easily (neuroticism), someone who is inventive (openness to experience).

Research Procedure

The researcher approached the participants at their various hostels after taking permissions from the hostels masters and mistresses of the hostels used for the study. Afterwards, the researcher recruited two students to assist as research assistants in administering the questionnaires. The research assistants were properly educated on the modalities of administering, filling and collecting the questionnaires. Before administering the questionnaire, the researcher created rapport with the participants, in which case the participants were told that the exercise is purely for academic research purpose. Participants were equally assured that their responses will be treated with utmost confidentiality and that participation in the study was voluntary. However, each participant before filling the questionnaire signed a consent form to show that the participant accepted voluntarily to be part of the study. The questionnaires were collected back from the participants after they were filled. Three hundred (300) questionnaires were distributed. At the end of administering the questionnaires, two hundred and sixty (260) questionnaires were returned. The returned questionnaires were cross checked after they were collected back from the participants. After cross checking the questionnaires, only two hundred and forty eight (248) questionnaires were found to be properly filled and were used for data analysis.

Method of Data Analysis

After subjecting the data collected to ensure they were free from errors; the data obtained from respondents were analyzed by computing the means, standard deviations, and correlations among the study variables. Step wise Multiple Regression was employed in the analysis of data.

Statistical Package for the social science (SPSS) version 20 was used for the data analysis. Hierarchical Multiple Regressions was conducted in which sexual risk behaviour was the dependent variable

Findings

Table 1: Correlations of demographic variables, extraversion, agreeableness, conscientiousness, neuroticism, openness to experience, gender and sexual risk behaviour

Variables	1	2	3	4	5	6
1 Extraversion	.06	-				
2 Agreeableness	.07	.05	-			
3 Conscientiousness	-.09	-.03	.31***	-		
4 Neuroticism	.08	-.03	-.27***	-.20***	-	
5 Openness	.03	-.02	.23***	.23***	-.09	-
6 Sex Risk Behav	-.02	-.07	-.02	-.03	.08	-.02

*** p < .001; ** p < .01; * p < .05

Table one above indicates the correlation between the five dimensions of big five personality (extraversion, agreeableness, conscientiousness, neuroticism and openness to experience) and sexual risk behavior. Result of table one above showed that amongst the five dimensions of big five personality all had non-significant relationship with sexual risk behavior. Hence, only neuroticism was positively non-significantly associated with sexual risk behavior; while extraversion, agreeableness, conscientiousness, and openness to experience all had non-significant negative relationship with sexual risk behaviour. Interestingly, there was a significant negative relationship between gender and sexual risk behavior of young people ($r = -.41, p < .001$).

Table 2: Hierarchical multiple regressions predicting sexual risk behaviour from extraversion, agreeableness, conscientiousness, neuroticism, openness to experience, and gender.

Predictors	Step 1			Step 2			Step 3		
	B	B	T	B	B	T	B	B	T
Extraversion				-.21	-.06	-.95	.53	.15**	2.45
Agreeableness				.04	.01	.16	-.44	-.13*	-2.0
Conscientiousness				-.11	.03	-.47	-.29	-.09	1.43
Neuroticism				.33	.09	1.38	.51	.14**	2.43
Openness				-.03	-.00	-.03	-.19	-.06	-.96
ΔR^2	.02			.01			.22***		
ΔF	1.77			.69			70.19***		

* $p < .05$, ** $p < .01$, *** $p < .001$

The results of the Hierarchical Multiple Regression in Table 2 above the five dimensions of personality – extraversion, agreeableness, conscientiousness, neuroticism and openness to experience were entered in step 2 of the equation, they accounted for statistically non-significant 1% variance as determinants of participant's sexual risk behavior ($\Delta R^2 = .01$). However, making unique and statistically significant negative impact in determining participant's sexual risk behaviour ($\beta = -.56$, $p < .001$). Hence, it added a variance impact as a determinant of participant's sexual risk behaviour; and made a statistically significant contribution in determining sexual risk behaviour.

Discussion

The present study provides that the five dimensions of personality type (extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience) shows that none of the dimensions was found to be significant predictor of sexual risky behavior of youths. The results here may mean that people despite their unique and individual characteristics engage in sexual risky behavior; other than attributing it to a particular personality characteristic. Equally, individuals of different personality characteristics engage in sexual risky behaviors because

every personality type seek gratification almost at similar range, and it urge to satisfy this sexual gratification that leads people to engage in risky sexual practices. This finding is inconsistent with the previous empirical research findings of (Zietsch, Verweij, Bailey, Wright, & Martin, 2010; Vollrath, Knoch & Cassano 1999) indicating that the genetic influences that shape our personality may also predispose us to risky sexual behaviour. Also, personality dimensions of agreeableness and conscientiousness had negative direct effects on perceptions of susceptibility as well as negative indirect effects through risky health behaviours.

Similar to empirical review, some researches in personality theory have lent support to the idea that risky behaviour is associated with a number of personality traits. For example, Cooper et al (2000) suggested that risk behaviour is driven by neuroticism (with the motive to regulate negative effect) and the extraversion drives the use of risky behaviour in order to enhance positive affective experiences. However, Cooper found that the relationship between personality and risky behaviour is extremely complex. For example, being extroverted increased the overall levels of risky sex practices, but primarily only if the individual was also impulsive. Eysenck (1976) one of the first to investigate the relationship between personality traits and indicators of risky sexuality found that extroverts tend to endorse more favourable attitudes than did introverts toward having multiple sex partners and trying out different sexual positions. Extraverts also engaged in sexual intercourse at younger ages than introverts, as well as having sex more frequently and with more partners than introverts did (Eysenck & Eysenck, 1975). Similar associations between extraversion and more promiscuous sexual desires have been found by others (Barnes, Malamuth & Check, 1984; Costa, Fagan, Piedmont, Ponticas & Wise, 1992; Snyder, Simpson & Gangestad, 1986). Perhaps as Zuckerman and Kuhlman, (2000) postulated, the strongest personality correlate of risky social behaviour is impulsive sensation-seeking. Hence, among the big five personality dimensions, impulsive sensation-seeking is most closely associated with low agreeableness and low conscientiousness.

Implications of the Study

The findings of this research have practical implications. The five dimensions of personality type studied in this study, all did not predict sexual risk behaviour of youths. This finding introduces another practical implication. By assumption, one would think that engaging in sexual risk behaviour is more prevalent in particular personality characteristics than others. Result of the present empirical study has disproven the assumption. However, indicating that risk behaviour is found in



people of different personality characteristics other than just one type. Therefore, the present study serves as a clarion call to the society, government at all levels and health related agencies as well to see sexual risk behaviour as a major issue of paramount concern.

Conclusions and Summary

Based on the findings of the study, it is concluded that risk behaviour is found in people of different personality characteristics other than just one type. This offered the researcher opportunity to assume that the present study serves as a clarion call to the society, government at all levels and health related agencies as well to see sexual risk behaviour as a major issue of paramount concern.

Limitation of the Study

Like every other psychological research, the present study has some limitations. Ordinarily, people expect different personality characteristics to play roles differently in individual's act of engaging in sexual risk behaviours; but the finding of this study is in the opposite. A probable reason for this could be as a result of the choice of only one particular private school or homogeneity in sampling. Although there exist different personality characteristics amongst the participants that participated in the study, the fact that the participants due to their nature of training might be of a particular single character, even in responding to questionnaires.

Another limitation is the generalizability of the findings of this study which may be limited to Godfrey Okoye University students that formed the sample used for study. Hence, only the students of Godfrey Okoye University, Enugu were involved in the study. Therefore, no comparison was made between these students and students in other schools especially at other locations within Nigeria.

More so, the researcher experienced difficulty convincing the students to participate and explaining to them the nature of the questions. Virtually all the students found the items too raw and privacy seeking making some participants to threaten to withdraw.

Suggestions for Further Research

In line with the limitations highlighted above, the researcher makes the following suggestions for further or future research. Future researches interested on the same variables as this research on sexual risk behaviour, should consider using participants from more than one institution, state and or region, while also increasing the number of participants for the study. In addition, adequate attention should be paid to the personality type dimensions to see if they could differently predict sexual risk behavior.

Furthermore, in testing sexual risk behaviors amongst youths, effort should be intensified in examining the moderating or mediating roles of variables like locality, parenting style, drug use and peer influence, while the participants of different regions might be involved to check for predicting roles of the dimension of personality. In addition, it is suggested that further research may involve other variables like goal orientation, moral reasoning, and self-efficacy.

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