

INFLUENCE OF PERSONALITY ON SEXUAL RISK BEHAVIOUR

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ABSTRACT Sexual risk behaviours have become a significant concern among undergraduates in recent times. This study explores the influence of personality traits and gender differences on sexual risk behaviour among undergraduate students. The research made use of an ex post facto research design; the sample comprised 308 participants (undergraduates) (203 males and 105 females); their ages ranged from 15 to 39. Data was collected with the Big Five personality inventory and the protective device inventory. Six hypotheses were raised: hypotheses one to five were tested with multiple regression analysis, while hypothesis six made use of an independent t-test. The result indicated that agreeableness ($\beta = 0.19, p < 0.05$) and gender ($\beta = 0.21, p < 0.01$) significantly predict sexual risk, while extraversion ($\beta = -0.04, p > 0.05$), conscientiousness ($\beta = -0.03, p > 0.05$), neuroticism ($\beta = -0.08, p > 0.05$), and openness to experience ($\beta = -0.01, p > 0.05$) do not significantly predict sexual risk behaviour. There is a need for further research, particularly on the other variables mediating the effect of personality on sexual risk behaviour and the development of effective interventions to reduce the incidence of sexual risk behaviours among Nigerian undergraduate students.

KEYWORDS: Personality Traits, Sexual Risk Behaviour, Agreeableness, Conscientiousness, Gender.

I. INTRODUCTION

In recent times, there has been a significant increase in sexual risk behaviors (SRBs) among undergraduate students, thereby making it a public health concern with devastating consequences for both physical and mental health, with implications such as anxiety and depression (Morale et al. 2014, Karle 2023, Haile et al. 2018, Zenouzi 2021). It could also result in unpleasant outcomes such as unwanted pregnancy and sexually transmitted diseases (Alamrew, Bedimo, & Azage 2013, Kasahun et al. 2017, Dimbuene et al. 2014). Personality is an important aspect of every individual's life, and strong evidence suggests that sexual behavior can be predicted by personality traits (Allen et al., 2017). Personality traits have been found to be associated with sexual risk behavior, traits such as impulsivity and sexual sensation seeking, which could in turn influence decision-making, thereby leading to an increase in the risk of contracting sexually transmitted diseases such as HIV (Charnigo et al. 2013). The extraversion personality trait is related to qualities such as assertiveness, excitement seeking, being confident, assertive, sensory seeking, risk-taking, and being action-oriented. These are some of the attributes of individuals with high levels of extraversion. While high extraversion is often perceived as attention-seeking and energy-seeking, low extraversion indicates a reflective and solitary personality. The traits of those with low extraversion include being calm, reserved, reflective, and solitary (Carvalho, Pianowski & Gonçalves 2020; Zager Kocjan et al. 2021).

The neuroticism trait can be characterized by anxiety, emotional instability, and impulsiveness. Individuals with high neuroticism are more likely to suffer anxiety and feel insecure about making sexual contacts (Hoyle et al., 2000). Furthermore, studies have shown that an increase in neuroticism will result in a decrease in the tendency of an individual to be involved in sexual risk behavior (Schmitt 2010, Otieno 2016). Openness to experience is characterized by curiosity, openness to new ideas, imagination, and being adventurous. Furthermore, individuals with openness to experience have been found to have sexually liberal attitudes, thereby making them more likely to engage in riskier sexual behaviors (Miller, Lynam, & Zimmerman 2004). In addition, Nasrollahi, Darandegan, & Rafatmah (2011) found openness to experience to have a positive relationship with sexual risk behavior.

The conscientiousness trait is associated with taking responsibility, being careful, perfectionism, and obedience (Pérez, Cupani, & Beltramino, 2004). Individuals high on conscientiousness traits are less likely to be involved in sexual risk behaviors; reasons for this could be that conscientious individuals are often perceived as following norms and rules and having self-discipline, while, on the other hand, individuals with low levels of conscientiousness are perceived as spontaneous and flexible but unreliable. In addition, individuals with high conscientiousness personality traits have fewer tendencies of being involved in sexual risk behavior (Chukwu et al. 2024; Ingledew & Ferguson 2007). Agreeableness is characterized by traits such as cooperativeness within interpersonal and social interactions, being compliant, friendliness, and warmth within social interaction and interpersonal relationships. Studies have shown Agreeableness to be negatively related to SRBs, thereby suggesting that individuals high on Agreeableness indicate lower sexual risk behavior (Allen & Walter, 2018). On the other hand, individuals with agreeable personality traits are more likely to take the needs and desires of their partner into account; an agreeable individual is likely to compromise during sexual activity and is most likely to be involved in risky sexual behavior (Hoyle, Fejfar & Miller 2000).

A study by Remero-Estudillo et al. (2014) suggests that gender plays a role in sexual behavior in that males and females express their sexuality differently, and they also express their behavior differently when engaging in risky sexual behavior. A series of recent studies has indicated a contrast between males and females with regards to condom use during the most recent sexual encounter, with 43% of males employing condoms compared to 16% of females. Moreover, a greater proportion of males (81%) reported engaging in multiple sexual partnerships compared to females (35%) (Odimegwu et al. 2017). However, studies by Mergheti et al. (2023) led to a better understanding of gender and sexual risk behavior; they revealed that men were less likely than women to engage in sexual risk behaviors; in addition, more women had a history of group sex than men; and the majority of the participants in this study never consistently used condoms during sexual activities over the past year. In view of the aforementioned, this study will focus on the influence of personality and gender on sexual risk behaviors among university students.

II. METHODOLOGY

RESEARCH DESIGN

This study made use of an ex post facto research design of the survey type; it was used to determine the cause-effect relationship of personality on sexual risk behavior. It involved the administration of questionnaires to the subjects incorporating the psychological test and some demographic information. The design is to test how well, big five personality and gender will significantly influence sexual risk behaviour among undergraduates (selected from Faculty of social and management sciences) males and females. As part of the research design, 6 hypotheses were formulated. The hypotheses are as follows:

- a) Openness to experience will significantly predict sexual risk behaviour among undergraduates.
- b) Agreeableness will significantly predict sexual risk behaviour among undergraduates.
- c) Conscientiousness will significantly predict sexual risk behaviour among undergraduates.
- d) Extraversion will significantly predict sexual risk behaviour among undergraduates.
- e) Neuroticism will significantly predict sexual risk behaviour among undergraduates.
- f) Gender will significantly predict sexual risk behaviour such that males will be higher on sexual risk behaviour than males

PARTICIPANTS

A total of 308 individuals (undergraduates) from Adekunle Ajasin University, Akungba Akoko, Ondo State, Nigeria, was used for this study, comprising of 203 males & 105 females from the Faculty of Social and Management Sciences, Social Science Departments, 76 students from Psychology department, 76 students from Sociology department, 79 students from Political science department and 77 students from public administration department. Participant ranged between the age of 15 to 39. This research was carried out at Adekunle Ajasin University, Akungba-Akoko, Ondo State. The pluralistic and viable nature informed the choice of the educational institution. The participants who were randomly selected using simple random technique.

INSTRUMENT

The instruments used contained three sections, section A, B, & C, paper and pencil questionnaires were employed in this study. The instruments used in this study are Protective Device Inventory (PDI) and Big Five Personality Inventory (BFI).

- a) Section A: Consists of the bio data information of the participants which include Gender (male and female), Religion, Department, Marital status and Age (in years).
- b) Section B: Protective Device Inventory was developed by Professor F.A Oluwatelure of Pure and Applied Psychology, Adekunle Ajasin University in 2005, to measure the use of protective device (condom) Sexual Risk Behaviour was measured using PDI questionnaire. PDI is a 42 item The Response were coded as SA strongly agreed (1), Agreed (2), Disagreed (3) SD=strongly disagreed (4).
- c) Section C: Big Five Personality Inventory was developed by Costa & McCrae (1992), to measure personality traits; it Contains five subscales which are openness, conscientiousness, extraversion, Agreeableness, and Neuroticism. The Neuroticism factor is sometimes referred to as emotional stability, each factor consists of a cluster of more specific traits that correlates together for example extraversion includes such related qualities as sociability, Excitement seeking, impulsiveness and positive emotion. BFI was used to measure personality in this research. The BFI contains 44 items, the response are coded as 1 = disagree, 2 = disagree-a-little, 3 = neither agree nor disagree, 4 = agree-a-little, 5 = agree strongly. Internal consistency for subscales in validation sample: Extraversion: Cronbach's alpha = .53; Agreeableness: Cronbach's alpha = .37; Conscientiousness: Cronbach's alpha = .38; Neuroticism: Cronbach's alpha = .15; Openness. Cronbach's alpha =.49

PROCEDURES

The instrument was administered to 308 participants, the researcher made use of survey method (203 males and 105 females from the social sciences departments (76 students from Psychology department, 76 students from sociology department, 79 students from political science department and 77 students from public administration department) from Adekunle Ajasin University, Akungba Akoko, Nigeria. Confidentiality of their responses were assured by pointing out that their names and addresses were not sought after and they were told that there were no right or wrong answers.

STATISTICAL ANALYSIS

The major variables in this study were Big Five Personality, Sexual Risk Behaviour and gender. Independent variables are Big five personality and gender, while dependent variables are substance risk behaviour. The hypotheses were tested using multiple regression and independent t-test. All test were significant at 0.05 and 0.01.

III. RESULTS AND DISCUSSION

The result in Table 1 indicates that there was a significant joint influence of personality, age, and gender on sexual risk behaviour ($F(16) 401, P < 0.01$). The result further showed that agreeableness ($\beta = 0.19, P < 0.05$) and gender ($\beta = 0.21, P < 0.01$) significantly predict sexual risk behaviour. Whereas extraversion

($\beta = -0.04$, $p > 0.05$), conscientiousness ($\beta = -0.03$, $p > 0.05$), neuroticism ($\beta = -0.08$, $p > 0.05$), and openness to experience ($\beta = -0.01$, $p > 0.05$) do not significantly predict sexual risk behaviour.

Table 1: Summary of Multiple Regression Predicting Sexual Risk Behaviour from Personality

Variables	β	t	p	R	R	f	p
Extraversion	-.04	-.76	>0.05				
Agreeableness	.19	2.78	<0.05				
Conscientiousness	-.03	-.48	>0.05				
Neuroticism	-.08	-1.26	>0.05	.43	.18	4.01	<.01
Openness	-.01	-.14	>0.05				
Gender	.21	3.81	<.01				

Table 2: Summary of T-test Showing Influence of Gender on Sexual Risk behaviour

Variables	N	Mean	S.D	T	Df	P
Male	203	7.14	25.89	-4.08	306	<0.01
Female	105	119.45	23.51			

As indicated in Table 2, there was a significant gender difference on sexual risk behaviour [$F(306) = -4.08$, $P < 0.01$]. Such that females were significantly higher than males on Sexual Risk Behaviour ($M = 119.45$; $SD = 23.51$), this result confirms hypothesis six and hypothesis is accepted.

This study examined the influence of personality and gender on sexual risk behavior among undergraduates. Six hypotheses were put forward to guide this study.

Hypothesis one, which states that openness to experience will significantly predict sexual risk behavior among undergraduates. The findings from this study show that openness to experience does not significantly predict sexual risk behaviors. This result was substantiated by Hoyle et al. (2000). Although openness to experience is characterized by willingness to explore new ideas. However, when it comes to predicting sexual risk behaviors, a multitude of factors such as cultural influences, upbringing, attitude, and beliefs might influence the openness trait, thereby not making it a reliable indicator of sexual risk behavior (Turchik et al., 2010; Baams et al., 2013).

Hypothesis two states that agreeableness will significantly predict sexual risk behavior among undergraduates. The present study revealed that agreeableness independently predicted sexual risk behavior. This result is in line with the study carried out by Hoyle, Fejfar & M(2000), whose findings revealed that agreeable individuals may prioritize social harmony and conform to partner or peer expectations, even at personal risk. Furthermore, the more agreeable an individual, the more likely he is to engage in sexually risky behavior, while less agreeable individuals are less likely to be involved in sexually risky behaviors. Similarly, Allen & Walter (2018) noted that agreeable individuals often compromise their interests to maintain relationships, potentially increasing their vulnerability to risky behaviors.

Hypothesis three posits that conscientiousness will significantly predict sexual risk behavior among undergraduates. The result of this study shows that conscientiousness does not significantly predict sexual risk behavior. This is consistent with previous research relating conscientiousness with risky sexual behaviors. Turchik et al. (2010) suggest that conscientiousness may not predict risky sexual behavior because other personality traits, such as sensation-seeking and agreeableness, may play a more significant role in influencing individuals' willingness to engage in risky sexual behavior. Further, this trait, characterized by organization, self-discipline, and responsibility, is often associated with responsible and cautious behavior.

Hypothesis four states that extraversion will significantly predict sexual risk behavior among undergraduates. The findings from this study revealed that extraversion does not significantly predict sexual risk behavior. Studies examining extraversion and sexual risk behavior show different results. Nnamdi-Annorzie (2023) suggests that Higher levels of extraversion is associated with increased risky behaviour, this was further substantiated by Holy et al(2000). However, according to Baams et al. (2013), the extraversion personality trait, characterized by sociability, assertiveness, and enthusiasm, does not consistently predict risky sexual behavior. Furthermore, there are several reasons for this: - Extraversion alone might not provide a complete picture of an individual's behavior or decision-making process. Furthermore, individual differences could have played a role, thereby overriding the influence of extraversion on sexual risk behavior (Depue & Fu, 2013).

Hypothesis five states neuroticism will significantly predict sexual risk behavior among undergraduates. The result from this study shows that neuroticism does not significantly predict sexual risk behaviors; this finding is not surprising given that the neuroticism trait is characterized by anxiety, worry, and emotional instability, and it doesn't appear to be a significant predictor of sexual risk behaviors. Several studies have investigated the relationship between neuroticism and sexual risk behaviors among undergraduate students. However, these studies have consistently found that neuroticism is not a significant factor in predicting sexual risk behavior (Turchik et al., 2010; Mcghee et al., 2012).

Hypothesis six posits Gender will significantly predict sexual risk behavior such that males will be higher on sexual risk behavior than males. The findings from this study show gender significantly predicted sexual risk behavior. There was a significant gender difference in sexual risk behavior, such that females were significantly higher than males on sexual risk behavior. This result confirms hypothesis six, and the hypothesis is accepted. Recent studies have shown that gender roles play a significant role in how sexual encounters are negotiated; males and females have distinct behaviors, reactions, and perceptions of sexual risks. Previous research indicates that young people's sexual risk-taking behavior differs on the basis of gender, as supported by Voison & Bird (2015). There was a significant gender difference in sexual risk behavior; females were significantly higher than males on sexual risk behavior, as supported by Grunbaum et al. (2001) and Trussell (2007). The authors discovered that a greater proportion of females than of males had had sex without a condom within the past three months. Twenty-nine percent of students had ever been pregnant or impregnated a partner; more females than males reported ever having been involved in a pregnancy. Reasons that could be accountable for this are that fewer females make use of protective devices than males, male condoms have the advantages of being inexpensive and easy to use and having few side effects, females are easily persuaded by their partners to engage in sexual risk behaviors, and also females are more prone to engaging in abortion, especially after the occurrence of unintended pregnancy. Surveys have shown that condoms are mostly used in developed countries among the married than in developing and underdeveloped countries (Briggs et al. 2013).

IV. CONCLUSION

In conclusion, this study investigated personality traits that significantly predict sexual risk behavior and gender influence among undergraduate students. More research has to be done in this area to help discover other factors leading to an increase in sexual risk behaviors among undergraduates. Results from these studies could help develop interventions aimed at reducing sexual risk behavior and promoting healthier outcomes among undergraduates. In addition, non-governmental organizations, parents, school authorities, and the government have to be intentional about providing sex education, psychological guidance, and counseling services to help young people navigate risky behaviors.

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