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PSYCHOLOGICAL VARIABLES AND SEXUAL BEHAVIOUR OF UNDERGRADUATES IN TERTIARY INSTITUTIONS IN CROSS RIVER STATE, NIGERIA

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ABSTRACT

The study examined Psychological Variables and Sexual Behaviour among Undergraduates of Tertiary Institutions in Cross River State, literature was reviewed based on the variables of the study. Two purposes were formulated for the study and two research questions were put forward and translated to two hypotheses. The Method(s) adopted where Ex-post facto design, A sample of five hundred and seven (507) students were randomly selected from a population of 76,279 students across ten institutions. Psychological Variables and Sexual Behaviour Questionnaire (PVSBQ) was used to collect data for the study. The validated questionnaire was used to collect data from the subjects. Data were analysed using simple linear regression to test the hypotheses directing the study either to reject or retain them at 0.05 level of significance. Results revealed that, self-esteem and self-regulation have significant individual and relative influence on sexual behaviour. Based on the finding it was concluded that psychological values of self-esteem and self-regulation have individual and relative influence on their sexual behaviour. It was recommended that authorities of tertiary institutions, school administrators, parents, educational psychologist and counsellors should create awareness about the implication of self-esteem and self-regulation in maintaining acceptable sexual behaviour.

KEYWORDS: Self-esteem, Self-regulation, sexual behaviour and undergraduates

Word count: (202)

INTRODUCTION

In Nigeria, education has been adopted as a means “par excellence” a tool for influencing the country's progress and overall development of its citizenry. The Nigerian National Policy on Education (NPE:2004; 4th Ed. Sec. 8, Pp. 35–36) defines tertiary education as the education provided at universities, colleges of education, polytechnics, monotechnics, and those that provide correspondence courses, after secondary education. The goals of tertiary education among others things; shall be to inculcate proper values for the survival of the individual and society; develop the intellectual capability of individuals to understand and appreciate their local and external environments; acquire both

physical and intellectual skills which will enable individuals to be self-reliant and useful members of the society.

Against this backdrop, it is obvious that tertiary education has been designed to produce a total man who is intellectually and psychologically balanced in all the spheres of cognition and affective domains. Such individual is considered to be useful not only to himself but to the society at large. The intellectual skills acquired in the tertiary institution will provide the individual with the requisite social, emotional and psychological skills and competencies required for the understanding of oneself and be self-reliant as well as being able to navigate his local, external and sociocultural environments. Thus, a product of tertiary education should be seen to be worthy in character and learning as certificates that are awarded are awarded both in character and in learning. Aside the traditional role of tertiary education in developing high level manpower, is the role of transmission of cultural values as well as inculcating proper value system to the younger generation for the survival of individual and society.

Notwithstanding the laudable benefits of education generally, and tertiary education in particular to nation building derivable from these educational goals, their attainment has remained a mirage due to seemingly insurmountable challenges. It is indeed the challenge of tertiary educations in shaping the behaviour of the youths, particularly the Undergraduates to take up leadership roles in the society and to sustain the cultural values of the society vis-a- viz their seemingly indiscriminate display of promiscuous erotic sexual behaviour among Undergraduates on the campuses that one wonders if these institutions have achieved their mandate of instilling in them the values of character and learning? As observable in Nigeria today, there is no gainsaying that the non-penetrative erotic sexual activities meant to be a private and secret activity are now being displayed publicly by the youths, most of them being the undergraduates of tertiary institutions and Undergraduates in Cross River State, are no exception.

The worry is that these erotic physiognomies are capable of sexual arousal which are likely to culminate in-penetrable risky sexual activity like virginal-penile sex like sexual harassment or rape, anal sex and oral sex with their associated consequences. That is why Obeta and Uwah (2015) stated that venereal diseases like Sexually transmitted Diseases (STDs), Human Immune Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) are contracted through sexual intercourse among undergraduates. Other undesirable consequences of erotic sexual behaviour include unwanted pregnancy and its attendant implications like possible abortions and its side effect, or having a child outside marriage which equally comes with the burden of single parenting, shame of stigmatization and the stress or depression arising from failed relationship, among other problems. These unpleasant outcomes have adverse effect on the psychological well-being of the individual as well as academic achievement, hence one's self-regulation is a valuable psychological tool in navigating this experience.

Self-esteem and sexual behaviour

Ackerman and Nash (2018) conceptualised self-esteem as the overall positive or negative evaluation of oneself which can be viewed in a variety of ways; as an enduring trait, as stable versus fragile, as specific domains of contingent self-worth, or as a goal that people pursue. Self-esteem is thought to develop in childhood and remains relatively stable over time. Thus, self-esteem is an assessment of oneself. It is how one feels about self in almost any situation. An individual may manifest high, moderate or low self-esteem. To Mruk (2013) and Reasoner (2004) high self-esteem is manifested by acceptance of responsibility for one's own actions - self-motivation, i.e. the willingness to take reasonable risk, and taking command and control of one's personal life including health behaviour. Again, the individuals with low self-esteem focus on trying to prove themselves to others. They generally lack confidence in themselves, and often doubt their own worth and acceptability. They frequently blame others rather than take responsibility for their behaviour (Mruk 2013).

Concerning self-esteem and sexual behaviour, Enejoh, Pharr, Mavegam, Olutola, Karick, & Ezeanolue (2016) found high self-esteem to be closely associated with lower frequency of anal sex (lower anal risk) among female adolescents. Also, Ethier et al (2006) found that lower self-esteem was predictive of early sex initiation, history of risky sexual partners and unprotected intercourse. A study by Boden and Horwood (2006) found an association between lower self-esteem and high risk for pregnancy in late adolescence and early adulthood. Similarly, a study conducted in Nigeria by Sangowawa and Adebisi (2013) found that high self-esteem was a significant predictor of abstinence among out-of-school adolescent females. Some studies indicate that high levels of self-esteem are protective against several types of sexual risk behaviour. Most studies of self-esteem measured by means of the global self-esteem scale found that adolescents reporting high levels of positive self-esteem are more likely to engage in risky sexual practices (rather than not to engage in sex) compared with those with low levels of positive self-esteem (Spencer and Paul et al, 2016). They indicated that higher scores of self-esteem were associated with more sexual activity among boys and girls.

Equally, Lily, McNair and Carter (2018) investigated self-esteem, gender, and alcohol use: relationships with HIV risk perception and behaviour among college students. The study examined the consequence of alcohol use and self-esteem on risky sexual behaviour and perceptions of risk for female and male college students. It was predicted that higher levels of self-esteem, female gender, and lower alcohol consumption would be associated with greater condom use and lower perceptions of risk for self and partner. Results indicated that for low drinking students, those with high self-esteem reported greater condom use. In addition, low rates of alcohol use were associated with greater frequency of past condom use. Women and students low in self-esteem indicated greater perceptions of risk for themselves and their partners.

Moreover, Boonabaana (2018) studied Self-esteem, Risky sexual behaviour and academic achievement among secondary school students in Wakiso Town Council. The study examined the relationship between self-esteem, risky sexual behaviour and academic achievement among secondary

school students. Results indicated that there was a negative significant relationship between risky sexual behaviour and academic achievement ($r = -.56, p < 0.01$) and a positive significant relationship between self-esteem and academic achievement ($r = .42^{**}, p < .01$). Results finally indicated that risky sexual behaviour perfectly mediated the relationship between self-esteem and students' academic achievement ($\beta = .01, p < .89$). It was concluded that adolescent students who have high self-esteem were more likely to avoid engaging in risky sexual behaviour and may hence concentrate on their studies and achieve highly in their academics. Johansson and Sällström (2015) investigated Rural High School Students' Sexual Behaviour and Self-Esteem. The background was that Negative consequences for sexual health may be caused by risky sexual behaviour related to attitudes, norms and self-efficacy regarding sexuality and that research has not resulted in a consensus on the associations between self-esteem and adolescents' sexual behaviour. The purpose was to describe high school students' sexual behaviour and self-esteem, along with investigating the relationship of attitudes, norms, self-efficacy, and self-esteem to sexual risk behaviour. Secondly, to describe and compare gender differences in self-esteem and sexual risk behaviour in high school students in a rural context. Results indicate that Swedish high school students reported having few sexual partners, a low use of alcohol along with sex, yet a low consistency in condom use. The students reported both high basic self-esteem as well as earned self-esteem. Basic self-esteem was higher for male students while earned self-esteem was higher for female students. Significant correlations were found between self-esteem and some factors affecting sexual risk behaviour related to condom use. It was concluded that High school students exhibited positive sexual behaviour and high levels of self-esteem, yet they put themselves at risk by inconsistent use of condoms. While, these studies concentrated on finding associations between the different self-esteems - high or low and the different sexual activities like anal sex and other sexual categories, the present study investigates the extent to which self-esteem influence sexual behaviour among undergraduates of tertiary institutions.

Self-regulation and sexual behaviour

According to Bandura (1991) the theory of self-regulation is a continuously active process in which we:

1. Monitor our own behaviour, the influences on our behaviour and the consequences on our behaviour.
2. Judge our behaviour in relation to your own personal standard and broader more contextual standards.
3. React to our own behaviour (i.e., what we think and how we feel about our behaviour).

Furthermore, he explained that Self-Regulation Theory (SRT) is a system of conscious, personal management that involves the process of guiding one's own thoughts, behaviour and feelings to reach goals. Self-regulation consists of several stages. In these stages, individuals must function as

contributors to their own motivation, behaviour, and development within a network of reciprocally interacting influences.

According to Vohs and Baumeister (2004) self-regulation is the mental processes we use to control our mind's functions, states, and inner processes. Also, they describe self-regulation as control over oneself. It may involve control over our emotions, thoughts, impulses, appetites, or task performance. Self-regulation is often thought to be the same thing as self-control (Vohs & Baumeister, 2004) and it usually involves stopping or inhibiting an action although it sometimes involves initiating an action (Baumeister, 2014). Self-Regulation vs. Self-Control "Self-control is about inhibiting strong impulses; self-regulation, reducing the frequency and intensity of strong impulses by managing stress-load and recovery. In fact, self-regulation is what makes self-control possible, or, in many cases, unnecessary" (Stuart Shanker, 2016). Stosny (2005) someone who has good emotional self-regulation has the ability to keep their emotions in check. They can resist impulsive behaviour that might worsen their situation, and they can cheer themselves up when they're feeling down. They have a flexible range of emotional and behavioural responses that are well matched to the demands of their environment.

Thus, Goleman (2018) self-regulation is the ability to monitor and control our own behaviour, emotions or that of the situation. It is clearly important for the development of self-understanding and healthy self-esteem. One of the skills we develop in childhood is the ability to control aspects of the self. Without this ability we would have great difficulty accomplishing anything regardless of how good we might feel about ourselves. It includes ability to inhibit first responses to resist interference from irrelevant stimulation and to persist on relevant task even when we do not enjoy them. This therefore means that self-regulation helps students to self-regulate and manage feelings. In the light of the foregoing, self-regulation presupposes a strong will mind of an individual who cannot be driven by sense of emotions hence the thoughts are well coordinated before decisions and actions are taken.

Kristin & Manuel (2018) investigated Little is known about specific mechanisms linking self-regulation to sexual risk taking. The study considered four possibilities in emerging adulthood: sexual self-restraint, consideration of future consequences, substance use, and romantic competence. Never-married young adults (N = 274), ages 18 to 24, responded to anonymous Internet surveys (60.2% female, 78.8% European American, 66.3% university students). The effects of self-regulation were primarily indirect but varied by sexual behaviour, suggesting that high self-regulation limits sexual risk via high sexual self-restraint and low substance use. High regulation was linked to multiple sexual partners and high-risk practices risk via high romantic competence; high self-regulation was linked to multiple sexual partners and high-risk practices.

Ugogi (2014) also carried out a study to determine risky sexual behaviour among in-school female students in secondary schools in Asaba metropolis, Nigeria. Using survey design, this study investigated the perceived effect of emotional intelligence, self-esteem, religiosity and media on social adjustment behaviour. 300 secondary school students from 13-18 years were used for the study. Five

instruments were administered to the participants selected for the study. Data were collected using questionnaire and analysed with descriptive statistics and multiple regression analysis. The result indicated that the relationship among independent variable-self-regulations and social adjustment were significant. It was however recommended that incorporating emotional intelligence and self-esteem training into the school curriculum of students should be encouraged. Raffaelli and Crockett. (2003), conducted a longitudinal study on sexual risk taking among female adolescent in United State of America high schools from 1994 and 1998. The participants were mostly in-school female adolescents' students. In 1994 ages of participants involved in the study were 12-13 years old in 1998, the ages of participants involved were 16-17 years a total of 443 students were involved in the study within the said years. Questionnaire was the main instrument for data collection. The data were analysed using multiple regression. Analysis of individual social adjustment indicated that self-regulation may affect choices made after becoming adult. Measures of parents and peer influence had independent effect on social adjustment and self-regulation. Coyne (2015) conducted a study on sex differences in the stability of self-regulation across childhood. Result indicated that self-regulation plays a vital role on the determination of adolescence and social adjustment, based on the result on in-school female adolescent students were advised to develop self-regulation in order to control their involvement in social adjustment.

Statement of the problem

The problem of the study is the drift in the sexual behaviour of undergraduates of tertiary institutions. Sexual behaviour which is supposed to be very private and secret is now a public display, as evident in their nude dressing styles which exposes the sensitive parts of the body considered to be secret if not sacred. These physiognomies cover a wide range of sexual activities such as engaging in prolong embrace, mouth to mouth kisses, hugging, curdling and other frottage like touching and rubbing. Others are holding the hands of opposite sex, putting their hands under the clothes of opposite sex, or sitting on the laps or laying their heads on the laps of opposite sex while sitting in public gallery with reckless abandon even when lectures are ongoing. These apparent disparaging sexual practices present the undergraduates in bad light so much so that some of them may be looked upon as prostitutes which could undermine the dignity and pride of the Undergraduate.

The worry is that this impervious public display of these non-penetrative and erotic sexual behaviour mocks the sanctity and dignity of human sexual health practices on our campuses and seem to violate the Nigerian sexual orientations. Sexual behaviour though multifaceted involving a varied range of behaviour such as biological and cultural influences, sexual arousal, both pronounced and subtle, in the aroused person requires a positive and respectful approach as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence (World Health Organisation, WHO:2002). More worrisome is the fact that this behaviour is capable of provoking penetrative and risky sexual activity such as vaginal-penile sex, anal and oral sex which may be associated with the risk of contracting Sexually Transmitted Diseases (STDs), Human Immunodeficiency Virus (HIV) and acquired immunodeficiency syndrome (AIDS), and other sexually

related diseases. Other probable outcomes of these erotic sexual behaviours include unwanted pregnancy and its attendant consequences like abortions and the side effect associated with it, or having a pregnancy and a child outside marriage if abortion is ruled out. This equally comes with the burden of single parenting, shame of stigmatization of having a child outside wedlock and the stress or depression arising from failed relationship, among other problems.

The concerns are that if these sexual activities continue unabated, will endanger the quality of sexual health and the well-being of our youths particularly our Undergraduates on campuses which may negatively impact their academic achievement and goal attainment. Psychological variables such as self-esteem, self-confidence, self-efficacy and self-regulation are said to be critical for regulating behaviour generally and sexual behaviour may not be exception. It is therefore, in view of the foregoing that this research has been designed to examine the extent to which psychological variables of self-

esteem and self-regulation individually and collectively influence the sexual behaviour among Undergraduates of tertiary institutions in Cross River State, Nigeria.

Purpose of the study

The main purpose of the study was to investigate the extent to which psychological variables influence the sexual behaviour of Undergraduate of tertiary institutions in Cross River State, Nigeria.

Specifically, the study sought to:

1. Ascertain the extent to which self-esteem influence the sexual behaviour of Undergraduates of tertiary institutions.
2. Find out the extent to which self-regulation influences the sexual behaviour of Undergraduates of tertiary institutions.

Research questions

1. What is the extent to which self-esteem influence the sexual behaviour of Undergraduates of tertiary institutions in Cross River State, Nigeria?
2. To what extent does self-regulation influence the sexual behaviour of Undergraduates of tertiary institutions in Cross River State, Nigeria?

Statement of hypotheses

1. Self-esteem does not significantly influence the sexual behaviour of Undergraduates of tertiary institutions in Cross River State, Nigeria.

2. Self-regulation does not significantly influence the sexual behaviour of Undergraduates of tertiary institutions in Cross River State, Nigeria.

Methods

The design adopted for this study was ex-post-facto survey design. This design, according to Isanghedighi, Joshua, Asim, and Ekuri, (2004) is used when the research variables have already interacted to produce the effect that is being observed in the dependent variable. In this study, the independent variables of psychosocial variables have already interacted within the respondents in the course of their study, to produce the observed and measured sexual behaviour of the Undergraduates. The design is even most appropriate because no deliberate attempt will be made to manipulate the independent variables, a condition that makes the study non-experimental.

The population of the study consisted of 76279 undergraduates in the 10 public tertiary institutions in Cross River State. 37439 were male and 38839 females. The sampling technique adopted for the study was stratified random sampling. All the 10 institutions were involved in the study, while the students or respondents were selected by random sampling based on department and gender. The study sample consisted of 507 undergraduates, which consists of 245 males and females, 262 selected from the ten (10) tertiary institutions in the Cross-River State. The distribution of this sample is presented in Table 1.

TABLE 1
Sample distribution by institution and by gender

S/N	Institution	No. of Departments	Male	Female	Total
1.	University of Calabar, Calabar.	116	132	164	296
2.	National Open University, Calabar	7	19	20	39
3	Cross River University of Technology.	42	72	53	125
4	Institute of Management and Technology, Ugep	5	2	1	3
5	Federal College of Education Obudu,	7	5	5	10
6	School of Health technology, Calabar	8	8	10	18
7	CRS, College of Education, Akamkpa	14	5	4	9
8	School of Nursing, Calabar	1	1	2	3
9	School of Nursing, Itigidi	1	1	2	3
10	School of Nursing, Ogoja	1	-	1	1
	Grand total	174	245	262	507

A 16 - item validated instrument named ‘Psychological Variables and Sexual Behaviour Questionnaire (PVSQBQ) developed by the researchers was used to elicit information from the respondents. The instrument was built on a self-reporting four–point modified Likert scale as response options with Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The questionnaire was divided into three (3) sections: - A, B and C. Section “A “contained all the demographic information of the respondents. Section “B” comprised a total of sixteen (16) items that measure the two psychological variables of self-esteem and self-regulation. While, section C consisted of 10 items that elicited information about the dependent variable of sexual behaviour

Validity of the instrument

Face validity was adopted by the researchers for the study. This was done by giving the instrument entitled “Psychological Variables and Sexual Behaviour Questionnaire (PVSQBQ)“ developed by the researchers, together with the title of study, the purpose of study, population and hypotheses of the study to 2 experts in educational psychology and 2 experts in Measurement for validation. They independently vetted the instrument to ensure that face validity was archived for the study. In the course of this scrutiny irrelevant items were deleted, others reworded and some modified to remove ambiguity.

Reliability of the instrument

The reliability of the instrument was established through trial-testing and Cronbach Alpha reliability estimate coefficient of .723 for self-esteem, .785 for self-regulation and .86 for the dependent variable which is sexual behaviour were obtained.

Ethical considerations

The research adhered to ethical guidelines throughout the study. Informed consent was obtained from the school authorities and from respondents who were provided detailed information about the purpose of the study, the use of data to be collected and the rights of participants to withdraw at any time they felt to do so. The study obtain approval from the Institutional Review Board (IRB) to ensure compliance with ethical standards.

Data collection procedure

The researchers visited the institutions and obtain permission from the appropriate authorities to use their institution for the study. Administration of the instrument was done in one week by the help of well-informed research assistants. Both administration of the instrument and its retrieval were relatively easy, as they achieved a 100% retrieval rate of 507 questionnaires that were distributed based on the number of samples selected in each institution

Procedure for data analysis

Based on the research hypotheses raised in this study, inferential statistics were used to analyse the data. All hypotheses were stated in the null form and tested at .05 level of significance as shown below:

Results

Hypothesis one

Self-esteem has no significant influence on sexual behaviour among Undergraduates of tertiary institutions.

To test this hypothesis, the procedures used in testing hypothesis one was adopted, with self-esteem as independent variable. The results are presented in Table 2

TABLE 2
Regression of sexual behaviour on Self-esteem

R-value = .162			Adjusted R		
R Square = .026			Square = .024		
			Std.		
			Error = 4.97368		
Source of variable	Sum of Squares	Df	Mean Square	F-value	Sig.
Regression	335.568	1	335.568	13.565	.000 ^b
Residual	12492.432	505	24.737		
Total	12828.000	506			
Predictor variable	Unstandardized Coeff	Standardized Coeff	t-value	Sig.	
	B	Std. Error	Beta		
(Constant)	29.104	1.817		16.018	.000
Self – Esteem	-.279	.076	-.162	-3.683	.000

**Significant at .05 level $P < .05$*

The results in Table 2 show that R-value of .162 was obtained, resulting in an R-squared value of .026. This means the variation in self-esteem accounted for about 2.6% of the total variation in sexual behaviour. The P-value (.000) associated with the computed F-value (13.565) is less than .05, thus the null hypothesis was rejected. This means that self-esteem has significant influence on sexual behaviour among Undergraduates of tertiary institutions, with both the regression constant (29.104) and coefficient (-.279) making significant contribution in the influence model ($t = 16.018$ & -3.683 respectively, $p = .000 < .05$). The influence model may be written as;

$$y = 29.104 - .279x$$

where x = self-esteem

y = sexual behaviour

Hypothesis two

Self-regulation has no significant influence on sexual behaviour among Undergraduates of tertiary institutions.

To test this hypothesis, the procedures followed in testing hypothesis one was adopted, with self-regulation as the independent variable. Table 3 is a summary of the result.

TABLE 3
Regression of sexual behaviour on Self-regulation

R-value = .187			Adjusted R Square = .033		
R Square = .035			Std. Error = 4.95096		
Source of variable	Sum of Squares	Df	Mean Square	F-value	Sig.
Regression	449.446	1	449.446	18.336	.000
Residual	12378.554	505	24.512		
Total	12828.000	506			
• Predictor variable	Unstandardized Coeff		Standardized Coeff	t-value	Sig.
	B	Std. Error	Beta		
(Constant)	30.325	1.849		16.397	.000
Self-Regulation	-.331	.077	-.187	-4.282	.000

**Significant at .05 level $P < .05$*

The results in Table 3 shows that an R-value of .187 was obtained, giving an R-squared value of .035. This means that about 3.5% of the total variation in sexual behaviour is accounted for by the variation in self-regulation. The p-value (.000) associated with the computed F-value (18.336) is less than .05. As such, the null hypothesis was rejected. This means that self-regulation has significant influence on sexual behaviour among university Undergraduates, with both the regression constant (30.325) and coefficient (-.331) making significant contribution in the influence model ($t=16.397$ & -4.282 , respectively, $p = .000 < .05$).

The regression model may be written as;

$$y = 325 - .331x$$

where x = self-regulation

y = sexual behaviour

Discussion of findings

Result of hypothesis one revealed that self-esteem has significant influence on sexual behaviour among Undergraduates of tertiary institutions. This result collaborates Ackerman and Nash (2018) who conceptualised self-esteem as the overall positive or negative evaluation of oneself and as an enduring trait, stable versus fragile, and as specific domain of contingent self-worth. This means that self-esteem can be said to regulates one's thought pattern, emotions and the sexual activities. Your level of self-esteem determines the nature sexual behaviour. The results as well align with Mruk (2013) and Reasoner (2004) who averred that high self-esteem is manifested by acceptance of responsibility for one's own actions - self-motivation, i.e. the willingness to take reasonable risk, and taking command and control of one's, personal life including health behaviour. Again, the individuals with low self-esteem focus on trying to prove themselves to others. They generally lack confidence in themselves, and often doubt their own worth and acceptability. They frequently blame others rather than take responsibility for their behaviour (Mruk 2013). This agrees with most researches which find that self-esteem is associated risky sexual behaviour.

The results as well agrees with Enejoh, Pharr, Mavegam, Olutola, Karick, & Ezeanolue (2016) who found high self-esteem to be closely associated with lower frequency of anal sex (lower anal risk) among female adolescents. Also, there is agreement with Ethier et al (2006) who found that lower self-esteem was predictive of early sex initiation, history of risky sexual partners and unprotected intercourse. Findings further collaborate a study by Boden and Horwood (2006) that found an association between lower self-esteem and high risk for pregnancy in late adolescence and early adulthood, and a study conducted in Nigeria by Sangowawa and Adebisi (2013) which found that high self-esteem was a significant predictor of abstinence among out-of-school adolescent females. This

revelation again laid credence to the claim by some studies that high levels of self-esteem are protective against several types of sexual risk behaviour. In fact, most studies of self-esteem measured by means of the global self-esteem scale found that adolescents reporting high levels of positive self-esteem are more likely to engage in risky sexual practices (rather than not to engage in sex) compared with those with low levels of positive self-esteem (Spencer *and* Paul et al, 2016), they indicated that higher scores of self-esteem were associated with more sexual activity among boys and girls.

Equally, the result is in support of the findings of Lily, McNair and Carter (2018) who found that for low drinking students, those with high self-esteem reported greater condom use. In addition, low rates of alcohol use were associated with greater frequency of past condom use. Women and students low in self-esteem indicated greater perceptions of risk for themselves and their partners. Moreover, results agree with Boonabaana (2018) whose results indicated that risky sexual behaviour perfectly mediated the relationship between self-esteem and students' academic achievement ($\beta = .01$, $p < .89$) and that adolescent students who have high self-esteem were more likely to avoid engaging in risky sexual behaviour and may hence concentrate on their studies and achieve highly in their academics. Final findings found association with Johansson and Sällström (2015) who investigated Rural High School Students' Sexual Behaviour and Self-Esteem. Results indicated that Swedish high school students reported having few sexual partners, a low use of alcohol along with sex, yet a low consistency in condom use. The students reported both high basic self-esteem as well as earned self-esteem. Basic self-esteem was higher for male students while earned self-esteem was higher for female students. Significant correlations were found between self-esteem and some factors affecting sexual risk behaviour related to condom use.

In the same way, results of hypothesis two revealed that self-regulation has significant influence on sexual behaviour among university Undergraduates. This of course bring into line Bandura (1991) theory of self-regulation, which argues that self-regulation is a continuously active process in which we: monitor our own behaviour, influences on our behaviour and the consequences on our behaviour; judge our behaviour in relation to your own personal standard and broader more contextual standards and react to our own behaviour (i.e., what we think and how we feel about our behaviour). He maintained that Self-Regulation Theory (SRT) is a system of conscious, personal management that involves the process of guiding one's own thoughts, behaviour and feelings to reach goals. Self-regulation consists of several stages. In these stages, individuals must function as contributors to their own motivation, behaviour, and development within a network of reciprocally interacting influences. As seen in the findings of the study, these claims are in association and interaction with self-regulation and sexual behaviour.

This finding is further collaborated with Vohs and Baumeister (2004) who averred that self-regulation is the mental processes we use to control our mind's functions, states, and inner processes. They also, describe self-regulation as control over oneself and that it may involve control over our emotions, thoughts, impulses, appetites, or task performance. If this is the case, then there can be no sexual

behaviour without the contribution of self regulation. Self-regulation is often thought to be the same thing as self-control (Vohs & Baumeister, 2004) and it usually involves stopping or inhibiting an action although it sometimes involves initiating an action (Baumeister, 2014). As seen in the various findings of sexual activities of the students non may happen without the influence of self – regulation. Whether you call it self - control or control over oneself which involve control over one's emotions, thoughts, impulses, appetites, or task performance, are actions that are typical of sexual behaviour and may likely not be consummated without upshot of self -regulation. Going by Goleman (2018) view of self-regulation is the ability to monitor and control our own behaviour, emotions or that of the situation and sexual behaviour is not an exception.

Results corroborated Kristin & Manuel (2018) who investigated Little is known about specific mechanisms linking self-regulation to sexual risk taking. The study considered four possibilities in emerging adulthood: sexual self-restraint, consideration of future consequences, substance use, and romantic competence. Findings indicated that effects of self-regulation were primarily indirect but varied by sexual behaviour, suggesting that high self-regulation limits sexual risk via high sexual self-restraint and low substance use. While high regulation was linked to multiple sexual partners and high-risk practices risk via high romantic competence, high self-regulation was linked to multiple sexual partners and high-risk practices.

Results in the same manner supports Ugogi (2014) who study to risky sexual behaviour among in-school female students in secondary schools in Asaba metropolis, Nigeria. The result indicated that the relationship among independent variable-self-regulations and social adjustment were significant. It was however recommended that incorporating emotional intelligence and self-regulation training into the school curriculum of students should be encouraged. Equally, there is agreement with Raffaelli and Crockett. (2003), conducted a longitudinal study on sexual risk taking among female adolescent in United State of America high schools from 1994 and 1998. The participants were mostly in-school female adolescents' students. In 1994 ages of participants involved in the study were 12-13 years old in 1998, the ages of participants involved were 16-17 years a total of 443 students were involved in the study within the said years. Results indicated that self-regulation may affect choices made after becoming adult. Moreover, finding align with Coyne (2015) conducted a study on sex differences in the stability of self-regulation across childhood and results indicated that self-regulation plays a vital role on the determination of adolescence and social adjustment, based on the result on in-school female adolescent students were advised to develop self-regulation in order to control their involvement in social adjustment.

CONCLUSION

The results of the analyses revealed that all hypotheses were statically tested at alpha level of 0.05 level of significance. It was concluded that self-esteem and self-regulation have significant individual and relative influence on sexual behaviour among undergraduates of tertiary institutions. The implication of the study is that psychological variables of self-regulation and self-esteem which are

products of strong character formation and together strengthen in the social spectrum of peer pressure, strong character tend to influence more positive and desirable sexual outcomes. This implies that we cannot compromise the task of building strong character in undergraduates who are predominantly youths and this is the responsibility of all stake-holders in tertiary institutions, parents, administrators, psychologist and counsellors, among others.

Recommendation. Based on the findings of the study that both individual students and postsecondary institutions need to understand the importance of self-regulation in determining an individual's sexual conduct. Your ability to manage your engagement in sexual conduct, especially dangerous sexual behaviour, is strengthened via self-regulation. Another psychological factor that determines one's worth and regard for oneself is self-esteem; thus, in order to influence sexual conduct, both higher education institutions and individual students must be taught to value oneself.

REFERENCES

- Ackerman, E and Nash, JO (2018). Online: <https://positivepsychology.com/self-esteem/>
- Bandura (1991) Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational behaviour and human decision processe*.50. 248-287.
- Baumeister & Vohs (2016) Baurmeister, R. F. & Vohs, K. D. (2016). Sexual Economics: Sex as Female Resource for Social Exchange in Heterosexual Interactions. *Personality and Social Psychology Review*. Vol. 8, No. 4, 339–36.
- Baurmeister, R. F. & Vohs, K. D. (2016). Sexual Economics: Sex as Female Resource for Social Exchange in Heterosexual Interactions. *Personality and Social Psychology Review*. Vol. 8, No. 4, 339–36.
- Boden, J. M. & Horwood, L. J. (2006). Self-esteem, risky sexual behaviour, and pregnancy in a New Zealand birth cohort. *Archives of Sexual Behaviour*. 35(5) 549–560.
- Boonabaana, (2018), Self-esteem, risky sexual behaviour and academic achievement among secondary school students in Wakiso Town Council. Master's thesis.
<http://hdl.handle.net/10570/7171>
- Coyne (2015) Coyne, I. (2015), Families and health-care professionals' perspectives and expectations of family-centred care: hidden expectations and unclear roles. *Health Expect*, 18: 796-808. <https://doi.org/10.1111/hex.12104>
- Enejoh, Pharr, Mavegam, Olutola, Karick, & Ezeanolue (2016) Enejoh, Pharr, Enejoh, V., Pharr, J., Mavegam, B. O., Olutola, A., Karick, H., & Ezeanolue, E. E. (2016). Impact of self-esteem on risky sexual behaviour among Nigerian adolescents. *Aids Care*, 28(5), 672-676.
- Ethier, K. A, Kershaw, T. S., Lewis, J. B., Milan, S., Niccolai, L. M., & Ickovics, J. R. (2006). Self-esteem, emotional distress and sexual behaviour among adolescent females: Interrelationships and temporal effects. *Journal of Adolescent Health*, 38(3), 268–274.
- Goleman (2018) Goleman, D. (2018). Emotional intelligence. *New York, New York: Bantam Dell*.
- Johansson and Sällström (2015). Rural High School Students' Sexual Behaviour and Self-Esteem. *Pen. Journal of Nursing*. 5(1),10.423

- Kristin & Manuel (2018) Kristin L. Moilanen & Mary Lynn Manuel (2018) Mechanisms Linking Self-Regulation and Sexual Behaviour in Never-Married Young Adults. *The Journal of Sex Research*, 55(1) 120-133.
- Lily, D., McNair, A., Michelle, K. & Williams, C. (2018) Self-esteem, gender, and alcohol use: Relationships with HIV risk perception and behaviour in college students, *Journal of Sex Marital Therapy*, 24(1), 29-36.
- Mruk, C. J. (2013). Self-esteem and positive psychology: Research, theory, and practice. Springer publishing company
- Nigerian Policy on Education (NPE:2004; 4th Ed. Sec. 8, Pp. 35–36).
- Obeta and Uwah (2015) Obeta, A. and Uwah B (2015). *Determinants of Dressing Pattern of Female Undergraduates Students in Tertiary Institutions in Abia State*. Rural Environment Education Personality
- Raffaeli and Crockett. (2003), Raffaeli, M. & Crockett, L. J. (2003), Sexual risk taking in adolescence: The role of self-regulation sexual risk taking in adolescence: *The role of self-regulation and attraction to risk. Developmental psychology* (39)6.1036–1046.
<http://www.apa.org/journals/dev/>
- Reasoner. R. (2004). The true meaning of self-esteem. National association for self-esteem. (Online).
- Sangowawa, A. O., & Adebisi A. O. (2013). Factors associated with sexual abstinence among out-of-school females in a transitional town in Oyo state, South-Western Nigeria. *Health Care for Women International*. 34(10) 917–932.
- Shanker, S. (2016). Self-Reg: How to help your child (and you) break the stress cycle and successfully engage with life. Canada: Penguin Random House (foreign editions Korea, Poland, Germany, Netherlands, Czech Republic, China, Taiwan, Japan, UK, USA, Georgian) ISBN 978-0-670-06829-6.
- Spencer, S., Zanna M. P., Fong Geoffrey T. (2005) “Establishing a Causal Chain: Why Experiments Are Often More Effective Than Mediational Analyses in Examining Psychological Processes,” *Journal of Personality and Social Psychology*, 89 (6), 845– 51.
<https://publications.aap.org/pediatrics/article-abstract/109/4/581/64114/Self-Esteem-as-a-Predictor-of-Initiation-of-Coitus>
- Stosny (2005) *Change in Self-Esteem and Physical Aggression During Treatment for Partner Violent Men*. *Journal of Family Violence* 20(4):201-210. DOI.
- Ugogi (2014) Ugogi, F. (2014) Determinants of risky sexual behaviour among secondary school students in Delta State Nigeria. *International Journal of Adolescence and Youths*, 19(3):408-418.
- Vohs, K. D., & Baumeister, R. F. (2004). Understanding self-regulation. *Handbook of self-regulation*, 19
- World Health Organization, *Active Ageing, A Policy Framework*, World Health Organization, Geneva, Switzerland, 2002