RISKY SEXUAL BEHAVIOURS AMONG FEMALE IN-SCHOOL ADOLESCENTS IN DELTA, NIGERIA: SELF-ESTEEM, PARENTAL INVOLVEMENT AND RELIGIOSITY AS PREDICTORS

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Abstract

This study adopted descriptive survey design of ex post type to examine the extent to which self-esteem, parental involvement and religiosity predicted risky sexual behaviours among female in-school adolescents in Delta state, Nigeria. Four hundred adolescents whose age ranged from 15 to 19 (SD=17.37) were drawn using Multi-stage sampling technique. Three standardized and one researcher developed self-report measures were used for data collection. Pearson Product Moment Correlation and regression statistics were used to analyze data at 0.05 level of significance. Self-esteem, parental involvement and religiosity have negative relationship with participants' risky sexual behaviours. The independent variables accounted for 30.3% of the variance in prediction of risky sexual behaviour. Self-esteem made the highest contribution to the prediction of risky sexual behaviour of adolescents while parental involvement made the least contribution. The need for Programme designers, sexuality educators, and Counsellors to incorporate these variables into activities to delay sexual debut by adolescents was implied from this outcome.

Keywords: Parental involvement, Self-esteem, Religiosity, Risky-sexual behaviour, Delta State

Introduction

Adolescents otherwise known as young people are important segment of Nigerian society where it makes up over a third (31.6 percent) of Nigeria's large and growing population (National Population Commission, 2013). Adolescents are generally defined as meaningful, young persons under

various laws, conventions and culture, who are within the ages of 10-19 and 10- 24 years old according to World Health Organization (WHO, 2001). It is a period of life from puberty to attainment of full maturity (adulthood) or growth, a time of being young when one's appearance is full of freshness, vigour and young spirit. Adolescents also share certain characteristics that distinguish them from other generation. Such characteristic include, desire for independence, zealousness, radicalism, rebellions, curiosity, sexual risk behaviours, etc. It is both a period of opportunity as well as a time of vulnerability- a time of experimentation with new ideas and options and marked with vulnerability to health risk and those related to unsafe reproductive health outcomes.

Until recently, adolescents in Nigeria were seen as a healthy segment of the population and received low priority for services. But biology and society bring on additional health challenges to them; those resulting from unprotected sex, violence and substance abuse. Ahonsi (2013) posited that adolescents in Nigeria have high burden of reproductive health problems. This assertion supported earlier surveys conducted on sexual behaviours of Nigerian Adolescents (National Demographic Health Survey, 2008; National HIV/AIDS and Reproductive Health Survey 2007; Integrated Biological and Behavioural Surveillance Survey, 2010) which show that Nigerian adolescent (15-19) almost half of the females (46.2%) and about a quarter of males (22.1%) have engaged in sexual intercourse. This figure varies from state to state. For some states like Cross Rivers it can be as early as 7 years (Diala, Olujimi, Harri & Feyisetan, 2011).

Worrisome still is data from the Federal Ministry of Education (2009) which found that 21% of upper primary school children surveyed indicated they have been involved in sexual intercourse yet only 40.6% who had two or more sexual partners in the past 12 months reported using a condom during their last sexual intercourse (National Demographic health Survey, 2008). Young people are clearly disproportionately affected by the epidemic in absolute terms even with the decline in overall HIV prevalence from 5.8% in 2001 to about 3.4% in 2012. The survey indicated that 2.9 per cent young people aged 15-19 years are infected while female adolescents aged 15-24 is most disproportionately affected by the HIV epidemic among the 4 broad age-gender categories of the sub-population (National HIV/AIDS and Reproductive Health Survey-Plus (NARHS Plus), 2012).

In addition to the risk of sexually transmitted infections (STIs), risk of unplanned pregnancy increases with frequency of unprotected sexual intercourse. Estimates have suggested approximately 23% of adolescent girls have begun childbearing while 54% have given birth to a child by age 20. Hospital based studies also show that adolescent girls make up over 60% of women treated for complications from unsafe abortion—many resulting in

death or permanent injury or infertility (Federal Ministry of Health, 2009). Adeyemo and Agokei (2008) posited that female adolescents often consider risky sexual behaviours as an elevation of status rather than being vicious. These patterns broadly conform to data from across Africa which suggests that the combination of being young, poor, female and lacking access to sexual health information and services carry particularly high risks for sexual reproductive health challenges (UNICEF, 2011; UNAIDS, 2011; Coutinho, 2004).

Ajuwon (2007) cited in Ahonsi (2013) was of the opinion that the fundamental bases of reproductive ill health among female is embedded in discriminatory social structures and stereotypes. For example, there is high tolerance for non-consensual sex (including rape) with girls by older men in communities, educational institutions,and work settings.This most times results to often unplanned and unwanted sexual debut (Luke & Kurz, 2002). Similarly, Ahonsi (2013) observed that prominent feature of the social landscape of Nigeria's towns and cities is formal and informal or disguised commercial sex on offer by female youth to a large population of generally older men. According to the scholar, it is a case of older, better resourced men (with much longer and more disease-filled sexual histories) preying upon or enticing less resourced and often less educated girls. In a recent survey conducted by Federal Ministry of Health (2009) female in-school adolescents identified enticement by men for sex, rape, sexual assault and sexual violence as some of their health concerns. Added to trans-generational and transactional sex is the social construction of sexual virility, sexual dominance and broad experience as part and parcel of masculinity right from adolescence in contrast to passivity and acquiescence as defining features of femininity (Fatusi & Wang, 2009; Izugbara & Nwabuawele, 2007).

Some states in Nigeria is suffers most from the negative outcome of early sexual debut. For example, Udoh, Mantell, Sandfort and Eighmy (2009) observed that female in Niger Delta region is particularly hit by STIs, HIV and unplanned teenage pregnancy.According to theresearchers, the high rate of infections in the Niger Delta has been linked to underrepresentation in the national government, disproportionately smaller share of donor funding, and region-specific political economic conditions, such as poverty, migration, and sex work (Udoh, 2006; Macilwain, 2007). These factors are believed to increase vulnerability to HIV/AIDS and other sexually transmitted diseases (STIs) in this region, particularly among women and adolescents (Okonta &Oseji, 2006). From the forgoing, it is evident that female bear the brunt of negative effects of risky sexual behaviours such as compromised life chances, maternal health risk, academic and educational deficit, poverty and social stigma (Ofole, 2013; Ofole & Offor, 2012).

Sexual risk behaviour, like other problematic behaviours of adolescents has been extensively studied for decades as earlier noted. However, the research that has been accumulated thus far still leaves some several important issues unaddressed. First, most existing literatures on adolescents was based on the assumption that adolescents are homogenous population, on the contrary, adolescents and young people are heterogeneous, they vary enormously by age, sex, marital status, class, religion, and cultural context.Sexual and Reproductive Health needs may vary considerably across these different groups, cultures and regions. One of such regions where variability is likely to exist is Niger Delta Region (NDR) of Nigeria. It is believed that about 90% of the crude oil in Nigeria comes from the numerous, large, producing fields located in the swamps of the NDR. Some have argued that the years of oil exploration activities with frequent oil spills have led to severe environmental degradation with resultant destruction of farmlands and aquatic flora and fauna. Consequently NDR indigenes believe that the oil boom has become a doom to them. They argued that years of neglect have resulted in the NDR of today being the epitome of hunger, poverty and injustice. It is estimated that 10 million people in the area are destitute with 14 million people living in poverty in rural communities (Okonta, 2007).There is well documented reason to believe that due to the geographic, economic and socio-cultural peculiarity of Delta the adolescent are more susceptible to negative Reproductive Health outcomes yet they are rarely targeted in research and interventions.

Second, researches have recently expanded to include personal, familiar, social and cultural factors as determinant of adolescents sexual risk taking behaviours, little effort has been made to integrate this literature into a conceptual framework that simultaneously consider multiple systems of influence and the complexity of their combined contributions on adolescents sexual behaviours. For proper policy formulation, program planning, implementation, monitoring and evaluation purposes, there is need to understand the dynamics of adolescents' sexual behaviours in terms of factors that precipitate or inhibit sexual behaviours among adolescents' with respect to their gender, context and cultures. It is against this backdrop that this paper examined the extent to which, self-esteem, parental involvement and religiosity predict involvement in risky sexual behaviours among female in-school adolescents in Delta State, Nigeria. It is expected that the outcome of this study would no doubt disentangle the relationship between self-esteem, parental involvement and religiosity on adolescent reproductive health behaviour in Delta state, Nigeria.

Self-Esteem and Sexual Behaviours

The notion that positive self-esteem is a vital protective factor for risk behaviours has witnessed unprecedented attention by public health professionals, sexuality educators, researchers, and psychologist. Despite such recognition, evidence in support of self-esteem as a protective factor is inconclusive within academic and there is considerable debate and lack of consensus on the meaning of the construct. Definitions of self-esteem vary but are anchored in the notion that self-esteem is a central dimension of self-concept and are often used interchangeably and receive a variety of labels such as; self-evaluation, self-schema, self-worth, self-approval and self-satisfaction among few. Broadly defined as a disposition that a person has which represents his judgments of his own worthiness. In the mid-1960s, Rosenberg defined self-esteem in terms of a stable sense of personal worth or worthiness. Similarly, Branden, (1969) noted that self-esteem is the sum of self-confidence (a feeling of personal capacity) and self-respect (a feeling of personal worth).

Considerably, variability exists also in characterizing self-esteem as comprising a single, dual or triple dimension structure. For some, self-esteem is formed exclusively by the dimension of feelings of emotions associated with an individual's evaluations of him/herself **(**Campbel & Lavallee, 1993). Other scholar propose similar to the dual structure of attitudes that self-esteem consists of both cognitive and emotional dimensions (Rosenberg, Schooler, Schoenbach & Rosenberg, 1995) and yet others propose a triadic structure for the construct; beliefs about the self as they relate to competence and ability, valence associated with these beliefs and attributions of value or worthiness according to some pre-established social standard (Goodson, Evans & Edmundson, 1997).Given that the assumptions that positive self-esteem might be health promoting and is intuitively appealing, research evidence abound. For example, studies have demonstrated the impact of self-esteem on sexuality-related factors such as early sexual initiation, risky sexual behaviours, unplanned pregnancies, and sexually transmitted infections (Goodson, Evans & Edmundson, 1997; Smelser, 1989). However, the nature of the relationship between self-esteem and these outcomes is largely unclear. The proponent of self-esteem as a 'social vaccine' opined that high self-esteem can inoculate young people against vulnerability to a wide range of social vulnerabilities. On this basis sexuality educators specially placed concerted emphasis on improving adolescents' self-esteem as a means of promoting healthy decision making, well- functioning and avoiding negative consequences of sexual behaviours (Nwokocha, 2012; Nwankwo, Balogun, Chukwudi & Ibeme,2012; Lawal, 2010).

On the other hand, some psychologists and social scientists debunked the myth of self-esteem as an 'all-purpose social vaccine' they argue that

young people with very high self-esteem are more likely than others to engage in risky behaviours (Emler, 2001; Baumeister, 1996). In addition, some researchers argued that enhanced self-esteem may be reinforcing individualistic and egoistical normative patterns of behaviour that contribute to the weakening of interpersonal connectedness and thus generate outcomes that are mainly unhealthy and potentially unethical (Hughes, Cavell & Prasadad-Gaur,2001).

Religion and Sexual Behaviour

Two things are growing among Nigerian adolescents- affiliation with religious group and sexually transmitted infections as well as HIV/AIDS. At every nook and cranny of Nigeria urban and rural settlements are religious houses with the majority of worshippers being youths, premarital sexual intercourse among adolescents in Nigeria is also growing at an alarming rate despite its prohibition by these religious groups. Researchers are of the opinion that in spite of the apparent pervasive religiosity in the country, pre-marital sexual practices that culminate to unplanned pregnancy and sexually transmitted infections are on the increase (Dorojaiye, 2009; Morhason-Bello, Oladokun, Enakpene, Fabamiro, Obisesan & Ojengbede, 2008).

A study argued that religion influence individual adolescents' sexual behaviour directly and indirectly through mechanisms of social support and social control interacting at multiple levels of the adolescents' social context (Durkheims, 1951). There is still controversy underlying the mechanism through which religion affects sexual behaviour of adolescents in Nigeria. Certainly, religious values are the source of moral proscriptions for many individuals the teachings of the churches are likely to play a role in the formation of individual attitudes, values and decisions. The extent to which specific doctrines and policies of the religion influences individual attitudes and behaviour is yet to be determined given Rohrbaugh and Jessor (1975) were of the opinion that religion generates social control through four pathways (a) by embedding the individual in an 'organised sanctioning network (p.137) that is supportive of conventional activities and opposed to unconventional ones, (b) by making the individual sensitive to moral issues and acceptable standards of behaviours, (c) by offering a deity as a source of punishment and wrath, and (d) by generating devoutness, thus creating an obedience orientation (p.137).Findings regarding influence of religion on sexual behaviours have been mixed. For example, study by Odimegwu (2005) using 1,153 campus-based adolescents aged 10-24 years show a strong relationship between religiosity and adolescent sexual attitudes and behaviour. Similar finding was reported by Owusu (2011) using 1026 adolescents between 12 and 19 years of age in Lagos metropolis result show that religiosity is significantly related to multiple sexual partnerships.

Findings in other contexts found that religious attendance delayed the sexual debut of males (Jessor, Costa, Jessor & Donavan, 1986). Crockett, Bingham, Chopak and Vicary(1996) also found that females who attended religious services more frequently were more likely to delay sexual debut. Whereas, others (Mott, Fondell, Hu, Kowaleski-Jones &Menaghan, 1996) indicate that attendance was a predictor only when the adolescents' male friends also attended religious activities. Other studies reported non-significant findings for males (Miller, Norton, Curtis, Hill, Schvaneldt& Young, 1997).

Parental Involvement and Sexual Behaviours

Adolescents are influenced by variety of social factors such as peers, family and mass media. Previous research confirms that parents can be one of the strongest influences in adolescents' lives. For example, higher levels of parental involvement in their adolescent lives are linked with lower levels of delinquency, violent behaviours, high school drop outs, drug abuse as well as high educational attainment. It is plausible to assume intuitively that high parental involvement will lead to delay in sexual activities, decline in number of sexual partners as well as increase in the use of protective measures. However, there is still disagreement among scholars on the extent to which parental involvement correlates with adolescents' sexual behaviours. Proponents of favourable parental outcome argue that parents can help prevent risky sexual behaviours by monitoring their adolescents' activities and being aware of where and with whom their adolescents are when they are not at home or in school (Resnick, Bearman, Blum, Bauman, Harris & Jones, 1997)**.** For example, a study found that adolescents of both sex who report higher levels of parental awareness were less likely to have had sexual intercourse before age 16, even when controlling for other background characteristics. Adolescents girl with higher levels of parental, maternal and paternal awareness were less likely to have initiated sex before age 16. Less than one-quarter of teen girls (22 percent) who reported that their parents or parents knew very little about whom they were with, when not at home had sex before age 16, compared with 29% who reported that their parents or parents knew just some things or less about whom they were with when not at home. Similarly, adolescents who feel close to their parents due to monitoring may be more comfortable communicating with them about sex may share or feel more influenced by their parents values or may have a better understanding of their adolescents' sexual behaviours (Miller, 1998; Crouter & Head, 2002). Nearly, one half of 12 to 19 year-old reported that their parents had the most influence on their decisions about sex.

Purpose of the study

The broad objective of this study is to examine the extent to which self-esteem, religiosity and parental involvement predicted adolescents risky sexual behaviours among female in-school adolescents in Delta state, Nigeria, specifically, the study will;

1. Examine the relationship between the three independent variables (self-esteem, religiosity, parental involvement) and the dependent variable (risky sexual behaviours).
2. Assess the joint contribution of the three independent variables (self-esteem, religiosity, parental involvement) on the prediction of the dependent variable (risky sexual behaviours).
3. Determine the relative contribution of each of the three independent variables (self-esteem, religiosity, parental involvement) to the prediction of the dependent variable (risky sexual behaviours).

Research Questions

The following research questions generated from literature review guided the study;

1. Is there relationship between the three independent variables (self-esteem, religiosity, parental involvement) and the dependent variable (risky sexual behaviour)?
2. To what extent do the independent variables (self-esteem, religiosity, parental involvement) jointly predict the dependent variable (risky sexual behaviour)?
3. What is the relative contribution of each of the independent variable (self-esteem, religiosity, parental involvement) to the prediction of the dependent variable (risky sexual behaviour)?

Methods

Sample and Sampling Technique

Descriptive survey design of ex post type was used to examine the phenomenon of interest as it exists without any form of manipulation. Multi-stage sampling procedure was adopted to draw a sample size of four hundred (400) which constituted 10 % of the study population. Only female secondary students from both junior and senior secondary in Oshimilli North Local Government Area of Delta State were targeted. The first stage involved purposive selection of Oshimili North out of the twenty-five Local Government Areas that made up Delta State, South-south geo-political region of Nigeria. This Local Government was targeted due to the fact that it was reported to have to high incident of HIV prevalence (FMoH, 2012). In the second stage, ten schools were selected using simple random sampling procedure. The questionnaire was administered with the assistant of two

research assistants. In addition to the instructions contained in the questionnaire, verbal explanations were offered to ensure clarity and understanding. Out of 713 questionnaires distributed 510 were returned, while only 400 was correctly filled making the return rate to be 56.1% which was above average.

Ethical issues

In order to adhere to ethical standard of confidentiality of responses, the researchers did not include any identifier information such as name, address, phone number on the questionnaire. To ensure voluntary participation, the researchers explained the purpose of the research and made the option for participations to be either '*opt in or opt out'*.

Study Site

The study site is Oshimili North Local Government Area. Oshimili North is one of the twenty-five Local Government Areas that made up Delta State, South-south geo-political region of Nigeria. The Local Government was created in 1997 and until its creation, was part of the old Oshimili Local Government Area. The Local Government is headquartered at Akwukwu-Igbo and has a population of about 80,000 people who are predominantly farmers and fishermen spread amongst Akwukwu-Igbo, Atuma, Illah, Ebu, Ukala, Ibusa, Okpanam and Ugbolu. The people of this region speak Igbo, which the indigenes refer to as the Enuani language dialect of Igbo language (Wikipedia, 2014). The HIV prevalence survey using antenatal attendee show that Delta state has 4.1 %. As a result of this high prevalence which is above the national average, Delta state was one out of the five states (Abia, Rivers, Edo and Bayelsa) which benefited from high-quality HIV/AIDS services under the Niger Delta AIDS Response (NiDAR) project initiated by the Shell Petroleum Development Company (SPDC) in 2009.

Self-Esteem Measure

Rosenberg (1965) Self-Esteem (RSE) Scale was adopted to measure the respondents' self-esteem. It is a commonly used measure of global self-esteem, an important element of mental health. The scale is a 10 item self-report questionnaire designed in five point Likert format ranging from strongly agree to strongly disagree. The original sample for which the scale was developed consisted of 5,024 high school juniors and seniors from 10 randomly selected schools in New York State. The scale showed adequate psychometric properties when it was used on a sample of 98 African American single mothers. It was reported that RSE Scale had adequate internal consistency with an alpha coefficient of .83. Test and Measurement

experts certified that the instrument has both face and content validities. To establish the consistency (reliability) of the scale, it was administered to randomly selected secondary school students in Oyo state during pilot study, the test re-test within a week interval using Pearson Product Moment Correlation was r=0.77. The scale was thus considered to have satisfactory psychometric properties using Nigerian sample.

Religiosity Measure

The Duke University Religion Index (DUREL) by Koenig and Büssing (2010) was adapted to measure religiosity. The five-item scale assesses the three major dimensions of religious involvement which are organizational, non-organizational, and intrinsic or subjective religiosity. The DUREL has an overall score range from 5 to 30. Studies of the DUREL's psychometric properties by other investigators have also found it to be a reliable and valid measure of religiosity. The two-week test-retest reliability of the DUREL is high (intra-class correlation coefficient of 0.91). The internal consistency (Cronbach's alpha between 0.78 and 0.91), convergent validity with other established measures of religiosity (r's = 0.71–0.86), and factor structure of the DUREL have been demonstrated and confirmed in three separate samples as reported by Plante, Vallaeys, Sherman and Wallston (2002). However, for the purpose of this study, some items were reworded, eliminated and rephrased to suit the study. Thereafter, test and measurement experts in University of Ibadan Faculty of Education certified that the adapted DUREL has face and construct validities. The scale was pilot tested on adolescents drawn from diverse religious background in Oyo state, test-retest after one week interval was r=0.72, it was considered to be satisfactory to measure religiosity among Nigerian sample.

Parental Involvement Measure

A structured researcher developed questionnaire titled Parental awareness and monitoring of Adolescents Activities (PAMAA) was used to measure parental involvement in monitoring adolescents' sexual behaviour. The instrument consists of two sections, namely Section A and B. Section A consists of attributive data such as age, gender and religion. While Section B specifically consist of 10-items designed to elicit information on adolescent perceived knowledge of parental monitoring of their movements and activities. The items were structured in a 4-point Likert format, with responses ranging from strongly agree to strongly disagree. Typical items in the scale are; "*My parents want to know where I spend my time when they are not at home*". '*My parents are interested in the type of friends I have'*. To ensure that the instrument was valid, the original 20 generated items based on reviewed literatures were shown to the measurement and

Evaluation experts who suggested the elimination, rewording and rephrasing of some items. The instrument was pilot tested on 30 school going adolescents in Edo state during pilot study.One -week test re-test analysis using PPMC show coefficient correlation of r=0.81.

Risky Sexual Behaviour Measure

An adapted version of Youth Risky Behaviour Questionnaire (YRBQ) was used to assess the participants' risky sexual behaviours.Youth Risky Behaviour Questionnaire (YRBQ) was developed in 1988 by the Centers for Disease Control and Prevention (CDC) in the United States. The YRBSS measures six categories of behaviours: (a) those that contribute to unintentional injuries and violence; (b) tobacco use; (c) alcohol and other drug use; (d) sexual behaviours which culminate to unintended pregnancy and sexually transmitted disease, including human immunodeficiency virus infection; (e) dietary behaviours; and (f) physical activity. Section D was used for the study because it contained the variables of interest to the researchers'. The instrument has been extensively used by Nigerian Researchers who reported validity index of 0.61. For the purpose of the present study a pilot study using 37 respondents drawn from diverse background was used to establish the psychometric properties, coefficient of correlation of 0.71 was obtained.

Results

Sample characteristics

A total of 400 respondents' with similar demographic characteristics' except religion participated in the study. The age of the participants ranged from 15 to 19 years and a standard deviation of 17.37. With regards to religion, two hundred and seventy-seven (69.3%) were Christians; fifty-seven Muslims (14.3%); twenty-four (6%) were traditional worshippers, while forty-two (10.5) were not affiliated to any religion. It is not surprising that majority (69.3%) were Christians since Oshimili is predominantly a Christian religion dominated settlement. It is documented that the first missionaries settled in riverine are of Nigeria of which Delta state is one.

Research Question One: is there the relationship between the three independent variables (self-esteem, religiosity, parental involvement) and the dependent variable (risky sexual behaviour)? The result analyzed using Pearson Product Moment Correlation (PPMC) is presented on table 1.

Table.1: Descriptive Statistics and Correlations among Variables.

Models	Risky sexual behaviour	Self esteem	Parental involvement	Religiosity
Risky sexual behaviour	1.00			
Self esteem	-.337	1.00		
Parental involvement	-.220	.018	1.00	
Religiosity	-.427	.031	.038	1.00
	400	400	400	400
Mean	56.16	32.27	31.57	12.48
SD	14.2	9.42	9.52	11.87

Result of research question as presented on table 1 indicate that risky sexual behaviours is negatively correlated with (1) self-esteem (r=0; p<.05, (2) parental involvement (r=; p<.05, (3) Religiosity (r=; P<0.05). This implies that the higher the participants' self-esteem the lower the tendency to involve in risky sexual practices. Similarly, the more the parents monitor their children's activities, the less likely they will be involved in risky sexual practices. Finally, respondents who involve more in religious activities are also less likely to experiment risky sexual behaviours.

Research Question Two: In order to establish the extent to which the independent variables jointly predicted the dependent variable, ANOVA was used to analyze the data, and the result is presented on table 2.

Table 2: Summary and ANOVA of the composite contribution of the Independent variables to the prediction of the dependent variable

Model	Df	Sum of square	Mean Square	F-ratio	Sig.
Regression	3	314.69	104.9	27.5	.004
Residual	396	1512.08	3.818		
Total	399	1826.77			

Note: Multiple R=.565 R – Square= 3.19, Adjusted R=.303; Standard error of the estimate=9.772

From the results presented in table 2, the independent variables collectively yielded a coefficient of multiple regressions R = .565, R^2 = .319 and an adjusted R^2 = .303. This shows that 30.3% of the total variance of risky sexual behaviour of the participants is accounted for by the combination of the three predictive variables studied. Analysis of variance produced an F- ratio value significant at 0.05 level (F = 27.5; < .05). The findings thus confirm that the three variables are significant predictors of the criterion measure.

Research Question Three: Table 3 was used to present the result of the third research questions which examined the relative contribution of each of the independent variable (self-esteem, religiosity, parental involvement) to the prediction of the dependent variable (risky sexual behaviour).

Table 3: Relative contribution of the Independent Variables to the Prediction risky sexual behaviour

Model	Unstandardized Coefficient	Standardized Coefficient	Standardized Coefficient	T	Rank	Sig
	B	Std. Error	Beta (β)			
Self-Esteem	1.126	.037	.204	2.889	1st	.000
Parental Involvement	1.013	.081	211	2.160	3rd	013
Religiosity	1.119	.767	229	2.416	2nd	.008

From the results displayed in table 3 each of the independent variable made significant individual contributions to the prediction of the criterion measure (risky sexual behaviour) in varying weights. The results indicated that the following beta weights represent the predictive strength of the independent variables observed in accordance to the most effective to the least; self-esteem (β = .204, t = 2.889, P< 0.05), religiosity (β =.229 t = 2.416, P< 0.05) and parental involvement (β =.211, t = 2.160, P< 0.05). It implies that while self-esteem is most potent factor in predicting risky sexual among in-school adolescents parental involvement was the least.

Discussion

This study examined the extent to which self-esteem, parental involvement and religiosity predict risky sexual behaviours among female in-school adolescents in Delta state, Nigeria. The Correlation matrix presented in table 1 indicates that there was a significant negative relationship between the independent and dependent variables. Result of research question 2 as presented on table 2 shows the magnitude of the prediction of the dependent variable by the independent variable as reflected in the values of coefficient of multiple R^2 .319 and an adjusted Multiple R^2 .303. Thus, it can be concluded that 30.3% of the total variance in the risky sexual behaviours of the participants is accounted for by the combination of the three investigated independent. Consequently, the other 69.7% variation in sexual behaviours could be attributed to other factors not included in the present study. The F-ratio value of 13.6 was significant at 0.05 further affirms this position that the predictive capacity of the independent variables could not have been attributed to chance factor. This outcome is consistent with the findings in earlier qualitative studies where young people report that varieties of personal, familiar and social fathers and shaped their obedient in all spheres of life (Hamid Johansson & Rubenson, 2010).

The outcome suggests that as self-esteem becomes high and parents are more involved with their children's activities coupled with engagement of the adolescents in religiosity activities risky sexual behaviours will be either be delayed or declined. With regards to research question two, the

multiple regression analysis in table 2 shows that self-esteem, religiosity and parental involvement could predict the risky sexual behaviours of in-school adolescents. This further gave credence to the theoretical proposition of Social ecology model/ecological-environmental health promotion model of Hawkins and Weiss (1985) and Kumpfer and Turner (1990) model of health promotion which viewed behaviour as being affected by, and affecting by systems.According to the theorists, the systems composed of five socially organized subsystems thatinfluence, support and guide human behaviour. The subsystem includes: (1) intrapersonal or individual factors such as the individual level of self-esteem; (2) interpersonal factors; (3) institutional or organizational factors; (4) community factors as evident in religious and parental involvement; and (5) public policy factors (McLeroy, Bibeau, Steckler & Glanz, 1988).

With regard to the extent to which each of the three independent variables contributed to the prediction of risky behaviours, as postulated in research question three it was observed that self-esteem is the most potent predictor of risky sexual behaviour among the three factors considered while parental involvement was the least. This finding is plausible given that the basic need of all people is that of believing that they are lovable and knowing that they are loved. When people have low self-esteem, however, they are anxiously unsure of themselves and will likely, often use sex as a way to desperately get attention and approval from others**.** This finding corroborated Noll, Trickett and Putnum (2003) report that the self-esteem of the individual could make them more averse and ambivalent. Moreover, girls who experienced low self-esteem, are said to be more intrusive, more hyper-arousal, more sexually anxious, vulnerable, and perceive the world as a more dangerous place than boys (Feiring, Taska & Lewis, 1999**).** However, the outcome of this study contradicts some previous studies (Ellis, 2001) who believe that self-esteem as unrealistic, illogical and self- and socially destructive – often doing more harm than good. The scholar claimed that self-esteem is based on arbitrary definitional premises, and over-generalized, perfectionistic and grandiose thinking. He argued that people with high self-esteem are more likely to minimize the consequences of risky behaviour rationalizing risky behaviour convincing themselves that the behaviour will not cause harm to themselves or others which may contribute to behaviours like drinking, taking drugs and engaging in early sexual intercourse as well as other risk taking behaviours (Ellis, 2001).

Religiosity is the second potent predictor of risky behaviours in this study. This further affirms the aphorism that religion is the opium of the society. This finding is supported by several empirical studies which demonstrate a negative association between level of religiosity and frequency of sexual risk-taking behaviours within emerging adulthood

(Owusu, 2011; Odimegwu, 2005; Zaleski, & Schiaffino, 2000). However, the nature of the influence of religious practices, beliefs on sexual control remains controversial. Some studies such as Carver and Scheier (1998) report that it is through self-control or self-regulation. They claimed that religion has link with health, well-being and social behaviours in the following pathways (a) religion is an organized sanctioning network that is supportive of conventional activities and opposed to unconventional ones (b) that religion makes the individual sensitive to moral issues and accepts standards of behaviour (c) Religion offers a deity as a source of punishment and wrath and (d) Religion generates devoutness, obedience and orientation (p.137). On the contrary, Smith (2003, p. 20) reported that the link between religion and sexual behaviours is that the former influence the lives of the young "by increasing their competence in skills and knowledge that contribute to enhancing their well-being and improving their life chances". He structured such learned competences into these three factors namely: community and leadership skills, cultural capital, and coping skills. On the contrary, a recent study using in-school adolescents in Lagos, Nigeria report that religious affiliations enhances sexual activities of female respondents (Onipede, 2011).

A surprising outcome of this study is that parental involvement made the least contribution to prediction of sexual behaviours. This outcome is contrary to numerous research findings where parents improved involvement with their children activities was reported to reduce negative outcome of sexual experimentation (Buunk, Park & Duncan, 2009). On the contrary some researchers (Dishion & McMahon, 1998) are of the opinion that in later adolescents, parents are more likely to allow their teens the freedom to spend increased unsupervised time with peers as part of negotiated agreement between them and their adolescent. Additionally, parents may believe that they can monitor their teens if he/she entertains friends at home rather than at different location (i.e friends' house). They argued that such unsupervised freedom may lead to more opportunity for experimentation with sexuality and substances (Patterson, 1997; Patterson & Stouthamer-Leber, 1984).

Implications

The result of this study reveals negative significant relationships between the variables investigated and risky sexual behaviours. This outcome has both theoretical and practical implications. First, it has shown that for any meaningful behaviour change to occur, in addition to targeting the individual, the micro and macro environments impinging on the behaviours should also be targeted.The practical implication of this study is that these variables investigated could be protective and effective in reducing

risky sexual behaviours. Positive self-esteem as revealed is a valuable factor for adolescents' risky behaviours, it therefore implies that if intervention is mounted to enhance self-esteem risky sexual behaviours can either be delayed or reduced. Moreover, programs designed to delay sexual activities may also benefit from including or enhancing parental involvement in their offerings. Parental involvement should also be component of sex education not merely as the usual 'sex talk' but a serious explorations of parenting practices since the study outcome suggests that several simple and affordable parental practices (involvement, monitoring, behaviour management) can help strengthen families and improve adolescent outcomes. Additionally, since identifying with a religion has been shown to have relationship with risky sexual behaviours adolescents should be encouraged to be affiliated to a religion group which eventually facilitates selection, pursuance and organization of goals.

Conclusion

The outcome of this study provided empirical evidence that adolescents' sexual behaviour is influenced by a variety of personal (self-esteem), social factors (parental involvement) and institutions factors (religion).Given that self-esteem has been found to be a 'social vaccine' that can inoculate young people against vulnerability to wide range of social illnesses, the need for enhancement of the adolescents self-esteem to at least moderate level was emphasized. Moreover, since religion directly and indirectly is reported to affect sexual decisions through religious norms and sanctions for noncompliance, the need to ensure that adolescents are affiliated to a religious group was suggested. Finally, the study has also confirmed that parental involvement in the lives of their children is linked with lower levels of sexual experimentation. It was recommended that any programme designed to delay sexual debut include parental involvement component. In addition, workshops and seminars should be organised to train parents on how to provide quality monitoring activities for their children.

Although, this study has several methodological strengths such as the use of valid and reliable instrument for data collection, use of representative sample and accurate analyses of result. However, the inability of the researchers to employ qualitative method such as Focused Group Discussion (FGD) in order to provide insight into the dynamics of risky sexual behaviours not indicated on the questionnaire used for data collection is a major limitation. Self-report measures are said to enable respondents present themselves positively. In addition, the sample size of four hundred may limit the generalizability of this study outcome since Delta state is just one out of 36 states and Federal Capital Territory(FCT) in Nigeria. Though the researchers adopted measures to ensure accuracy of results, interpretation

and generalizability should therefore be done with caution.There is need for further exploration of the mediating and moderating roles of variables which were not explored in this study play in adolescents' sexuality.

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