ISSN 2321–7359
EISSN 2321–7367

Medical Science
An International Journal

Promoting sexual abstinence among in-school adolescents in Ondo state using psycho-educational group therapy

Aremu AO[1], Owodunni AA[2], Adenegan TS[3]

1. Institute of Peace and Strategic Studies, University of Ibadan, Ibadan, Nigeria
2. Department of Counselling and Human Development Studies, University of Ibadan, Ibadan, Nigeria
3. General Studies Unit, Achievers University, Owo, Nigeria

Publication History
Received: 25 November 2016
Accepted: 24 December 2016
Published: January-February 2017

Citation
Aremu AO, Owodunni AA, Adenegan TS. Promoting sexual abstinence among in-school adolescents in Ondo state using psycho-educational group therapy. *Medical Science*, 2017, 21(83), 16-28

Publication License
This work is licensed under a Creative Commons Attribution 4.0 International License.

General Note
Article is recommended to print in recycled paper.

ABSTRACT

Prevalence of negative consequences of early sex initiation such as sexually transmitted infections and unintended pregnancies has vaulted the study of adolescent sexual behaviour to the forefront of sexuality research. While attempt at understanding why adolescents choose to engage in sexual activity at an early age has been made by researchers, examinations into the enhancement of sexual abstinence, however, have been less frequent in Nigeria. This study, therefore, applied Psycho-educational group therapy (PGT) to enhance sexual abstinence among in-school early adolescents in Ondo State, Nigeria. The study employed a pretest-posttest, control group, experimental design with a 2x2x2 factorial matrix. Multi-stage sampling technique was used to select 64 in-

© 2017 Discovery Publication. All Rights Reserved

school adolescents from the three randomly selected secondary schools. The 64 non-sexually active participants were randomly assigned into the treatment condition (PGT) and control group. Three standardized research instruments were used, namely, Sexual Abstinence Scale (α = 0.89), Sexual Abstinence Test for Adolescents (α=0.77) and Peer Pressure Inventory (α = 0.80). The treatment programme lasted eight weeks. Three null hypotheses were tested at 0.05 level of significance. The findings, which made use of Analysis of Covariance and Scheffe Post-hoc test, showed a significant main effect of treatments on sexual abstinence ($F_{(1,62)}$ = 87.54, P<.005, η^2 = .690) of in-school early adolescents. The enhanced sexual abstinence of participants in the experimental groups; PGT ($\bar{X}$ =158.24) improved more significantly than those in the control group ($\bar{X}$ =122.63). However, gender, alongside peer influence, had no significant main effect on sexual abstinence. Therefore, practicing counsellors as well as other adolescent friendly personnel should utilize the two techniques in helping early adolescents to refrain from spur-of-the moment sex, while giving attention to factors beyond gender and peer influence as underpinning factors of sexual abstinence among early adolescents. The results also provided valuable clues to parents, teachers, NGOs and even the early adolescents to maximize PGT to control the untold effects of sexual debut, among the future leaders of the Nation. These should be incorporated into civic education and school curricular.

Keywords: In-school adolescent, Psycho-educational Group Therapy (PGT), Sexual Abstinence

1. INTRODUCTION

The period of adolescence is a very delicate phase of life from biological, psychological and social perspectives. It is a time when major lifestyle decisions have to be made including the decision to have or not to have sex. It is also the time adolescents integrate sexual impulse into self-concept. There is high sexual awareness, sexual activity and interest in the opposite sex. Adolescence is a period of transition between childhood and adulthood. It begins with physical changes during puberty. It ends when a person takes on adult roles and responsibilities. The sudden changes in adolescents may result in behavioural, social, peer and developmental problems, which are evident in early adolescence.

Sexual abstinence during adolescence and emerging adulthood stage is a moral virtue that is today welcomed with mixed reactions among adolescents (Odeyemi, Onajole & Ogunowo, 2009). Going by the inherent benefits of sexual abstinence, which includes safety from sexually transmitted infections and prevention of unwanted pregnancies, among others, adolescents would readily want to embrace the practice. On the other hand, the hormonal demands of their libido, with the onset of puberty among other environmental factors, make it critical for the adolescent to avoid impulsive decision to initiate sex earlier than expected. An understanding of both sexual activity and sexual abstinence among young people is crucial in preventing the negative consequences of early sex initiation.

The increase in adolescent and young adult sexual behaviour during the last two decades has considerably attracted the concern and anxiety of parents and scholars alike globally. From a twelve year review of adolescent sexual behaviour across different parts of Nigeria, high level of sexual activity has been reported among unmarried adolescents of both sexes with progressively decreasing age of debut, risky sexual practices, including unprotected sexual intercourse with multiple partners (Aji, Aji, Ifeadike, Emelumadu, Ubajaka, Nwabueze, Ebenebe & Azuike, 2013). There appears to be a consensus among Nigerian researchers and observers that many cherished traditional values are changing rapidly and for the worse. One area of life in which the decline of traditional values is obvious is in the area of sexuality, which is evident in the acceptance of pre-marital sex most especially among youngsters (Koffi & Kawahara, 2008). In Nigeria, culture no longer has a grip on the youth as our society seems to be plagued with moral decadence and poor values (Oladepo & Fayemi, 2011). These seem to affect the youth, adolescents inclusive, more than any other group as this is manifested in the acceptance of sex before marriage, homosexual behaviour, lesbianism, abortion, drug addiction and indecent dressing.

One phenomenon among other things that corrupts the world is promiscuity most especially among the youth; and with its attendant effects (e.g. HIV/AIDS, STIs and adolescent sudden death syndrome). Adolescents' sexual activities are on the rise and rapidly emerging as a public health concern. Nnachi (2003) observed that in terms of behavioural problems, sex abuse appeared to be one of the most serious offences committed by children and adolescents. Obiekezie-Ali (2003) supported this stance with a United Nation's (2000) information on reproductive health, which shows that many Nigerian girls are known to start involvement in active sex at the early age of 13 years. For both boys and girls, Hammed and Adenegan (2009) reported that the mean age of initiating sexual intercourse was 13.1 years. The age of initial sexual experience and involvement thus becomes younger than 15

© 2017 Discovery Publication. All Rights Reserved

years as found by Esen in Egbochukwu and Ekanem (2008). Oladepo and Fayemi (2011) observed that today's situation shows a sharp contrast to the traditional Nigerian societal context in which ladies avoided pre-marital sexual experiences for fear of social punishments usually meted out to girls who lost their virginity before marriage.

Popular opinion regarding the detrimental effects of adolescents' early sexual debut and teen parenthood is supported by empirical research. Specifically, several negative outcomes have been cited, including loss of wages and career opportunities, increased welfare dependency, interrupted education, single parenthood, psychological distress, increased medical complications during childbirth, and high likelihood of further unintended pregnancies (Bamidele, Abodunrin & Adebimpe, 2009; Ankomah, Mamman-Daura, Omoregie & Anyanti, 2011; Adenegan & Ogunlade, 2013). Children born to adolescents are also at risk for various negative outcomes, including low birth weight, infant mortality, and other health risks, as well as long term difficulties such as intellectual deficits, educational achievement and problem behaviours. Teenage childbearing is economically expensive as well. In 1985, it was estimated that the first child born to a teenager would cost the United States government at least $15,000 by the time that child reaches the age of twenty (Burt, 2000); one wonders what the cost implication would be in this age.

In addition, early sexual activity is also associated with an increased risk of sexually transmitted infections (STIs), reduced psychological and emotional well-being, lower academic achievement, teen pregnancy, and out-of-wedlock childbearing. Girls, most often, bear the consequences of early sexual activity in unwanted pregnancies, teenage births and abortions, often by quacks. Many of these risks are avoidable if teens choose to abstain from sexual activity. Abstinence has been remarkably observed as the surest way to avoid the risk of STIs and unwed childbearing.

In a world radically changed by the HIV/AIDS epidemic, many teens nevertheless choose to initiate sexual intercourse. UNAIDS (2013) reported that an estimate of 2.1 million adolescents (10 – 19 years) were living with HIV. In Nigeria, previous studies have validated the observation that sexual activity among unmarried adolescents and young adults is on the rise (Adetoro, Babarinsa & Sotiloye, 1991; Hammed & Adenegan, 2009; Oladepo & Fayemi, 2011).

The adolescent's sexual needs cannot be ignored. Sex, like many other human experiences, is a learning experience observed Adams (1976) and Adenegan (2010). The learning process in the society has been hastened with the emphasis placed on heterosexual contacts at an early age. Even more unfortunate is the fact that many youths are unable to tolerate the waiting period. They desperately need the human closeness that the sexual experience can provide. The speed with which industrialized society has developed has removed many of the possibilities for human involvement and companionship that were available to many of the present day adults as they were growing to maturity. It is scarcely surprising that adolescents turn to their peers of the opposite sex for their emotional and physiological needs. In many respects it may not be desirable, but in every respect it should be understandable. If premarital sex and sexual debut are expected to decrease, the society that produces the situations which cause the need for the sexual involvement must first be looked into for change. In addition, the youth should be given both intellectual and emotional understanding of the implications of the sexual relationship.

Notably, like other aspects of psychosocial development, sexuality is not an entirely new issue that surfaces for the first time during adolescence. Young children are curious about their sex organs and at a very early age derive pleasure (if not what adults would label orgasm) from genital stimulation – as both Sigmund Freud and the famous sex researcher Alfred Kinsey pointed out long ago (Kinsey, Pomeroy & Martin, 1948). And, of course, sexual activity and sexual development continue long after adolescence. Although sexual development may be more dramatic and more obvious before adulthood, it by no means ceases at the end of adolescence. The fact remains that the 21st century has witnessed a geometric increase in the level of adolescent sexual initiation, with sexual abstinence and virginity as virtues being played down (Asuzu, 2009). This is not far fetched from the age of internet, in which cyber-sex has gravely exposed the innocent adolescents into various illicit practices.

Consequently, the adolescents are encumbered with many unanswered questions in their minds regarding their sexuality. From experiences with the adolescents, they are always seeking for answers to these unending questions. Today's young people face strong peer pressure to engage in risky behaviour and must navigate media and popular culture that endorse and even glamorize permissiveness and casual sex. Alarmingly, the government implicitly supports these messages by funding programmes that promote contraception and "safe-sex." Although many parents want schools to teach youths to abstain from sexual activity until they are in a committed adult romantic relationship via marriage, which is the core message of abstinence education; these parental values are rarely communicated in the classroom (Oladepo & Fayemi, 2011).

Adolescence, a period of transition from childhood to adulthood, is probably the most challenging and tasking phase in the developmental process of the human organism. These challenges, which are often traumatic to most people stem from the fact that young males and females are faced with the task of biological, sexual and physical maturity as well as the adult society – induced

© 2017 Discovery Publication. All Rights Reserved

demand for emotional stability; however, each of these invariable processes of maturation is independent of personal control of the adolescent which may often result in conflicts which the youngster may attempt to resolve by engaging in inappropriate and socially undesirable patterns of behaviour, especially sexual risk-taking behaviour (Uwakwe, 1998; Asuzu, 2014).

Despite all the huge investments of governments in sexual abstinence interventions, adolescents' rates of sexual activity increase rapidly during the adolescent years and many teens engage in sexual behaviour that places them at risk for unintended pregnancy and STIs, including HIV (Aji et al, 2013). Abstinence is a great choice for so many reasons. Having sex with an individual has psychological repercussions. If there is a breakup, increased chances of depression and unstable mental health are higher; and statistics show that teens who practise sexual abstinence are likely to do better in school; twice as likely to graduate from college than teens who do not practise abstinence (YLC, 2013). Only complete and consistent abstinence can totally prevent pregnancy and protect against STIs (Gavin, 2013).

Studies have shown that abstinent teens report, on average, better psychological well-being and higher educational attainment than those who are sexually active (Hallfors, Waller, Ford, Halpern, Brodish & Iritani, 2004; Hallfors, Waller, Ford, Halpern, Brodish & Iritani, 2005; Sabia & Rees, 2009). In other words, the benefits of sexual abstinence to in-school adolescents are evident in their academic performance. Delaying the initiation of or reducing early sexual activity among teens can decrease their overall exposure to risks of unwed childbearing, STIs, and psycho-emotional harm. Remarkably, sexual abstinence during adolescence and avoidance of pre-marital sex have been linked to sexual satisfaction in marriage and marital stability (Kim & Rector, 2010). Authentic abstinence programmes are therefore crucial to efforts aimed at reducing unwed childbearing and improving youth well-being.

Sexual abstinence has been identified as the best available option for preventing both pregnancy and sexually transmitted infections, including HIV/AIDS. Identifying the factors associated with sexual abstinence among adolescents would have meaningful implications in a generalized HIV epidemic country such as Nigeria in Africa. Notably, contextual and developmental issues influencing abstinence are poorly understood. Therefore, research needs to more clearly define sexual abstinence, as well as those factors that may promote or discourage early sexual activities.

Several studies (Sunmola, Dipeolu, Babalola & Adebayo, 2003; Jemmott, Jemmott & Fong, 2010; Oladepo & Fayemi, 2011; Rijsdijk**,** Bos**,** Lie**,** Ruiter**,** Leerlooijer & Kok, 2012) have been carried out to investigate the predictors of sexual abstinence among adolescents with diverse interventions to promote the practice. Major studies carried out have been surveys and not interventions. However, not much success had been witnessed in this direction. Majority of studies focused attention on the negative outcomes of premarital sex. There is paucity of researches on interventions in making adolescents remain virgins. It is therefore imperative that a research on promoting sexual abstinence among adolescents with quest for theoretically-based effective interventions is inevitable.

The intervention for this study is psycho-educational group therapy. Psycho-education is concerned with the teaching of personal and interpersonal attitudes and skills which the adolescent applies to solve present and future psychological problems and to enhance his satisfaction with life regarding sexual abstinence. The Psycho-educational group therapy is a humanistic approach to changing the behaviour patterns, values, interpretation of events, and life outlook of individuals who are not adjusting well to their environment(s) (e.g. home, school, workplace, and in this case sexual stimuli). Inappropriate behaviour is viewed as a person's maladaptive attempt to cope with the demands of that environment. Appropriate behaviours are developed by helping the adolescent to recognize the need for change, and then helping the adolescent to display better behaviour choices regarding his sexuality.

Psycho-educational interventions tend to be "packaged" plans that are implemented and modified to the needs of the adolescent to address surfaced crisis in the participants' sexual desires. The Psycho-educational viewpoint seeks to understand the adolescent who is engaged in a struggle to adequately handle life situations. In doing so, it looks at both individual and social explanations for inappropriate, anti-social, and otherwise unacceptable sexual behaviour patterns. The roots of psycho-educational orientation can be found in the humanitarian writings of the early to mid 1800 by individuals such as Pestalozzi, Itard, and Howe, among others. However, it was the 'mental hygiene' movement in the early 1900 that strengthened and promoted this humanistic approach for the treatment of those who experience psychological and behavioural disorders.

Psycho-educational group had been notably used to treat sexual addiction among adolescents with significant impact and extremely beneficial in addiction and mental health (Griffin-Shelley, 1994). It provides information, validation and support, help reduce distress, and help families develop better problem-solving and coping strategies (CAMH, 2004). Psycho-education as a pycho-behavioural intervention had been successfully used to increase the use of condom among sexually active adolescents (Fishbein & Ajzen, 2011) and adolescents living with HIV/AIDS (Walsh & Tiffany, 2013). Psycho-education has helped in raising awareness of adolescents about teenage pregnancy and prevention (Moore & Rosenthal, 2007); found effective as intervention among children victims of sexual abuse (Martine & Marc, 2010) and of use in promoting healthy sexuality among young adults

© 2017 Discovery Publication. All Rights Reserved

(Hebert & Tourigny, 2010). It is, therefore, considered a veritable treatment that can be used to promote sexual abstinence among the adolescents.

This study employed psycho-educational group therapy to provide information designed to have a direct application to the participants' lives – to instill self-awareness, suggest options for growth and change, identify community resources that can assist them in recovery, develop an understanding of the process of recovery, and prompt adolescents engaging in risky sexual thoughts to change their negative thought patterns. The major purpose of Psycho-educational groups is expansion of awareness about the behavioural, medical, and psychological consequences of early sexual involvements.

There are several moderator variables including gender, age, ethnicity, race, home type (polygamy or monogamy) and sexual experience that might be considered in abstinence intervention research. However, the moderating variables for this study were gender and peer influence. The sex of participants is of great relevance. Many cultures in Nigeria show preference for the male child and accord him certain privileges often to the exclusion of the female child. This leaves the female with little or no education and at a low socio-economic stratum with sex as the only bargaining tool. The male adolescents, likewise, are not left alone in their struggle with sex. Their secondary sexual growth, changes in hormonal secretion, emotional, cognitive and psychosocial development result in sexual curiosity and experimentation, often in situations of little reproductive health information or services.

Major predictors of sexual abstinence were being female, and not having a boyfriend/girlfriend. Adolescent female as compared with adolescent male are consistently older at initiation of sexual intercourse, often hold stronger normative beliefs supporting abstinence and are more vulnerable to direct negative sexual consequences, including pregnancy and sexually transmitted infections (Oladepo & Fayemi, 2011). Accordingly, it would be important to know whether abstinence interventions are more effective with adolescent females than with adolescent males, as well as the mediators of any differential intervention effect across gender. If abstinence programmes were known to be effective with both males and females, this lack of information would not be problematic. However, since efforts to delay and decrease sexual intercourse among adolescents have been mostly unsuccessful, it may be that there is the need to better understand how these gender differences relate to abstinence messages.

On the other hand, literature revealed that peer pressure influence sexual initiation and subsequent sexual behaviours, and adolescents who perceive their friends are engaged in sexual practices are more likely to adopt those same behaviours (Oladepo & Fayemi, 2011). Bhardwaj, Ramsay, Bain and Prakasam (2007) revealed that susceptibility of adolescents to negative peer influence is linked with greater tendency to copy the risky sexual behaviour of their friends. Egbochukwu and Ekanem (2008) found exposure to peer pressure at 61.2% as potent factor exerting a large measure of influence on the attitude of adolescents towards sexual practice.

For adolescents without sexual experience (virgins) and the sexually active adolescents (non-virgins), gender and peer influence were found to be significant predictors of intention to delay sexual intercourse (Oladepo & Fayemi, 2011; Rijsdijk**,** Bos**,** Lie**,** Ruiter**,** Leerlooijer & Kok, 2012). Understanding the interwoven and interconnected factors that influence sexual behaviours of adolescents is vital in designing and implementing sexual abstinence interventions. Hence the moderating variables (gender and peer influence) for this study.

The theory of reasoned action and the theory of planned behaviour were chosen for this study as they are the theories most cited in sex-related researches, and have been found to be better predictors of sexual health behaviour than other models (Fishbein, 1993; Terry, Gallois & McCamish, 1993; Warwick, Terry & Gallois, 1993). It is the result of a decision-making process that involves an individual processing the information available to him/her, and then deciding on a course of action after reflecting on the consequences of performing the behaviour and his/her beliefs about what other people expect him/her to do.

The Nigerian populace has been exposed to sufficient information on the consequences of adolescent sexuality. There is a need to move towards behaviour change. As attitudes and beliefs have been shown to be significant in people's choice of action, the theories of reasoned action and planned behaviour are relevant to behaviour change. This study is specifically anchored on the theories of reasoned action and planned behaviour. The model that is applied in this study is based on the assumption that if adolescents' attitudes towards sexual abstinence behaviours are *shaped* in particular directions and their beliefs about the expectations of their significant others are reinforced; it will then be possible to change behaviour.

2. STATEMENT OF THE PROBLEM

Prevalence of negative consequences of early sex initiation such as sexually transmitted infections and unintended pregnancies has prompted the study of adolescent sexual behaviour to the forefront of sexuality research. While an attempt at understanding why adolescents choose to engage in sexual activity at an early age has been made by researchers in this field, most specifically

© 2017 Discovery Publication. All Rights Reserved

investigate adolescents' sexual behaviours. Examinations into the enhancement of sexual abstinence, however, have been less reported in Nigeria and have resulted in a significant gap in the literature surrounding this line of research.

This study is predicated, therefore, on experimentally using psycho-educational group therapy to enhance sexual abstinence among in-school adolescents with the intention of coming up with remediative measures that would be usable in planning adolescents' welfare in Nigeria vis-à-vis their sexuality.

3. PURPOSE OF THE STUDY

On the premise of the background to the study, the broad objective of this study was to examine the effectiveness of psycho-educational group therapy in the enhancement of sexual abstinence among in-school adolescents in Ondo State, Nigeria. Specifically, the study was designed to:

- investigate the potency of psycho-educational group therapy in promoting sexual abstinence among the participants; and
- determine the moderating effect of gender and peer influence on enhancing sexual abstinence among in-school adolescents in Ondo State, Nigeria.

4. SIGNIFICANCE OF THE STUDY

It is expected that this study would provide a picture of possible contributions of psycho-educational group therapy to enhancing sexual abstinence practice among adolescents in Nigeria. The outcome of the study would form a basis for practical techniques for counselling secondary school adolescents on HIV/AIDS prevention in a developing country, such as Nigeria. Such counselling intervention strategies could impact greatly on fostering positive attitudinal dispositions and response to sexual abstinence practices.

5. SCOPE OF THE STUDY

This study focused on investigating the effects of psycho-educational group therapy in enhancing sexual abstinence. The study was restricted to in-school adolescents in public co-educational (boys and girls) urban secondary schools in Ondo State, Nigeria with samples drawn from Junior Secondary (JS) 2 classes.

6. METHODOLOGY

Research Design

The study employed a 2x2x2 factorial matrix. The participants of the study were divided into two groups: one treatment group (Psycho-education Group Therapy - A_1) and one control group - A_2. The experimental group and the control group made up the two rows; i.e., A_1 and A_2, while the Male and Female (gender) constituted into columns B_1 and B_2 respectively. The other moderating variable, peer influence (Positive and Negative) respectively constituted columns C_1 and C_2. The first group was pre-tested and subjected to the therapeutic treatment (Psycho-education Group Therapy). The control group was equally pre-tested. They were all post-tested by the end of the experimental sessions held with the experimental group.

In essence, the row consisting of the intervention (Psycho-education Group Therapy) and the control was crossed with the columns of gender and peer influence; each varied at two levels. This is represented in the matrix table 1.

Table 1 A 2x2x2 Matrix for the Treatment to Enhance Sexual Abstinence among In-school Adolescents

Treatment	Gender				Group Total
	Male (B_1)		Female (B_2)		
	Peer Influence				
	Positive (C_1)	Negative (C_2)	Positive (C_1)	Negative (C_2)	
A_1	$A_1B_1C_1 = 9$	$A_1B_1C_2 = 2$	$A_1B_2C_1 = 16$	$A_1B_2C_2 = 3$	30

© 2017 Discovery Publication. All Rights Reserved

A_2	$A_2B_1C_1 = 13$	$A_2B_1C_2 = 1$	$A_2B_2C_1 = 20$	$A_2B_2C_2 = 0$	34
Total	22	3	36	3	N= 64

Key: A_1 = Psycho-education Group Therapy A_2 = Control Group
B_1 = Male B_2 = Female C_1 = Positive C_2 = Negative
N = the sum total of all the values in each cell i.e. row wise and column wise

Population of the Study

The population for the study comprised the in-school adolescents who are in public co-educational secondary schools in Ondo State, Nigeria. Ondo State is one of the 36 states in Nigeria. It is in the South Western part of the country. Ondo State has three Senatorial districts with 18 local governments. The State, as at the period of the field work, has 300 public secondary schools, out of which 288 are co-educational (mixed) schools.

Sample and Sampling Technique

Multi-stage sampling technique was deployed in selecting the sample. Out of the three senatorial districts, the North Senatorial district (comprising of 6 local government areas) was randomly chosen for this study through ballot papers. Three local governments (Akure North, Akure South and Owo Local Government Areas) were further randomly chosen from the senatorial district. There were 31 public co-educational secondary schools in the Metropolises (urban-centred), out of which 3 schools were randomly chosen for the study through ballot papers. Junior Secondary (JS) 2 classes were purposively chosen for the study. The randomly selected schools had JS2 classes ranging from five to twelve arms. Hence, proportionate stratified random sampling technique to eliminate gender bias and other demographic factors that could inadvertently moderate the study. The stratified random sampling technique allows for increase in precision of the estimate of population characteristics. It also allows for each sub-population to be treated as a population in its own right.

Forty in-school adolescents were randomly chosen (from JS2 classes) from each of the three schools and then screened for sexual status (had sex/sexually experienced/non-virgin/non abstainers or not have had sex/sexually inexperienced /virgin/abstainers) using the Sexual Abstinence Test for Adolescents (SATA). Out of the 120 sampled, 21 (representing 18%) declared to have had sex at a mean of 10.4 years. Thirty-five were inconsistent in responding to the questionnaires provided. They were, therefore, not assigned to groups. Sixty-four participants were then randomly selected into the experimental and control groups from the three public co-educational secondary schools.

Research Instruments

The data collected for this study made use of three instruments: Sexual Abstinence Scale (SAS) by Asuzu (2013) to measure the dependent variable (sexual abstinence); the Peer Pressure Inventory (PPI) by Brown and Clasen (1985) to measure one of the moderating variables, peer influence; and the Sexual Abstinence Test for Adolescents (SATA), self-developed by the researcher, to screen participants for sexual status.

Data Analysis

The dependent variable is sexual abstinence on which pre-test scores were obtained. The independent variable is the treatment (Psycho-education Group Therapy), while the moderating variables are gender and peer influence. The pre-test data for the two groups (Psycho-education Therapy group and the control group) were analyzed using mean and standard deviation to help establish the similarities and prove that the groups are similar in their level of sexual abstinence behaviours before the commencement of treatments while analysis of co-variance (ANCOVA) statistical technique was used to test all the seven null hypotheses raised to determine the effect of treatments on the experimental groups. The Scheffe Post-hoc analysis was also used in this study to determine the directions of differences and significance identified.

© 2017 Discovery Publication. All Rights Reserved

7. RESULTS

Table 2 Hypothesis 1: There is no significant main effect of treatment on sexual abstinence of participants

Source	Type III Sum of Squares	Df	Mean Square	F	Partial Eta Squared	Sig.
Corrected Model	60744.62[a]	11	5522.24	138.58	.953	.000
Intercept	3496.45	1	3496.45	87.74	.550	.000
Pretest	36086.65	1	36086.65	905.57	.926	.000
Treatment	7142.27	1	3273.35	87.54	.690	.000
Gender	12.64	1	12.64	.29	.003	.564
Peer Influence	50.23	1	50.23	1.03	.014	.259
Treatment * Gender	52.63	2	26.32	.66	.014	.502
Treatment * Peer Influence	49.39	2	24.69	.62	.014	.538
Error	2987.63	50	32.34			
Total	2009850.00	63				
Corrected Total	63932.61	91				

a. R squared = .884 (Adjusted R squared = .879)

Table 2 reveals that there is a significant main effect of treatments on sexual abstinence of in-school adolescents ($F_{(1,62)}$ = 87.54, P<.005, η^2 = .690). This implies that there is a significant difference between the groups test scores on sexual abstinence. The table also shows that the differences between the groups had large effect on their sexual abstinence test score. That is, the groups' differences account for 69.0% (Partial Eta Squared =.690) in the variation of their sexual abstinence test score. Hence the null hypothesis was rejected. To further understand where the differences lie the pairs-wise comparison of the adjusted Y-means was computed and the result is as shown in table 2.

Table 3 Scheffe Post-Hoc Pairwise Significant Differences among Various Treatment Groups

(I) Treatment	(J) Treatment	Mean Difference (I-J)	Std. Error	Sig.
Psycho-educational Group Therapy	Control Group	39.98*	2.14	.000
Control Group	Psycho-educational Group Therapy	-39.97*	2.31	.000

From the pairwise comparison of the adjusted Y-means of the main effect of treatment on Sexual Abstinence scores, Table 3 shows that after controlling for the effect of pre-sexual abstinence behaviour of the in-school adolescents, experimental group (Psycho-educational Group Therapy; mean = 158.24) displayed higher sexual abstinence than control group (mean = 122.63). This implies that Psycho-educational Group Therapy (mean difference = 39.98) had enhanced sexual abstinence better than the control group (mean difference = -39.97). The coefficient of determination (Adjusted R Squared = .879) overall implies that the differences between the groups account for 87.9% in the variation of in-school adolescents' sexual abstinence.

Hypothesis 2: There is no significant main effect of gender on sexual abstinence of participants

Table 2 indicates that there is no significant main effect of gender on sexual abstinence of in-school adolescents ($F_{(1,62)}$ = .291, P>.005, η^2 = .003). This implies that there is no significant difference between the test scores of male and female in-school

© 2017 Discovery Publication. All Rights Reserved

adolescents on sexual abstinence. The table also shows that the differences between the groups had little or no effect on their sexual abstinence test score. That is, the groups' differences account for 0.3% (Partial Eta Squared = .003) in the variation of their sexual abstinence test scores. Hence the null hypothesis was accepted.

Hypotheses 3: There is no significant main effect of peer influence on sexual abstinence of participants

Table 2 shows that there is no significant main effect of peer influence on sexual abstinence of in-school adolescents ($F_{(1,62)}$ = 1.03, P>.005, η^2 = .014). This implies that there is no significant difference between the test scores of positively and negatively influenced in-school adolescents on sexual abstinence. The table equally shows that the differences between the groups had little effect on their sexual abstinence test scores. That is, the groups' differences account for 1.7% (Partial Eta Squared = .017) in the variation of their sexual abstinence test scores. This denotes an insignificant main effect of peer influence on sexual abstinence since the table shows a contributing effect size of 1.7% in spite the slightly sharp difference. The null hypothesis was therefore accepted.

8. DISCUSSION

This study investigated the effects of psycho-educational group therapy in enhancing sexual abstinence among in-school adolescents in Ondo State, Nigeria. The findings with respect to the 3 formulated and tested null hypotheses are discussed as follow:

Hypothesis One

There is no significant main effect of treatments on sexual abstinence of participants. This null hypothesis was rejected as the result on Table 2 shows that there was a significant main effect of treatments on sexual abstinence of in-school adolescents. This means that psycho-educational group therapy was both effective in enhancing sexual abstinence among in-school adolescents. This finding is in line with Smith, McCall and Ingram (2014), who found that programmes that emphasize the educational, occupational, and psychological preparation for productive and self-sufficient lives for youth and impart a realistic hope that these goals can be obtained can motivate youth to refrain from sexual activity and prevent pregnancy.

The possible explanation for this result could be that both psycho-educational group therapy and self-components training follow an educational model which is directly or indirectly concerned with the teaching of personal and interpersonal attitudes and skills which the adolescent applies to solve present and future psychological problems and to enhance his satisfaction with life.

Hypothesis Two

There is no significant main effect of gender on sexual abstinence of participants. The null hypothesis was accepted as the result indicated that there was no significant main effect of gender on sexual abstinence of in-school adolescents. This implies that there is no significant difference between the test scores of male and female in-school adolescents on sexual abstinence even though the mean score of male is slightly higher than that of female.

The outcome of this hypothesis is inconsistent with the work of Egbochukwu and Ekanem (2008) and Koffi and Kawahara (2008) who identified gender as significant correlate of sexual abstinence. This finding also disagrees with the submission of Pham, Nguyen, Tho, TanMinh, Lerdboon, Riel, Green and Kaljee (2012) that gender constructs result in differential knowledge and awareness of sexual health issues, ideologies, expectations, and norms for sexual behaviours, different motivations for sexual activity and relationships, and differential socio-cultural and economic power to negotiate sex and safer sex.

The current study demonstrates insignificant difference between gender and sexual abstinence. This could be as a result of the technology in the twenty-first century. The social media which has deeply permeated the fabrics of the adolescents' psyche and attention is not a respecter of gender. Both male and female adolescents are unduly exposed to technologically driven aids for sex through the use of hand sets. Many schools are seriously fighting the battle of restricting their adolescents from bringing cell phones to the school. The acceptance of this hypothesis, however, upheld the study of Masters, Beadnell, Morrison, Hoppe and Gillmore (2008) whose study's participants (both genders) reported positive attitudes about abstinence.

The finding of this study, however, indicated that the mean score of male is slightly higher than that of female. This implies that the males have tendency to practise sexual abstinence than the females. This finding is again contrary to the study outcome of Dlamini, Taylor, Mkhize, Huver, Sathiparsad, Vries, Naidoo and Jinabhai (2009) who found that many young girls expressed positive attitudes towards abstinence, citing protection from pregnancy and sexually transmitted infections (STIs) as reasons. They also reported that younger girls perceived having sex at their age as inappropriate. The finding of this study favouring male's higher tendency towards sexual abstinence agrees with view of Plummer (2013) that male pupils seemed to understand better the

© 2017 Discovery Publication. All Rights Reserved

knowledge of the risks and benefits of sexual abstinence than the girls. This reflected on how the boys were typically favoured and encouraged more in their learning.

The likely reason for this shocking outcome may not be far-fetched from the submission of The National Center for Victims of Crime (2012) and Child Molestation Research and Prevention Institute (2012) which estimated that at least two out of every ten girls and one out of every ten boys are sexually abused by the end of their 13th year. However, the inherent advantage in this outcome is that sexual abstinence will gain more ground among the adolescents, since earlier researchers (Nnachi , 2003; Aji, Aji, Ifeadike, Emelumadu, Ubajaka, Nwabueze, Ebenebe & Azuike, 2013) have reported that sexual abuse or sexual debut are mostly experienced in between a young boy or girl and a older partner. With the sanction recently agreed upon by the National Assembly in Nigeria, the outcome of this study will in no doubt promote sexual abstinence once perpetrators of sexual abuse are squarely dealt with.

Hypotheses Three

There is no significant main effect of peer influence on sexual abstinence of participants. The null hypothesis was accepted as the result revealed that there is no significant main effect of peer influence on sexual abstinence of in-school adolescents. The implication of this is that there was no significant difference between the test scores of positively and negatively influenced in-school adolescents on sexual abstinence. This denotes an insignificant main effect of peer influence on sexual abstinence of participants. Worthy of note is the sharp difference between the scores of negatively peer influenced adolescents and the positively influenced ones.

The insignificant difference outcome of this study contradicts the finding of Miller and Benson (2001) alongside Babalola, Awasum and Quenum-Renaud (2002) whose studies documented the predictive role of perceived peer behaviour on early sexual experimentation and risky sexual behaviours. This finding even plays down the submission of Babalola, Awasum and Quenum-Renaud (2002) that the perception that most friends are having sex decreases the odds of sexual abstinence. The probable reasons for this finding could be hinged on the fact that sex related matters are not limited to adolescents only. There exist cases where significant older people in the lives of the young ones make the innocent adolescents to go astray. Adenegan and Ojo (2015) documented instances of this. Thus, peer influence, though potent, has other significant predictive factors that determine adolescent sexual debut. This finding lays credence to the behaviour contagion theory as established by Oyeyemi (2004), which is commonly thought to contribute to many social problems such as sexual promiscuity among teenagers.

The finding of this study also showed sharp difference between the scores of negatively peer influenced adolescents and the positively influenced ones. The higher mean score for the negatively peer influenced adolescents indicates that they have the tendency to practise sexual abstinence after the treatments than their positively influenced counterparts. The reason for this compelling effect in enhancing sexual abstinence among the negatively peer influenced adolescents in the study could be traced to the kind of exposure they have gotten through the various negative influences. Having gotten many ill ideas about sex related matters and now receiving helping information about sex could be motivating enough to practise abstinence. This finding could probably explain why many innocent adolescents, who are refrained from receiving information about sex by parents for religious or personal reasons, easily fall prey at the slightest opportunity of sexual adventures.

This finding could be explained in the light of the discovery of Collins, Alagiri and Summers (2002) that credible research clearly demonstrated that some comprehensive sex education, or "abstinence-plus," programmes can achieve positive behavioural changes among young people and reduce STIs, and that these programmes do not encourage young people to initiate sexual activity earlier or have more sexual partners. In other words, the so-called negatively influenced adolescents are often proned to be exposed to advanced information about sexual matters, which when combined with treatment to enhance sexual abstinence triggered their decision.

9. CONCLUSION FROM FINDINGS

The main objective of this study was to investigate the effects of psycho-educational group therapy in enhancing sexual abstinence among in-school adolescents. The study made use of gender and peer influence as moderating variables. Training programmes were carried out, relevant data were collected and analysed using appropriate statistical methods.

Psycho-educational group therapy was effective in enhancing sexual abstinence among in-school adolescents, thus, introduction of these techniques will help in enhancing sexual abstinence among in-school adolescents, if the principles are properly applied on this group of people.

© 2017 Discovery Publication. All Rights Reserved

Meanwhile, none of the moderating variables (gender and peer influence) played a mediation role on the causal effect of treatment on sexual abstinence of in-school adolescents. It is presumed that other extraneous variables could be responsible for the interaction effect.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made:

1. This study is potent to provide useful information for understanding adolescent sexuality, sexual abstinence and the negative outcomes of initiating sex earlier than expected. Hence the results of the present study may provide valuable cues to the government, non governmental organisations, parents, teachers, counselling psychologists, adolescents and youths to maximise the psychological interventions such as psycho-educational group therapy to enhance sexual abstinence thereby reducing the the negative effects of adolescent sexual debut.
2. Counselling centres in schools and adolescent friendly centres should utilise this treatment in helping adolescents to refrain from spur-of-the moment sex.
3. Parents should pay close attention to the sexual activities of their children and incorporate this treatment in the moral discuss between them and their adolescents.
4. Counselling psychologists and researchers can stem out intervention from the treatment for those who have been unduly introduced to sex and willing to practise secondary abstinence.
5. Government should strengthen her policy framework on providing effective support services to the posted guidance counsellors and not load them with classroom work as in recent time; counsellors in schools were mandated to pick up teaching subjects in addition to their counselling work.
6. Future researchers could harvest ideas relating to sexual abstinence from this study as it laid precedence for further studies.

REFERENCES

1. Adams, J.F. 1976. *Understanding Adolescence*. Boston: Allyn and Bacon. Inc.
2. Adenegan, T.S. and Ogunlade, O.O. 2013. Teenage Pregnancy among In-school Adolescents: Implications for Counselling. In Ayodele, A.I., Solarin, I.O. and Adenegan, T.S. (Eds.); *Nigeria's Socio-economic and Political Dilemmas: The Challenges and the Way Out*. Owo, Intanitina Gim Publishers. Pp. 115 – 125.
3. Adenegan, T.S. and Ojo, T.E. 2015. Sexual Abstinence Knowledge and Behaviour of Secondary School Adolescents in Kubwa, Abuja. *Journal of Educational Research in Natural and Social Sciences*. Vol. 1 No. 1Aji, J., Aji, M.O., Ifeadike, C.O., Emelumadu, O.F., Ubajaka, C., Nwabueze, S.A., Ebenebe, U.E., and Azuike, E.C. 2013. Adolescent Sexual Behaviour and Practices in Nigeria: A Twelve Year Review. *Afrimedic Journal*, Vol.4 No.1 Pp 10 – 16
4. Adetoro, O.O., Babarinsa, A.B., and Sotiloye, O.S. 1991. *Socio-Cultural Factors in Adolescent Septic Illicit Abortions in Ilorin*, Nigeria.
5. Ankomah, A., Mamman-Daura, F., Omoregie, G. and Anyanti, J. 2004. *Abstinence and Delayed Sexual Debut among Nigerian Youth: A Qualitative Study Informing the 'Zip-Up!' Campaign*. Abuja; Society for Family Health, Nigeria.
6. Asuzu, C.C. 2009. Sexual Beliefs, Attitudes and Knowledge of Adolescents and Youths in Ibadan concerning AIDS. *BMC Public Health* Vol. 1 No. 2, Pp. 11 – 16
7. Asuzu, C.C. 2013. Development and Validation of the Sexual Abstinence Scale. *African Journal for the Psychological Study of Social Issues* Vol. 16 No. 1, Pp. 61 – 70
8. Asuzu, C.C. 2014. Knowledge and Attitudes of Adolescents Towards Sexual Abstinence: Implications for HIV/AIDS Prevention. *International AIDS Society. https://www.aids.2014.org*
9. Babalola, S., Awasum, D. and Quenum-Renaud, B. 2002. The Correlates of Safe Sex Practices among Rwandan Youth: A Positive Deviance Approach *African Journal of AIDS Research*. Vol. 1. Pg 11 – 21
10. Bamidele, J.O., Abodunrin, O.L. and Adebimpe, W.O. 2009. Sexual Behaviour and Risk of HIV/AIDS among Adolescents in Public Secondary Schools in Osogbo, Osun State, Nigeria. *International Journal of Adolescent Medicine and Health*; 21.3:387–394.
11. Bhardwaj, S. A.; Ramsay, H.; Bain, B. and Prakasam, C. P. 2007. Effects of Parental Monitoring on the Sexual Behaviours of Adolescents in Jamaica. *Journal of Family Welfare*; Vol. 53 Issue 1, p21
12. Brown, B. B. and Clasen, D. R. 1985. Perceptions of Peer Pressure, Peer Conformity Dispositions, and Self-reported

© 2017 Discovery Publication. All Rights Reserved

Behavior among Adolescents. *Journal of Personality and Social Psychology*, 22: 521-530.

13. CAMH. 2004. *Putting Family-centred Care Philosophy into practise*. Report prepared by Community Research, Planning and Evaluation Team and Community Support and Research Unit, Centre for Addiction and Mental Health. Toronto: Author.
14. Child Molestation Research and Prevention Institute. 2012. Early Diagnosis and Effective Treatment. Retrieved from *http://www.childmolestationprevention.org*
15. Collins, C., Alagiri, P. and Summers, T. 2002. Abstinence Only vs. Comprehensive Sex Education: What are the arguments? What is the evidence? *AIDS Research Institute University of California, San Francisco.*
16. Dlamini, S., Taylor, M., Mkhize, N., Huver, R., Sathiparsad, R., Vries, H., Naidoo, K. and Jinabhai, C. 2009. Gender factors associated with sexual abstinent behaviour of rural South African high school going youth in KwaZulu-Natal, South Africa. Health Education Research, Vol. 24, No. 3, Pp. 450 – 460
17. Egbochukwu, A. and Ekanem, B. 2008. Attitude of Nigerian Secondary School Adolescents Toward Sexual Practices: Implications for Counselling Practices. *European Journal of Scientific Research* Vol.22 No.2, pp.177-183
18. Fishbein, M. and Ajzen, I. 2011. Predicting and Changing Behavior: The Reasoned Action Approach**.** Retrieved on 14 October, 2014 from *http://books.google.com.ng*
19. Gavin, M.L. 2013. Abstinence. Retrieved on 26 September, 2014 from *kidshealth.org/teen/sexual_health/contraception/abstinence.html*
20. Hallfors, D. D., Waller, M. W., Ford, C. A., Halpern, C. T. Brodish, P. H. and Iritani, B. 2004. Adolescent Depression and Suicide Risk: Association with Sex and Drug Behavior. *American Journal of Preventative Medicine*, 27.3: 224-230
21. Hallfors, D. D., Waller, M. W., Ford, C. A., Halpern, C. T. Brodish, P. H. and Iritani, B. 2005. Which Comes First in Adolescence – Sex and Drugs or Depression? *American Journal of Preventative Medicine*, 29.3: 163-170
22. Hammed, T. A. and Adenegan, T. S. 2009: Effects of Self – Concept, Emotional Mastery, Peer Group Influence and Social Support on Delaying Sexual Debut among In-School Adolescents in Owo, Ondo State, Nigeria*; Nigerian Journal of Applied Psychology, 10.2:* 1 – 26.
23. Hebert, M. and Tourigny, M. 2010. Effects of a Psycho-educational Group Intervention for Children Victims of Sexual Abuse. *Journal of Child & Adolescent Trauma*, Volume 3, Issue 2, pp. 143-160.
24. Jemmott, J.B., Jemmott, L.S. and Fong, G.T. 2010. Efficacy of a Theory-Based Abstinence-Only Intervention Over 24 Months. *Archives of Pediatrics and Adolescent Medicine*, 164.2: 152-159.
25. Kim, C.C. and Rector, R. 2010. Evidence on the Effectiveness of Abstinence Education: An Update. Accessed 10 October, 2014 from *http://www.heritage.org/research/reports*
26. Kinsey, A., Pomeroy, W., and Martin, C. 1948. *Sexual Behaviour in the Human Male.* Philadelphia: Stunders.
27. Koffi, A. K and Kawahara, K. 2008. Sexual Abstinence Behavior Among Never-Married Youths in a Generalized HIV Epidemic Country: Evidence from the 2005 Côte d'Ivoire AIDS Indicator Survey. *BioMed Central Public Health*. 8:408
28. Martine, H. and Marc, T. 2010. Effects of a Psycho-educational Group Intervention for Children Victims of Sexual Abuse. *Journal of Child & Adolescent Trauma*, Volume 3, Issue 2, pp. 143-160.
29. Masters, T. N., Beadnell, B. A., Morrison, D. M., Hoppe, M.J. and Gillmore, M. R. 2008. The Opposite of Sex? Adolescents' Thoughts About Abstinence and Sex, and Their Sexual Behavior. *Perspectives on Sexcual and Reproductive Health*.Vol. 40, No. 2
30. Moore, S. M. and Rosenthal, D. A. 2007. Sexuality in Adolescence: Current Trends. Retrieved on 14 October, 2014 from *http://books.google.com.ng*
31. Miller, B.C. and Benson, B. 2001. Family relationships and adolescent pregnancy risk: A research synthesis. *Developmental Review* 21.1: 1–38.
32. Nnachi, R. O. 2003. "Causes, Consequences and Control of Behaviour Problems among Nigerian Children" in Nnachi, R. O. and Ezeh, P. S. E. (Eds.). *The Behaviour Problems of the Nigerian Child.* Awka, The Nigerian Society for Educational Psychologists (NISEP)
33. Obiekezie-Ali, M. C. 2003. "Sexual Behaviour Problems of Secondary School Girls and Women, *Obstetrics*. 19.6: 481-486.
34. Odeyemi, K., Onajole, A. and Ogunowo, B. 2009. Sexual behaviour and the influencing factors among out of school female adolescents in Mushin market, Lagos, Nigeria. International Journal of Adolescent Medicine and Health.; 21.1: 101–109.
35. Oladepo, O. and Fayemi, M. M. 2011: Perceptions about Sexual Abstinence and Knowledge of HIV/AIDS Prevention among In-School Adolescents in a Western Nigerian City. *BioMed Central Public Health*. 11:304
36. Pham, V., Nguyen, H., Tho, L.H., TanMinh, T., Lerdboon, P., Riel, R., Green, M.S. and Kaljee, L.M. 2012. Evaluation of Three Adolescent Sexual Health Programmes in Ha Noi and

© 2017 Discovery Publication. All Rights Reserved

Khanh Hoa Province, Vietnam *AIDS Research and Treatment*. 2012: 1 – 13

37. Rijsdijk, L. E., Bos, A. E., Lie, R., Ruiter, R. A., Leerlooijer, J. N. and Kok, G. 2012: Correlates of Delayed Sexual Intercourse and Condom Use among Adolescents in Uganda: a Cross-sectional Study. *BMC Public Health Vol.12* Retrieved October 10, 2014 from *http://www.biomedcentral.com*
38. Sabia, J. J. and Rees, D. I. 2009. The Effect of Sexual Abstinence on Female Educational Attainment," *Demography*, 46.4: 695-715;
39. Smith, E., McCall, R.B. and Ingram, A. 2014. Abstinence Programmes for Preventing Teenage Pregnancy. Special Report of Universities Children Policy Partnership.
40. Sunmola, A.M., Dipeolu, M., Babalola, S. and Adebayo, O.D. 2003. Reproductive knowledge, sexual behaviour and contraceptive use among adolescents in Niger state of Nigeria. African Journal of Reproductive Health. 7.1: 37-48.
41. UNAIDS. 2000. *Report on the global HIV/AIDS Epidemic*. Joint United Nations Programme on HIV/AIDs, Geneva
42. UNAIDS 2013: *UNAIDS Report on the Global AIDS Epidemic 2013*. UNAIDS, Geneva
43. Uwakwe, C. B. U. 1998. Prevalence Estimate and Adolescent Risk Behaviours in Nigeria. Health Intervention Implications: *Nigerian Journal of Applied Psychology*, 4: 135-143.
44. Warwick, P., Terry, D. and Gallois, C. 1993. Extending the theory of reasoned action: the role of health beliefs. In D. J. Terry, C. Gallois & M. McCamish (Eds.), *The theory of reasoned action: Its application to AIDS-preventive behaviour* (pp. 117 – 133). Oxford: Pergamon Press.
45. YLC, 2013. Benefits of Abstinence. *http://www.yourlifecounts.org/blog/benefits-abstinence* Your Life Counts. Accessed 26 September, 2014

© 2017 Discovery Publication. All Rights Reserved