

**THE INFLUENCE OF SCHOOL TYPE IN MODIFYING SEXUAL
BEHAVIOUR OF SECONDARY SCHOOL ADOLESCENTS**

Ekanem, Imo Ben

Department of Educational Foundations
Akwa-Ibom State College of Education
Afaha Nsit

Abstract

This study was a quasi-experimental research aimed at modifying sexual behaviour of secondary school adolescents. The effect which the mediating variable of school type has on the sexual behaviour of secondary school adolescents was also assessed. The study made use of a sample of one hundred and seventy three (173) senior secondary school two (SS 2) adolescents from three schools, one all boys', one all girls and one co-educational. These were distributed into experimental and control groups in each school. Three hypotheses were formulated. The findings show that there was significant difference between the experimental and control groups in favour of the experimental group in modifying sexual behaviour of adolescent students at post-test. There was significant school type effect on the sexual behaviour of adolescents at post-test. The post-hoc analysis showed that treatment was significant when sexual behaviour of mixed and all girls' schools are considered with the impact of treatment being more significant in the mixed school. Based on these findings, it was concluded that life skills training is effective in modifying sexual behaviour of secondary school adolescents. It was therefore recommended that; life skills training should be emphasized in the national sexuality curriculum, and can be made to apply to other areas of youth behaviour for example, drug use.

Key Words: Sexual behaviour, Adolescents, School type, Modifying behaviour, Education

Introduction

Today's adolescents grow up in a social environment that is considerably more liberal and permissive in sexual attitudes than that of their parents. The impact of the negative consequences of this situation on the sexual behaviour and sexual health of adolescents can best be understood through research and other

observed reports. (Eze, 2000; Ejue and Effiom, 2005; Eruesegbefe, 2005 and Ogunsanya, 2005) have shown that there is a high prevalence of sexual activity among adolescents in Nigeria leading to a high rate of teenage pregnancy, school drop out, academic under-achievement, abortions and maternal mortality, as well as infection with sexually transmitted diseases including HIV/AIDS. This tends to portray the fact that many adolescents are involved in making self-destructive choices. Many adolescents remain greatly mis-informed about sexual relationship. Identification with peers appears to be a prime force aiding in the emancipation from parents. In the quest for emancipation, such identification forces the child to stick to suggestions by age mates of the same sex. Glassberg (1965) cited in Awolo (1998) states that pre-marital sex may represent an effort to submit to peer group pressures. Esen (1974) states that high school adolescents involved in sex exploits have their peer group as the main source of information. When the adolescents who have been engaged in sex tell their friends for instance, that sex is fun, those not involved before want to experiment too. School is therefore one place where peer group influence is very strong.

The type of school which students go to does affect their opportunities to learn and consequently their behaviour. There have been arguments for and against single sex schools and co-educational schools and much research has been carried out in the area of school type though mostly in relation to academic performance. Ajuwon, Olaleye, Faromoku and Ladipo (2006) however, focused on sexual behaviour in relation to school type. In their study on sexual behaviour and experience of sexual coercion among secondary school students in three states in North Eastern Nigeria, they found that students from boys' only schools were significantly more likely to have had sexual intercourse (18%) than those from the co-educational (14%) and girls' only schools (2%). The major predictors of sexual activity were found to be, type of school, location of the school, sex, age, living arrangement, religion and having a boy/girl friend. It was found that, for respondents in co-

educational schools, whose schools were located in urban areas, who had boy/girl friends, males and females, sexual activity was higher. Specifically, respondents in co-educational schools were more likely to have had sexual intercourse than those in single sex schools. Type of school and sex were also found to be predictors of sexual coercion. Among the population surveyed, sexual coercion was a common phenomenon. Overall, 5.1% of the students had been raped.

Their report on sexual behaviour in co-educational schools corroborates the report that girls face sexual harassment in co-educational schools even in the United States. In its findings on sexual harassment, *Seventeen Magazine* (2008) reported that 89% of over 2000 respondents had faced unwanted touching and remarks at school. The American Association of University Women and Polls (1993) found that 1 high school girl in 4 experienced forced kissing. Another 15% had their clothes pulled off. Two-thirds of the girls admitted that sexual harassment happened “often”. In Nigeria, about 10% of the respondents in Alika’s (2007) study indicated that girls drop out of school because of bullying by the opposite sex.

On the contrary, Sadker and Sadker (1994) report that girls in single sex schools are free from sexual harassment that affects 90% of girls in co-educational high schools. An all-girls’ school they say, can create an atmosphere that counteracts the negative influence of mass media and its often troubling depictions of women and girls. Trickett and Trickett et al (1982) in comparing students at private single-sex schools in the United States with their counterparts at private co-educational schools found that students in the single-sex schools had a far more positive attitude toward academics than did students in co-educational schools. This finding held for both boys and girls. The students at the single-sex schools also developed better organizational skills and were more involved in classroom activities. They stated that at many co-educational schools what was really important was, “who likes who, who’s going out with who and who’s not.”

Statement of the Problem

Most researches so far have focused on risk behaviours and their determinants. While young people may be aware of sexual and reproductive risks in general, their information is not complete. The reports on sexual behaviour in schools pointed to a need to investigate the influence of school type on sexual behaviour of adolescent students in our own setting. They also suggested the need for young people, especially females, to be equipped with skills which would enable them resist unwanted sexual activity. Studies have shown that skills-oriented prevention programmes based on social learning theory which combine the traditional information approach with skill building activities have proven to yield positive outcomes, Moore et al (2008). Such programmes have caused adolescents to postpone sexual involvement or adopt contraceptive protection.

Research Questions

The following research questions were raised to guide this study.

1. How does Life Skills Training affect secondary school adolescents' sexual behaviour?
2. Is sexual behaviour different among students of different types of school?
3. Is there any treatment by school type interaction effect on adolescent students' sexual behaviour.

Scope and Delimitation of the Study

Two independent variables were involved in the study namely; treatment (2 levels) and school type (3 levels). One of these, school type was used as a mediating variable. The remaining variable is the treatment which was a manipulable variable. The study involved only one dependent variable namely, sexual behaviour. The study was also particularly targeted at adolescents

currently in school. In order to determine the contribution of school type on the sexual behaviour of students, the study involved three institutions, one all boys', one all girls and one co-educational institution. The senior secondary two (SS 2) class was used. The study was carried out in Benin City, capital of Edo State.

Method of Study

Participants

The target population for the study comprised of all secondary school adolescents in Benin City. The sample for this study was drawn from this population. The study made use of purposive stratified sampling technique. Three secondary schools were involved in the study; one co-educational, one all boys and one all girls' secondary schools. The study made use of a sample of one hundred and seventy three (173) adolescents distributed into experimental and control groups in each school according to the available number of students in each class since intact classes were used for the study. At post-test however, the number of subjects had reduced to 165 due to attrition (see Table 1).

Instrument

The instrument used for the study was the Adolescents' Sexual Behaviour Inventory (ASBI) developed by the investigator. It has two sections, A and B. Section A contains the biodata while section B contains thirty-six (36) items assessing the sexual behaviour of the respondents. These items were drawn up based on various sources of literature which pointed to certain prevalent sexual practices carried out by adolescents'. The measurement is a 4-point modified likert type scale: SA = Strongly Agree, A = Agree, D = Disagree and SD = Strongly Disagree. Respondents were required to tick the columns which best indicated their behaviour in the given circumstances. Where the response did not indicate an effective application of a skill as expected, it was reflected in the scoring. In such an instance, SA = 1 point, A = 2 points, D = 3 points

and SD = 4 points. The reverse was the case where SA = 4, A = 3, D = 2 and SD = 1.

Table 1: Distribution of students by school type, group and sex

Group	School	Sex	N
Control	All Boys	Male	36
	All Girls	Female	27
	Mixed	Male	10
		Female	10
Total		Male	46
		Female	37
Total			83
Experimental	All Boys	Male	27
	All Girls	Female	30
	Mixed	Male	13
		Female	12
Total		Male	40
		Female	42
Total			82

To establish validity of instrument, it was given to experts in guidance and Counselling and Measurement and Evaluation who scrutinized it. Items were rated to see how well they represented the sexual practices (behaviour) of the adolescents. Only items found relevant for the study were used while items found to be irrelevant were discarded.

The reliability of the instrument was established through test and re-test procedure. A random sample of one hundred and two (102) secondary school adolescents was drawn from one all boys', one all girls' and one mixed secondary school different from the ones used in this study. They were all in senior secondary two (SS2). The instrument was administered to them and re-administered after a two-week interval. The reliability co-efficient

obtained was 0.81. This instrument was considered suitable for use in this study.

Treatment Package

The treatment for this study was Life Skills Training. A manual for this had been developed. A vocational guidance package was also developed for the control group.

The instrument was administered according to a well-patterned procedure aimed at ensuring uniformity among the groups and reducing or eliminating bias. Research assistants were trained for the process but the researcher personally handled the treatment groups in order to ensure that correct procedures were maintained. Both the experimental and control groups were taught twelve lessons of 45 minutes duration over a period of six weeks.

Data Analysis

Descriptive Statistics and Analysis of Co-variance (ANCOVA) were used to determine the differences between the treatment groups and the pre-test and post-test scores. The level of significance for all the hypotheses was set at 0.05 level.

Results

To determine the effects of these independent variables, treatment and school type in modifying adolescent students' sexual behaviour, the following three hypotheses were tested using the method of data analysis explained earlier.

Hypothesis 1: There is no significant difference between the treatment and control groups in modifying sexual behaviour at post-test.

Hypothesis 2: There is no significant difference in sexual behaviour among adolescent students from the three types of schools.

Hypothesis 3: There is no significant interaction effect of treatment by type of school in modifying adolescent students' sexual behaviour.

The descriptive statistics of the groups of students classified by treatment (control and experimental) are shown in table 2.

Table 2: Distribution of means of pre-test and post-test scores on Adolescents' Sexual Behaviour Inventory (ASBI) by treatment groups

Group	Pre	Post
Control	110.17 (83)	106.92 (83)
Experimental	116.17 (90)	119.95 (82)
Total	(173)	(165)

Table 2 shows the pre and post test mean scores of the control and experimental groups. In the post test, the control group has 106.92 while that of the experimental group is 119.95. The pre-test scores are used as a covariate in the analysis. To test the significance of the differences in the mean scores, inferential statistics, ANCOVA was used. This is summarized in Table 3 below.

Determination of difference between the experimental and control groups at post-test. The F. value for treatment (Group) in Table 3 is 38.112 with df (1,162) significant at .000 which was also significant at $p < .05$ level. The null hypothesis 1, that there is no significant difference between the experimental and control groups in modifying sexual behaviour of adolescent students at post-test was therefore rejected. It was concluded that there was significant difference between the experimental and control groups at post-test in favour of the experimental group. That meant that there was significant treatment effect in modifying sexual behaviour of

adolescent students.

Table 3: ANCOVA summary for effect of treatment (life skills) on sexual behaviour (dependent variable) of secondary school adolescents

Source	Sum of squares	df	Mean square	F	Sig.
Corrected model	14519.774	2	7259.887	95.404	.000
Intercept	3211.280	1	3211.280	42.200	.000
Prebehav	7510.594	1	7510.594	98.698	.000
Group	2900.163	1	2900.163	38.112	.000
Error	12327.620	162	76.096		
Total	2148448.000	165			
Corrected total	16847.394	164			

School Type Effect

In order to determine the effects of school type and its interactions with treatment, hypotheses 2 and 3 were tested. In order to test these hypotheses, the pre-test and post-test scores of students on the Adolescents' Sexual Behaviour Inventory (ASBI) were analysed into mean distribution using descriptive statistics. The results of the data are shown in Table 4 below.

Table 4 shows the mean scores of students from the three types of school according to their treatment groups. In the post-test, the experimental group, in the mixed school scored highest with 121.20 followed by the girls from the all girls school with 119.83 and lastly the boys from the all boys school with 118.93. These scores are much higher than those of their counterparts in the control group.

Table 4: Distribution of means of pre-test and post-test scores on Adolescents' Sexual Behaviour Inventory (ASBI) by group and school type

Group	School	Means	
		Pre	Post
Control	All Boys	115.28 (36)	111.89 (36)
	All Girls	109.85 (27)	103.56 (27)
	Mixed	101.40 (20)	102.50 (20)
	Total	110.17 (83)	106.92 (83)
Experimental	All Boys	116.54 (35)	118.93 (27)
	All Girls	118.23 (30)	119.83 (30)
	Mixed	114.96 (25)	121.20 (25)
	Total	116.87 (90)	119.95 (82)
Total		(173)	(165)

To test the significance of the differences in the mean scores ANCOVA was used as summarized in Table 5 below.

The F value for school type effect was 3.198 with df (2,161) significant at .043 and consequently significant at $p < .05$ level. The null hypothesis 2 that there is no significant difference in sexual behaviour among adolescent students from the three types of schools at post-test was rejected. It was concluded that there was significant school type effect on the sexual behaviour of adolescents at post-test.

Table 5: ANCOVA summary for effects of school type on sexual behaviour of secondary school adolescents

Source	Sum of squares	df	Mean square	F	Sig.
Corrected model	12201.455	3	4067.152	44.709	.000
Intercept	1314.380	1	1314.380	14.449	.000
Prebehav	11964.074	1	11954.074	131.409	.000
School	581.844	2	290.922	3.198	.043
Error	14645.939	161	90.969		
Total	2148448.000	165			
Corrected total	26847.394	164			

In order to ascertain in which of the schools the difference lay, a post-hoc analysis was conducted using the Bonferroni method. The result of the post-hoc analysis is summarized in Table 6.

Table 6: Post Hoc Analysis: Bonferroni method for pair-wise comparisons on sexual behaviour of adolescents by school type

(I) School	(J) School	Mean Difference (I – J)	Std Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
All Boys	All Girls	1.085	1.750	.536	-2.370	4.541
	Mixed	-3.680	1.927	.058	-7.485	.124
All Girls	All Boys	-1.085	1.750	.536	-4.541	2.370
	Mixed	-4.766*	1.934	.015	-8.585	-.947
Mixed	All Boys	3.680	1.927	.058	-.124	7.485
	All Girls	4.766*	1.934	.015	.947	8.585

* The mean difference is significant at the .05 level.

In Table 10, it was found that the mean difference between the all girls and mixed schools was 4.766, significant at .015 and therefore significant at $p < 0.05$. It was concluded that treatment was significant when behaviour of mixed and all girls' schools are considered. The mean differences between the all boys and all girls, as well as all boys and mixed schools were not significant.

Interaction effect

Table 11: ANCOVA summary for the interaction of treatment with school type on the sexual behaviour (dependent variable) of secondary school adolescents

Source	Sum of squares	df	Mean square	F	Sig.
Corrected model	15191.293	6	2531.882	34.320	.000
Intercept	2843.579	1	284.579	38.545	.000
Prebehav	6529.140	1	6529.140	88.503	.000
Group	2825.357	1	2825.357	38.298	.000
School	337.099	2	168.550	2.285	.105
Group* School	300.123	2	150.062	2.034	.134
Error	11656.101	158	73.773		
Total	2148448.000	165			
Corrected total	28847.394	164			

The F value for school type by treatment interaction in Table 11 was 2.034 with df (2,158) significant at .134 but not significant at $p > 0.05$ level. The null hypothesis 6 that there is no significant interaction effect of treatment by type of school in remediating adolescent students' sexual behaviour was therefore retained. It was concluded that there was no significant interaction effect of treatment by school type.

Discussion of Findings

One major finding of this study was that there was significant difference between the experimental and control groups in modifying sexual behaviour of adolescent students at post-test. The F value for treatment (Group) as shown in Table 3 was 38.11 with df (1.162) significant at .000 which was also significant at $p < 0.05$ level. This led to the rejection of the null hypothesis. The conclusion was that treatment was effective in modifying sexual behaviour of adolescents. This finding is in consonance with the findings of Odoemelam (1996) and Ajala (1998) who, though not using life skills as treatment, found significant difference between sexual behaviour of those exposed to sex education and those who had no treatment. This also confirms the findings of Isiugo-Abanihe and Offrey (2003) and Falola-Anoemuah (2004) who found significant effects in the knowledge and attitude indicators of sexuality education influence. It would be possible to infer from these studies (including the present study) that adolescents' sexual behaviour can be modified.

Effect of School Type

With regard to school type and its interactions with treatment, it was found that there was significant school type effect on the sexual behaviour of adolescents at post-test. As shown in Table 5, the F value for school type effect was 3.196 with df (2.161) significant at .43 and consequently significant at $p < 0.05$ level. Null hypothesis 2 was therefore rejected. The post-hoc analysis which followed showed the direction of significance. While the mean difference between the all girls and all boys' schools was not significant at the $p > 0.05$ level, the difference between the mixed school and the all girls' school was significant at .015 level which was also significant at $p < 0.05$ level. It was concluded that treatment was significant when sexual behaviour of mixed and all girls' schools are considered.

The type of schools which students go to does affect their opportunities to learn and consequently their behaviour. In the

present study, on investigating the effect of school type on treatment, it was noted that the mean difference between the two single-sex schools was not statistically significant. In the experimental group, the all boys' school had a mean score of 118.93 while the all girls' school had 119.84. The mixed school had a mean score of 121.20. The F ratio for school effect was 0.043 which was statistically significant at $p < 0.05$ level also. The post-hoc analysis showed that the significance lay in the mixed and all girls' schools. It could be inferred from this finding that the treatment impacted much on the students at the mixed school. The study by Ajuwon et al (2006) has shown that sexual activity was higher in co-educational schools than in single-sex schools. This could be a possible reason why the impact of intervention was significant in the mixed school in this study. This argument would be in agreement with the findings of Trickett and Trickett et al (1982) who reported that "who likes who, and who's going out with who and who's not" is of great importance to the students in many co-educational schools. In this present study, it was also found that there was no significant interaction effect of treatment by school type and so, null hypothesis 3 was retained.

Conclusion

Based on the findings of this study, the following conclusions were drawn. Life skills training is effective in modifying sexual behaviour of secondary school adolescents. The type of school a student attends determines how successfully a students' sexual behaviour can be modified. The mixed school is superior in this respect.

Since life skills training has been found to be effective, the implication of these findings is that this treatment can effectively be applied to adolescents whether male or female and in single-sex or co-educational institutions.

Recommendations

On the basis of the findings of this study and the discussions thereof, it was recommended as follows:

1. Life skills training should be emphasized in the national sexuality curriculum, and can be made to apply to other areas of youth health for example, drug use.
2. School counsellors should re-work their counselling schedules to include life skills training.
3. Since the treatment was found to be very effective in the mixed school, counsellors in mixed schools should use this finding to advantage by exploring avenues to develop and sustain these skills. One way could be by starting anti-sex abuse clubs in the schools. In these clubs, students should be made to know that sex is subject to misuse and exploitation and that its power may have negative as well as positive results. The dominant emphasis therefore should be on human sexuality in its positive form. From there, the influence, it is hoped, can spread to the community.

References

- Ajala, U. N. (1998). *Sex education in management of sexual behaviour of secondary school students in Abia State*. Unpublished M.Ed. thesis. Abia State University, Uturu.
- Ajuwon, A. J., Olaleye A, Faromoku B, and Ladipo O. (2006). Sexual behaviour and experience of sexual coercion among secondary school students in three states in North Eastern Nigeria. Retrieved April 28th, 2008 from <http://www.biomedcentral.com/1471-2458/6/310>.
- Alika, H.I. (2007). *Socio-economic status, vocational interest and age as correlates of re-entry of girls into school in Edo State: Implications for counselling*. Unpublished Ph.D. thesis. University of Benin, Benin City.

- American Association of University Women & Polls, L. H., (1993) Sexual pressure on co-eds. Retrieved April 14, 2008 from www.girlslearndifferently.com/sexualpressure.html .
- Awolo, N.M. (1998) Incidence of teenage pregnancy among female secondary school students in Delta State, Unpublished M.Ed. Thesis, Faculty of Education, University of Benin.
- Ejue, J. B. & Effiom, D. O. (2005). Adolescent sexual activity: gender disparity. *The Counsellor*. Journal of the Counselling Association of Nigeria (CASSON) 21, 47 – 53.
- Eruesegbefe, R. O. (2005) A literature review of causes, effects and remedies of teenage pregnancy. *The Counsellor* Journal of the Counselling Association of Nigeria. 21, 54 – 71
- Esen, A. J. A (1974) A Study of adolescent sexuality in Nigeria. *West African Journal of Education* 18 (18) 445 – 453
- Falola-Anoemuah (2004) in Isiugo-Abanihe I.M (2005).
- Isiugo – Abanihe, I. M. (2005). *Comments on benefits of sexuality education for young persons in Nigeria* by Ajuwoh, A.. J. (2005). Understanding Human Sexuality Seminar Series 3. Lagos. Africa Regional Sexuality Resource Centre.
- Moore, K. A., Miller, B.C., Sugland, B. W. Morrison, D. R., Gleib, A. Blumenthal, C. (2008) Beginning too soon: Adolescent sexual behaviour, pregnancy and parenthood. A review of research and interventions. Retrieved on April 28, 2008 from <http://aspe.hhs.gov/hsp/cyp/xsteensex.htm> .
- Odoemelam, A.M. (1996). Incidence and management of male and female sexually maladjusted youngsters: gender and counselling implications. *The Counsellor*. Journal of the Counselling Association of Nigeria. 14(2) 160 – 171.
- Okonkwo, R.U.N & Eze, I. (2000) Attitude of Nigerian adolescents to premarital sexual behaviour. Implications for sex education *Journal of Counselling*.1 (1) 21 – 26 International Association of Counselling Nigeria.
- Sadker, M & Sadker, D. (1994) *Failing at fairness*. New York: Charles Scribner. Retrieved May 20, 2008 from <http://www.girlslearndifferently.com/girlsschools.html>.

Seventeen Magazine (2008). In Girls face sexual pressure in co-ed schools. Retrieved on April 14, 2008 from www.girlslearndifferently.com/sexualpressure.html.

Trickett, E., Trickett, P. et al (1982) The independent school experience: aspects of the normative environment of single-sex and coed secondary schools. *Journal of Educational Psychology*, 74 (3): 374 – 381. Retrieved, April 14, 2008 from <http://www.singlesexschools.org/evidence.html>