HIV-RELATED BEHAVIOURS AMONG NIGERIAN IN-SCHOOL RURAL ADOLESCENTS

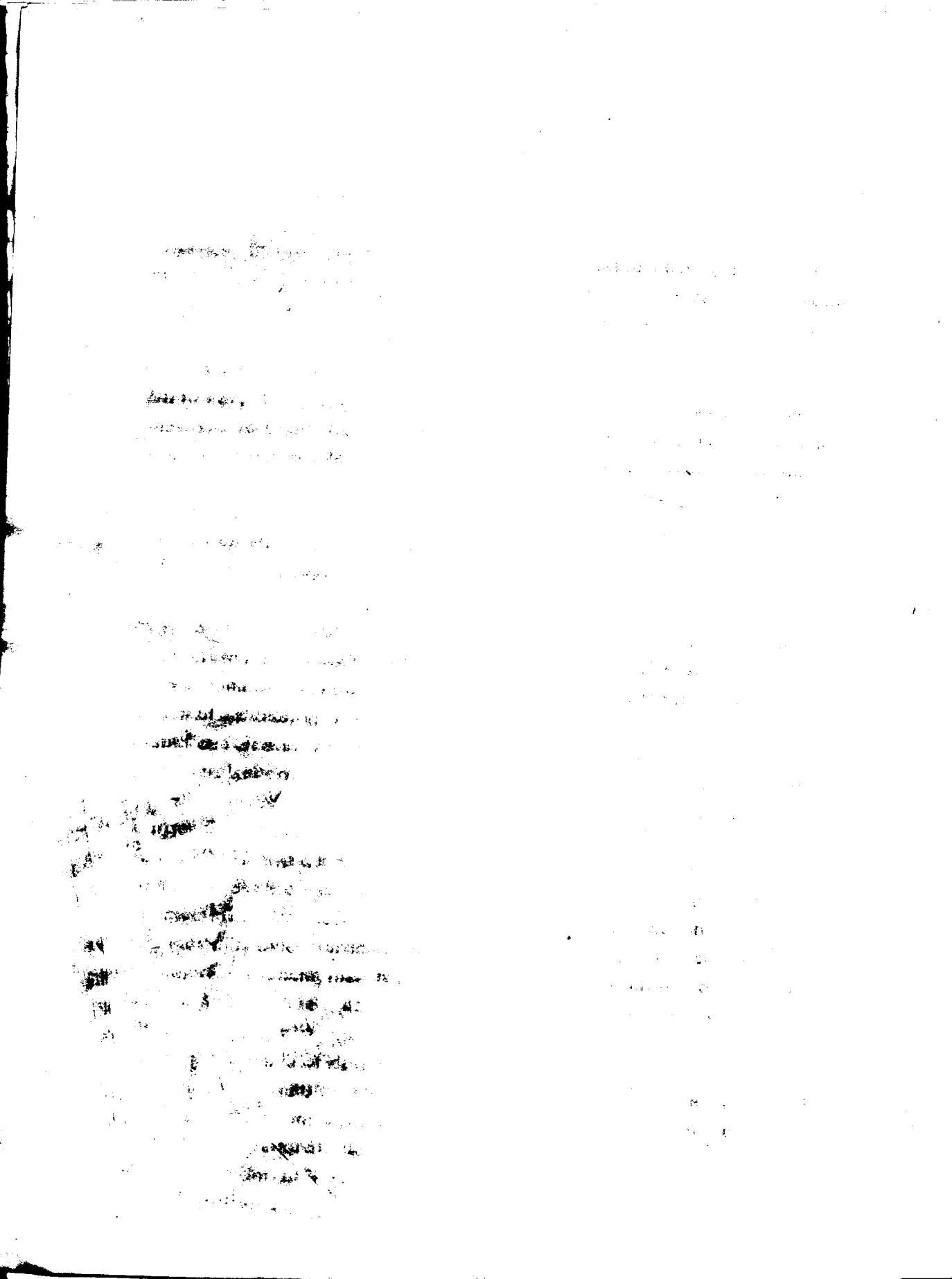
Enebechi, J. C. [1] and Nwagu, E. N. [2]

Abstract

This study investigated the HIV-Related behaviours among Nigerian in-school rural adolescents. The survey design was adopted for the study which involved a sample of 816 students selected randomly from 8 out of the 24 grammar schools in Udi L.G.A. Instrument for data collection was a 4-item researcher designed questionnaire which was validated by three experts. Using the Spearman Brown correlation coefficient, the reliability index value was 0.68, showing that it was reliable. Frequencies, percentages, and chi-square statistics were used to analyze the data and test the only null hypothesis of the study. It was found out that in-school rural adolescents in Udi exhibited HIV-related behaviours such as keeping multiple sex partners, sex without condom and sex under alcoholic intoxication. Again that keeping multiple sex partners was more prevalent among students in co-educational schools. Based on the findings, recommendations were made.

Keywords: HIV, Behaviours, Adolescents.

[1] Department of Physical & Health Education, Enugu State College of Education (Technical) Enugu
[2] Department of Health & Physical Education, University of Nigeria, Nsukka.



Introduction

The Human Immunodeficiency Virus (HIV) epidemic has remained a major developmental problem in developing countries, such as Nigeria. It is in recognition of this act that the 6th goal of the UN Millennium Development Goals (MDG) and the National Development Roadmaps, aims to *halt and begin to reverse the spread of HIV/AIDS*. This decision to combat HIV in developing countries, suggests that the damaging effect HIV/AIDS is of grave consequence. Globally, the age groups worst affected by the epidemic is the 15 – 29 years old (Buregyeya, Bazeyo, Moen, Michelo & Fylkesnes, 2008).

Interestingly, adolescents fall within this age range. Agujiobi (2003) observed that adolescence was a period of confusion, sexual explosion and experimentation. Since HIV infection is associated with sexuality (Samuel, 2006), and adolescents are sexually active (Ezedum, 1999), this increases the adolescents' vulnerability to the epidemic. Again, secondary school students are mainly adolescents who may exhibit behaviours that promote the contraction and spread of the disease, since it is evident that HIV is a problem of behaviour and life style(Ene, 2004).

Promotion and maintenance of healthy lifestyle is of paramount interest to health education teachers. This is because of its perceived positive contributions to longevity. Diseases related to lifestyle have been known to be more deleterious than the communicable ones. Okafor (2009) noted that the major causes of early death had shifted from communicable diseases to chronic lifestyle-related conditions. Again, Lotrean, Laza, Ionut and Vries (2010) identified that the leading causes of mortality and morbidity among young people could be traced to several preventable health risk behaviour that were often initiated during youth and may extend into adulthood. Such health risk behaviour may be HIV-related and the adolescents, especially those in the school in rural Nigeria may be involved.

Given the cardinal position occupied by adolescents in the productive population, it then becomes obvious that, disease-related behaviours of the youths should be of great concern to health educators and should guide the modification of existing reproductive health policy. The concern should be on how to promote healthy lifestyles among adolescents. Akinsola (2006) lamented that, in sub-Saharan African countries, one of the major challenges facing individuals within the

communities today was how to adopt a healthy lifestyle, which could be characterized by practice of safe sex, freedom from alcohol and drug abuse among others. Adolescents appear to be guilty of alcoholism and drug abuse. These habits expose them to the experimentation of careless causal sexual behaviours which may lead to unpleasant developments related to sexuality. Contraction of sexually transmitted infections (STI$^{S)}$ and HIV/AIDs could be one of such unpleasant developments resulting from adolescents' behaviours.

Adolescence has been defined in various ways by different authorities. Nworah (2004) described adolescence as a transitional period from childhood to adulthood characterized by rapid developmental changes that culminate in sexual maturity and onset of puberty. The period has been chronologically given as 12 to 20 years. Samuel (2006) saw adolescence as a period when an individual is capable of begetting offspring because of his or her sexual maturity as well as ability to withstand societal pressures, making it possible to perform adult roles. Etymologically, adolescence, from its Greek word 'adolescere' means growing into maturity. People whose age fall within the range described above are regarded as adolescents. In other to make it possible for the adolescents to perform adult roles, their behaviours especially disease related ones require modification.

Umeano (1999) aptly conceptualized behaviour as a broad term for any type of action. Hornby (2000) saw behaviour as the way somebody functions in a particular situation. Following from these, behaviour means actions manifested by an individual functioning in a situation. Such actions may be desirable or undesirable. It is on this premise that Amajirionwu (1981) noted that a behaviour may create difficulties or reveal the presence of difficulties. Adolescents' behaviours that are disease related may create or reveal health difficulties. One of such difficulties/problem may be contraction of the HIV.

HIV is a popular acronym that stands for 'Human Immuno-deficiency Virus". It is a deadly virus which infects anybody and slowly destroys the body's immune system. Consequently, the infected person losses the ability to resist diseases and subsequently becomes sick of 'Acquired Immune Deficiency Syndrome' (AIDS). The disease has no cure, but the causative virus could be prevented through behaviour and lifestyle modifications. Based on this knowledge, Njoku (2004) warned that HIV/AIDS had neither medical cure nor vaccine and that the

solution to the scourge was in the change of human sexual habits through education and enlightenment about the disease.

The National Reproductive Health Policy of 2001 recognized that there is no limited access to reproductive health information to adolescents (FMH, 2001). This according to Ikorok (2004) is associated with the general oppositions to any discussion on sex except between married couples. The major source of information on sexual matter for adolescents is often from peers (Agujiobi, 2003), and the information many a times are misleading. Many polices relating to adolescent reproductive health exist. Sedgh; Bankole; Okonofua; Imarhiagbe; Hussan; and Wulf (2009) noted that the problem is not just creating policies, but who will invest in transforming the government's noble policy declaration into concrete programme and services that will improve sexual and reproductive health of Nigerian adolescents. Understanding the HIV-related behaviours of adolescents particularly in-school rural ones will help the teachers identify areas of needs in providing adequate HIV prevention information and related life skills. This is very important for the adolescents because of their peculiar nature at this stage of their development.

In view of the fact that adolescence is a crucial period in the life of an individual and that a surge of sexual interest occur around puberty (Action Health Inc, 2003), their behaviour need to be determine, since they are always engulfed in confusion, sex explosion and experimentations. Adolescents in rural areas were preferred because Ezedum (2002) believed that focusing studies on adolescents more in rural areas of Nigeria where well over 80 percent of Nigerians live may be more rewarding. One of such rural areas is Udi local government area of Enugu State, where palm wine is commercially produced. Again adolescents in the school are expected to be society role models for others, hence the need for their behaviours to be determined. Furthermore, Schwartz; Forthum; Rivert; Zamboanga; Umana-Taylor; Filton; Kein; Rodriguez; Weisskirch; Vernon; Shneyderman; Williams; Agocha; and Hudson (2010) noted that negative behaviours especially health related ones did not only contribute to leading causes of death, but also pose costs to society in terms of property damage, violence, imprisonment, diminished lifespan and treatment expenses. It is against this background that the researcher decides to investigate the HIV-related behaviours among Nigerians in-school rural adolescents.

The purpose of the study therefore is to investigate the behaviours of the Nigerian in-school adolescents that are HIV-related. Specifically, the study aims to determine:

1. The sexual experience of Nigerian in –school adolescents;
2. Number of sexual partners kept by Nigerian in-school adolescents;
3. Condom use behaviours of Nigerian in-school adolescents, and
4. Alcohol use behavoiurs of Nigerian in-school adolescents.

To aid the study, four corresponding research questions and one null hypothesis were raised thus:

1. What is the sexual experience of Nigerian in –school adolescents?
2. What is the number of sexual partners kept by Nigerian in-school adolescents?
3. What is the frequency of condom use among Nigerian in-school adolescents?
4. What is the frequency of alcohol use among Nigerian in-school adolescents?

Ho: School type is not a significant factor in determining the HIV-related behaviours of Nigerian in-school rural adolescents.

Methods

The cross-sectional survey design was adopted for the study. Population for the study comprised 8941 students in the twenty four grammar schools in Udi local government area of Enugu State (PPSMB, 2011). The study sample comprised of 816 students selected randomly. Sampling was done in two stages. The first stage involved the selection of eight schools from the twenty four using the stratified random sampling technique. The schools were stratified according to school type. Each of the selected schools was either boys, girls or mixed schools. This was to represent the three different types of school; boys, girls or mixed schools. The second stage involved a non-proportionate drawing of 102 students from each of the eight selected schools, by randomly selecting seventeen students from each of the six classes in the schools using systematic random sampling technique.

Instrument for data collection comprised of a four-item questionnaire designed by the researcher and validated by three experts. Two of the items which sought information on the students sexual experience and condom use had 'Yes' or 'No' options, while the other two that wanted to ascertain their frequency of alcohol use and number of sexual partners had response options 'non'/

'Never', 'once' and 'more than once'. Reliability of the instrument was established using the Spearman Brown correlation coefficient. The reliability index value was 0.69, showing that the instrument was reliable.

Administration of the instrument was done personally by the researcher with the help of four research assistants. Copies were administered and collected on the spot. All the 816 copies of the questionnaire were duly completed and returned. The data were corrected to frequency distribution tables and percentages for analysis according to the specific objectives of the study, while the chi-square statistic was employed in testing the null hypothesis of the study. Item by item analysis was employed in testing the null hypothesis for the study. This is to give a vivid interpretation and analysis.

Results

Table 1: Students' Ever Had Sexual Experience

School Type	Responses					
	Yes		No		Total	
	F	%	F	%	f	%
Boys	67	65.7	35	34.3	102	12.5
Girls	216	70.6	90	29.4	306	37.5
Mixed	294	72.1	114	27.9	408	50.0
Total	**577**	**70.7**	**239**	**29.3**	**816**	**100**

χ^2 – cal = 0.70; df = 1 $p < .05$

Results in Table 1 show that the highest proportion (72.1% or 294) of the students who had experienced sexual intercourse were in the mixed schools, followed by those in girls' school (70.6% or 216). The table also revealed that the highest proportion (34.3% or 35) of those who had never had any sexual experience were in the boys' school. It is indicative in the Table that the calculated chi-value 0.70 at 1 degree of freedom and .05 level of significance is less than the table chi-square value (3.84). Consequently, the null hypothesis of no significant difference is accepted. This means that school type is not a statistically significant factor in determining the adolescents' sexual experience.

Table 2: Students' Number of Sexual Partners

School Type	Responses: None		One		Two or more		Total	
	f	%	F	%	f	%	f	%
Boys	35	34.3	41	40.2	26	25.5	102	12.5
Girls	90	29.4	149	48.7	67	21.0	306	37.5
Mixed	114	27.9	113	27.7	181	44.4	408	50.0
Total	**239**	**29.3**	**303**	**37.1**	**274**	**33.6**	**816**	**100**

χ^2 – cal = 48.32; df = 2 p < .05

Data in Table 2 indicate that the greatest proportion (44.4% or 181) of the students who had more than one sexual partner were in the mixed schools. The highest percentage (34.3%) of those who had no partner was in boys schools, 48.7% of those who keep one sexual partner were in girls' school. The table also shows that the calculated chi-value of 48.32 at 2 degree of freedom and .05 alpha levels is greater than the table chi-square value (5.99). Therefore the null hypothesis is rejected, meaning that the students' number of sexual partners is dependent on school type.

Table 3: Students' Use of Condon During Last Sexual Contact

School Type	Responses: Yes		No		Total	
	F	%	F	%	f	%
Boys	39	38.2	63	61.8	102	12.5
Girls	112	36.6	194	63.4	306	37.5
Mixed	157	38.5	251	61.5	408	50.0
Total	**308**	**37.7**	**508**	**62.3**	**816**	**100**

χ^2 – cal = 0.20; df = 1 p < .05

Data in Table 3 show that, while 63.4% of students in girls' school did not use condom during their last sexual contact, 61.8% and 61.5% of those in boys and mixed schools respectively did not use condon during their last sexual contact. The table shows that 38.5%, 38.2% and 36.6% of those in mixed, boys' and girls' schools respectively used condom during their last sexual contact. Results in the table show that the calculated chi-value of 0.20 at 1 degree of

freedom and .05 alpha level is less than the table chi-square value (3.84). As a result, the null hypothesis is accepted meaning that, the students' use of condom during sexual intercourse is not dependent on school type.

Table 4: Students' Life Time Use of Alcohol

	Responses							
School Type	**None**		**One**		**Twice or more**		**Total**	
	f	**%**	**F**	**%**	**f**	**%**	**f**	**%**
Boys	29	28.4	41	40.2	32	31.4	102	12.5
Girls	221	72.2	62	20.3	23	7.5	306	37.5
Mixed	210	51.5	107	26.2	91	22.3	408	50.0
Total	**460**	**56.4**	**210**	**25.7**	**146**	**17.9**	**816**	**100**

χ^2 – cal = 12.73; df = 2 p < .05

The data in Table 4 show that a total proportion of 71.6% of the students who were involved in alcohol use one or more times, were in boys' school while a greater percentage (72.2%) of the students who never used alcohol were in girls' schools. Since the calculated chi-value of 12.73 at 2 degree of freedom and .05 alpha level is greater than the table chi-square, the null hypothesis is rejected. This means that school type is a factor in determining the students' use of alcohol.

Discussion

The major purpose of the study was to investigate the behaviours of the in-school rural adolescents that are related to HIV infection. Information in the study show that such behaviours have been identified as

- having sexual intercourse
- keeping multiple sexual partners
- getting involved in unprotected sexual intercourse and
- using alcohol

A look at Table 1 shows that 70.7% of the students across school type have had sexual intercourse. This finding agrees with Ezedum (1999) who established that secondary school students were sexually active. World Health Organization (WHO)(1995) had reported that

the state of global human reproductive health is poor, and that the reproductive health of Nigerian adolescents is also poor (Njoku, 2004) the students' sexual activities become very worrisome.

The worry is precipitated on the fact that Njoku (2004) observed that the poor state of Nigerian adolescents' reproductive health was due to ignorance that was perpetuated by lack of adequate reproductive health education of students. Again, Ochiagha (1996) lamented that adolescents in school had little or no information on sex and reproductive health until marriage. It was also evident that all sex education which adolescents got before marriage was through feeble moralization about sex in the home by very few parents and Catechists (Williams, Milligan & Odenwingie, 1997). Given the above students' background and high prevalence rate of STI[s], especially HIV/AIDS, the fact that they are sexually active becomes a risk behaviour for HIV.

It has been earlier established that the solution to HIV cure was in change of behaviour. This study established that in-school rural adolescents kept multiple sex partners (Table 2), and that this behaviour was determined by school type. One may raise the suspicion that the mixed school structure could increase the availability and easy access to sexual partners. The finding is not a surprise because Buregyeya; Williams; Moen; Michelo; and Fylkenses (2008) reported that multiple sex partners tended to be highest in the youngest age group and among those with lowest levels of education. In-school rural adolescents, who are the subjects in this study share these two qualities of age and educational background.

Coupled to multiple sex partners is the students' involvement in the behaviour without condom (Table 3). This behaviour is believed to be related to HIV because; Brener, Kann, Wechsler and Romero (2006) warned that young persons who engaged in unprotected sexual intercourse, alcoholism or abuse drugs were at risk for human immunodeficiency virus (HIV) infection. Alcohol has been blamed for various undesirable behaviours related to STI[s]. For instance, Lotrean; Laza; Ionut; and Vires (2010) observed that use of alcohol and alcohol intoxication were significant factors in precocious beginning of sexual life. Furthermore, Ene (2004) noted that, while intoxicated people could forget to use a birth control method, chances of having sex with a stranger, which increases the risk of STI[s] and AID[s] was high. The obvious HIV risk related consequences of alcohol intoxication may not be exhausted in this discussion, but a fact

remains that alcohol could blue ones judgment and may lead to unintended sexual experiences.

Conclusion and Recommendations

Based on the findings of the study, the following conclusions were drawn:

1. A higher proportion of the students (70.7%) had experienced sexual contact making them sexually active.
2. Keeping multiple sex partners which is a prevalent behaviour among the adolescent is higher among students in the mixed schools.
3. Rural adolescents are involved in unprotected sex as 62.3% of them had sex without condom.
4. Alcohol use is prevalent among the rural adolescents as a total percentage of 43.6% of the students had used alcohol one or more times in their lifetime.

In-school rural adolescents exhibit HIV-related sexual behaviours

Following from the results of the study, the following recommendations were made:

1. A functional reproductive health education programme should be developed for secondary schools to provide necessary knowledge and skills needed for reproductive health promotion.
2. Frequent youth programmes at community level should be put in place and sustained. This will help to engage the youths meaningfully and serve as a means to cope with the identity crisis and developmental challenges associated with adolescence.
3. Parents should be encouraged by teachers to discuss sexuality and discourage alcohol use with their children.
4. Reconsideration should be given to establishment of co-educational schools.

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