

Evaluation of the Impact of Life-Planning Skills Training in the Harbin City Education System

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Executive Summary

Objective

The objective of this study was to assess the impact of the China Youth Reproductive Health (YRH) Project implementation in Harbin City, including (1) documenting cooperation with the Education Bureau and institutionalization of life-planning skills (LPS) training in schools; (2) documenting the process of facilitator training, the effect of the training, and the role of trained facilitators in the project; and (3) assessing the impact of LPS education on school students.

Methodology

The research started in late 2002 and concluded at the end of 2004. A qualitative and quantitative combined methodology was used, including interviews and focus group discussions, surveys, observation, and records review.

Results

(1) The Harbin YRH Project team focused on integrating LPS into the school education system. LPS has been included in the regular teaching plans in schools, and the foundation for institutionalization has been established with the cooperation between the Family Planning Association and the Education Bureau. (2) Seven training workshops were organized to train school teachers, research staff from the Educational Research Institute, project managers, family planning workers from the community and businesses, and physicians. Project staff trained 232 facilitators in the workshops. Participatory training methods were used and taught with positive results. (3) LPS training had a positive impact on participating students. They gained knowledge as well as skills to deal with adolescent sexual and reproductive health (ASRH) issues. After

training they showed more positive attitudes toward healthy, safe, and responsible behavior regarding sexual and reproductive health. However, some evaluation findings were mixed and unexpected, indicating areas for improvement of LPS implementation or further investigation.

Conclusion

The institutionalization of ASRH education has begun in schools. The cooperation among city family planning and education has been successful and effective. The LPS workshops to train facilitators have ensured qualified facilitators for project implementation. The Harbin Family Planning Association has support from the local government and a close collaboration with education sectors to promote institutionalization of the project.

Suggestions

Recommendations include increasing support to teachers to ensure they are able to cover and are comfortable with all LPS content, increasing the length of the course or adding more class time, and using multiple approaches to improve the training in the future.

Key words

Life-planning skills training, sustainability and institutionalization, school-based adolescent sexual and reproductive health education, China, Harbin, in-school youth

1. Background

1.1 Adolescent Sexual and Reproductive Health in China

In the last decade, adolescent sexual and reproductive health (ASRH) issues have gained significant attention globally. The transition from childhood to adulthood is recognized as a critical step that impacts a person's lifelong development. Many social, economic, biological, and demographic milestones take place during this time, all of which can directly affect adulthood. Adolescents' access to health care and education is a key factor that affects their later quality of life.

Demographic events that closely relate to reproductive health include menarche, first sexual intercourse, and first marriage. Research indicates that the average timing of these events in China has been changing over the last half century. Age of menarche has decreased from 15.8 years in the 1950s to 13.9 years in the 1980s. The rate decrease is larger among those who were born after 1970 (Wu et al. 2000). Meanwhile, the age of first marriage has increased from 22.0 years in 1990 to 23.6 years in 2000 (Guo 2004). There is also evidence that the age of sexual maturity has been decreasing since the late 1980s and that adolescents' interest in sex is increasing. With a longer opportunity for sexual activity before marriage, premarital sex has become more common. The increasing socio-biological gap due to early maturity and later marriage increases the need for appropriate ASRH education and services (Tu et al. 2002). Unfortunately, sexual and reproductive health education for adolescents has lagged behind.

Although the potential need for ASRH education and services is great, service providers and educators are not ready to meet that need. According to some surveys, service providers and school teachers were not aware of the need for ASRH information

and services, and some were even opposed to providing them. They also lack the knowledge and skills to provide the necessary ASRH support for youth (Tu et al. 2002, Zhou 2002, Liu and Xu 2001). The existing ASRH services and education, if available at all, do not meet the real needs of adolescents, and the current community does not view ASRH service provision to young unmarried clients favorably (YRH Project Team of CFPA 2002).

The situation is largely due to conservative social norms that dictate chastity until marriage and less open communication regarding sex. It is rare in China for parents to discuss sexual and reproductive health issues with their children. Therefore, sex education in school is one of young people's most important information sources. Yet, in-school ASRH education is not well developed in China. Nationwide, adolescent health education was put in the middle school curriculum in the 1980s, defined as sexual biology, sexual psychology, and social morals about sex. The actual content taught varies widely from school to school, and also varies from area to area. Most of the emphasis is on social mores rather than teaching skills that could prepare youth for the challenges, confusion, and problems they may face.

Both theory and evidence show that the best place and time to provide ASRH education to adolescents is in school, although there is still debate on when the education should start and what should be taught. Since the 1990s, efforts have been made by institutions and organizations for school-based education regarding sexuality and health to respond to the need. Examples include "girls' classes" and "boys' classes" in middle schools and "peer education" in colleges. However, the coverage of such activities has been too limited to meet adolescents' needs for reproductive health information.

More importantly, since most in-school activities have been project-oriented, there is no guarantee of time allotted, teacher availability, or sustainability after the end of the projects. Therefore institutionalization of ASRH education into school systems remains a big challenge to youth education promoters.

1.2 A Brief Introduction to the China Youth Reproductive Health Project

The China Family Planning Association (CFPA) and PATH are implementing an innovative ASRH initiative in China with support from the Bill & Melinda Gates Foundation. The China Youth Reproductive Health (YRH) Project began in April 2000 and ends in 2005. The project operates in 14 sites across 12 Chinese provinces. To reach the overall goal of improving ASRH, the project staff adopted a holistic strategy focused on a youth-development approach to providing life-planning skills (LPS) training to youth. Additional components of the project's strategy include policy and advocacy, youth-friendly services, monitoring and evaluation, media involvement, and informational materials. The objectives of the project include:

- Increasing adolescents' self-esteem, awareness of positive gender and human rights values, and safer sexual practices.
- Increasing adolescents' access to and utilization of high-quality sexual and reproductive health services and counseling (youth-friendly services).
- Creating a safe and supportive environment for programming at the national, community, and school levels.
- Improving the national-level response to ASRH issues by building the capacity of CFPA and other agencies to advocate for, plan, implement, and evaluate innovative health interventions for adolescents.

Harbin is one of the 15 sites of the China YRH Project.

1.3 Activities of the China YRH Project in Harbin

Harbin is the capital city of Heilongjiang Province, the most northern province in China. With a total population of 9.4 million in 2000, Harbin has about 668,000 youth between the ages of 10 and 24 in urban areas, and nearly 240,000 of them in primary or secondary schools. The Harbin Family Planning Association (FPA) identified school students as their most important target population for this project, particularly targeting secondary school students, as did many other project sites.

The project was implemented in two stages: first, the preparation stage, from March 2001 to March 2002, followed by the pilot stage, from March 2002 through 2005. The target population was youth aged 10 to 24, including school students, youth employed and unemployed, as well as migrant youth.

Project Initiation and Advocacy

To create an enabling social and policy environment to implement the project effectively, support from the local government is crucial. Harbin FPA communicated with leaders of relevant departments of city government to introduce the project and discuss the strategy, and a city leadership group for the China YRH Project was established with leaders from multiple sectors of government.

Education materials of different formats were developed and distributed to reinforce messages and give youth additional information. The content covers knowledge related to contraception, condoms, sexually transmitted infection and HIV/AIDS, and drug abuse.

To better inform the public about the project, staff organized a launch meeting for the project, including a news release picked up by all major local media. Site meetings, seminars, and workshops were organized to train facilitators,

exchange experiences, and discuss project implementation strategies. Sexual health education and psychology professors and experts gave lectures on sexual health and physical and psychological development for youth.

The project activities were publicized well in local television and newspapers. From 2002 to 2004, there were 14 reports on project activities in local newspapers and 13 reports on local TV programs. *China Population News* reported the Harbin project activity with the title of "Youth Health—A Government's Response." The YRH Project Office also edited and distributed news briefs about the project process.

Publicity campaigns in a variety of formats—including organizing seminars and distributing flyers and pamphlets about ASRH—were carried out in urban districts and rural counties of Harbin. One business company organized a large evening entertainment event, "Oasis of Life," to publicize the China YRH Project.

Training and Curriculum Development

The pilot activity was divided into three phases: the first phase was carried out in schools, the second in communities, and the third in rural areas. In 2002, the project activity was carried out in nine schools; all LPS teachers from the nine pilot schools participated in project training for facilitators. The trainings were jointly organized by the Harbin FPA and Education Bureau (EB) with technical and financial support from CFPA and PATH. The Harbin FPA provided 100,000 RMB Yuan to EB for training, and EB input 100,000 Yuan in matching funds.

The training materials were mainly drawn from the training manual developed by CFPA and PATH, *A Path to Growth* (Cheng Zhang Zhi Dao). Teaching plans were developed to fit different schools, such as junior and senior high schools and vocational schools. Supplemental

teaching and reference materials were also selected or developed. Scholars from the Harbin Educational Research Institute worked with teachers from the pilot schools to publish teaching plans for LPS training for the different types of schools.

Each of the nine pilot schools developed specific implementation plans for LPS training, identified grades and classes for testing the curriculum in the pilot phase, and arranged the course schedule. In most schools, all students in one grade participated in LPS. In 2002, all pilot schools implemented LPS as planned, in nine 45-minute sessions. The training was carried out in 147 classes with 7,986 students.

Building on pilot schools' experiences, LPS was introduced to 16 more schools in 2003. There are now 30 schools involved in the project.

In addition, the project carried out activities to reach a broader target population, and to create a favorable social environment for the healthy development of adolescents with phases two and three of the pilot. This paper focuses only on the first stage—in schools.

2. Objectives and Methods of the Evaluation

One year after the project started in Harbin, an evaluation on the impact of the project was initiated to:

- Document collaboration with the EB and institutionalization of LPS training in schools.
- Document the process of facilitator training, the effect of the training, and the role of trained facilitators in the project.
- Assess the impact of LPS education on school students.

The research team was led by researchers from the Educational Research Institute of Harbin Normal University with technical assistance from the Institute of Population and Labor Economics at the Chinese Academy of Social Sciences (CASS). The research started in late 2002 and concluded at the end of 2004.

2.1 Evaluation Design

The methodology used to evaluate the first and second objectives was mainly qualitative: documenting existing records and reports—such as project activity records, related documents, specific activity arrangements, and education curriculum—and interviewing relevant informants, including leaders from the Harbin EB and FPA, school principals and teachers, and trainers and trainees of the LPS facilitation workshops. The interviews traced the process of collaboration, the initial opinion and attitudes toward ASRH education in school, the coordinated work that was done, the success stories, as well as the lessons learned.

The evaluation team observed facilitator training activities, visited participating schools, and observed student training activities in schools.

Quantitative methodology with a pre-designed questionnaire was used to assess the changes in students' knowledge, attitudes, and behaviors. Focus group discussions with students who received training and interviews with teachers were also used as a way to better understand the impact.

The survey took place in schools with intervention and schools without intervention, to make two groups, "intervention" and "control." The respondents were first-year students in senior high school (equivalent to grade 10 in the United States, ages 15 to 16) at the time of training.

Three surveys were carried out to collect information—before the intervention, shortly after the intervention, and three months after the intervention—to observe the immediate impact and sustained impact after a period of time, with other external factors controlled. The data collection design is shown in Table 2-1.

The main purpose of focus group discussions with students was to collect information difficult to obtain with a structured tool, such as descriptions of events, opinions, and feelings.

Focus groups were organized after each survey with eight student participants, to better understand the impact of the LPS education and to assist with survey result interpretation.

Table 2-1. Data Collection Design for Student Survey

	Baseline March 2003	March-July 2003	Post-test July 2003	Follow-up October 2003
Intervention group	O ₁	Intervention	O_2	O_3
Control group	$O_{_1}$		O ₂ '	O_3

2.2 Sampling and Data Collection

Cluster sampling with the whole class as the cluster in selected schools was used. All students from the selected classes were voluntarily recruited to participate in the survey.

Schools were selected purposively, based on school features. There were four intervention schools (Middle School of Harbin Institute of Technology, No. 19 and No. 73 Middle School of Nangang District, Physical Education School of Daowai District) and two control schools (No. 5 of Daoli District and No. 4 of Daowai District). The criteria for selection were that the school be among the middle-ranked schools, and that the class selected not be the experimental class (which usually recruits top-ranked students) in the grade. The characteristics of control schools were similar to those of intervention schools in ranking and type of surrounding neighborhood.

The sample size was 800 (400 in each group). There are generally about 50 students in each class; therefore, two classes were selected from each intervention school and four classes were selected from each control school.

Focus group discussions took place only in intervention schools. Teachers familiar with the students suggested the participants. There was one focus group discussion in each school, with eight participants in each group.

Students anonymously completed a computerized questionnaire to better ensure confidentiality and hence improve validity and reliability of the information collected.¹ The questionnaire mainly contained multiple-choice questions. In addition to ensuring confidentiality, the computerized questionnaire was used to make students feel more

comfortable when responding to sensitive questions. The programming included range check and missing value check to quality check entries and prevent too many missing values or typing errors. The answers were stored as an ASCII data set and were later merged together for data cleaning and processing. At least two research assistants were trained to assist students during each survey by clarifying questions and solving computer problems.

An English translation of the questionnaire is provided as Appendix 1.

Data Process and Analysis

Students entered data into computers as they selected responses. The response rate was high, with cooperation of respondents and good quality control in the field. For the quantitative data, all comparative analysis was tested for significance by SPSS 10.0.

The records from focus group discussions were entered into computers, sorted, and summarized for analysis. From the qualitative information we can gain a better understanding of students' feelings and compare for any changes after the training.

¹ All schools involved in the evaluation had computer labs, allowing classes of students to use computers at the same time.

3. Main Findings—Institutionalization of the Project

With nearly 240,000 adolescents in primary and secondary school, LPS education in schools was identified as the focus of the YRH Project in Harbin. For LPS training to be standardized and sustainable, effort has been made from the beginning to include LPS as part of regular teaching plans in schools and to treat it as a normal course, that is, to institutionalize the LPS activities.

A special Project Office with government leadership was set up to coordinate the project activities. The group leader was the vice-mayor of Harbin, and the chairperson of Harbin FPA was the deputy leader of the group. The members of the leadership group came from various sectors: department of education, public security, finance, public health, population and family planning, industry and business, as well as from major nongovernmental organizations such as the Trade Union, the Youth League, and the Women's Federation. Each department or organization had clearly defined responsibilities for the project implementation. The City Government distributed the "Work Plan of Harbin Youth Health Education," and provided matching financial support for the project; 350,000 Yuan each year—a total of 1.4 million Yuan—has been provided to date (see Table 3-1).

With the coordination of the city government, the Harbin FPA and EB reached an agreement to introduce LPS training (with curriculum provided by the project) into the regular school course schedule and curriculum. The activity has been integrated into courses of health, social and moral, and physical education in primary schools, and into courses of health, psychology, biology, political science, and physical education in middle schools. The classes are taught once every two weeks by teachers who have received project facilitation training.

Teachers who received project LPS facilitation training combined LPS training content and methods into regular school activities to make them more interesting. For example, in No. 73 Middle School, special seminars, group discussions, and entertainment activities were organized in place of class teaching. Students who participated in LPS training published their own posters and newsletters. Teachers kept health records for students and set up a room for counseling with colorful and friendly decorations and ASRH informational materials. The school also set up a mailbox for anonymous questions from students who prefer not to have face-to-face counseling (answers are posted on a nearby bulletin board). All pilot schools have organized theme meetings, parent meetings, student and teacher group discussions, and seminars. Other activities included school radio broadcast and cable TV programs, homepages on the Internet, and cards/bookmarks related to the YRH Project activity.

In early 2002, the pilot started in nine schools (three junior middle schools, three senior high

Table 3-1. Financial Support for YRH Project in Harbin (in RMB, 1,000 Yuan)

Source	2001	2002	2003	2004	Total
Project funds from CFPA	400	400	400	400	1,600
Matching funds from city government	350	350	350	350	1,400
Total	750	750	750	750	3,000

schools, and three occupational high schools) among first- and second-grade students in the schools. To ensure the implementation of the pilot project and the scaling up, the Harbin FPA and EB signed an agreement in 2002 that clearly defined the responsibilities of both parties. The Harbin FPA provides training resources, education materials, funding for activities, and technical assistance for the implementation; the EB provides matching funds for the activities and is responsible for organizing and implementing the activities in schools.

The Harbin EB also included the YRH work in schools to provide reproductive health education as one of the city's key research projects, involving all pilot schools. In September of 2002, the City of Harbin included the YRH Project as one of the city's ten key projects.

Harbin FPA not only cooperated with EB to create a favorable environment for ASRH education but also trained a team of trainers for all pilot schools, hence making possible the implementation and sustainability of the project activity.

The activity has extended to 30 schools, now including primary schools. Numbers of students reached by the project activities are shown in Table 3.2. The Harbin EB has decided that the YRH education should be continued after the end of the project. To ensure continuation after the end of project, the EB requested that each participating school have a budget for the YRH training activity.

Training LPS facilitators is one of the fundamental tasks of the YRH Project. The Harbin FPA organized seven training workshops from 2002 to 2004 for 232 participants (see Table 4-1).

Table 3-2. Students Involved After Scale-Up in 2004

School	Grade	Number of classes	Number of students
Primary	5^{th}	32	1,600
Middle	2^{nd}	72	40,000
Senior high	$1^{st} \ \& \ 2^{nd}$	76	3,800
Vocational	$1^{st} \ \& \ 2^{nd}$	64	2,500

4. The Main Findings—LPS Facilitator Training

Participatory approaches were used for all trainings. The training content includes understanding adolescence, HIV/AIDS prevention, values, behavior change, participatory training, facilitating skills, introduction of LPS curriculum, and LPS facilitation practice.

In December 2002, the evaluation team participated in the facilitation training. The total training time was 35 hours, and the training content was as listed above, with a focus on participatory training design. We observed that participants were very involved, and they gained not only a better understanding of the training content, but also became very creative in designing participatory training models. The training used participatory approaches which enabled the school teachers to practice and understand

the usefulness of the methods for engaging students.

To assess the effect of the facilitators' training, the research team visited nine schools² to evaluate project activities by observing training sessions. The team agreed that the trainings were well prepared, the contents were correctly taught, and the approach was creative and flexible. Students were very involved. The team believed that the training was very effective.

The impact evaluation of student training was based mainly on survey results, as well as some findings from focus group discussions with students.

Table 4-1. Training Sessions and Participants, 2002–2004

Session	Date	Participants	No. persons
1	March 2002	School teacher, school doctor	32
2	May 2002	Project manager, family planning worker, community leader, medical doctor, teacher	32
3	October 2002	County and community staff, medical doctor, school teacher	32
4	December 2002	School teacher, school doctor, youth leader, school vice-principal	41
5	November 2003	School teacher, school doctor	32
6	December 2003	Community staff, medical doctor, school teacher	31
7	August 2004	Community staff, medical doctor, school teacher	32
	Total number of parti	cipants	232

² The nine schools were No. 18, 156, 44, 76, 36, 13, and 73 Middle Schools; Xuanqing Middle School; and No. 20 Vocational School.

5. The Main Findings—Impact of Student Training

5.1 Background Characteristics of the Survey Respondents

As mentioned in Section 2, the survey sampling was clustered. Six high schools from Nangang and Daowai Districts were selected—four as the intervention group and two as the control group. Two classes in each intervention school and four classes in each control school were randomly selected, and all students in the class attending school at the time of the survey filled out the questionnaire on the computer. All students were in the first grade of high school at the time of baseline survey (equivalent to U.S. grade 10). All students were surveyed three times with the same instrument. However, there was one exception with the control group. Since one school was relocated and combined with other schools, the control school had to change to another one with similar characteristics. Therefore about half of the control group students changed for posttest and follow-up surveys. Because of the similarities among the students, this was not viewed as a significant concern; however, it may have, in some way, affected some of the results of our evaluations regarding tested effects. Results are described carefully to not overstate significance. Researchers tried to control for possible effects brought on by the sample change.

Table 5-1 shows the sample size and response rate for each of the three surveys. The average age of respondents was 16.2; about 70 percent are 16 years old.

Table 5-1. Total Sample Size, Response Rate, and Composition

			Percentage of	•
Survey		Response Rate (%)	intervention group	Percentage of girls
Baseline	765	95.6	51.6	54.2
Post-test	713	89.2	43.5	57.1
Follow-up	793	99.1	52.2	44.9

Family

The study found that the parents of the intervention group had attained higher education levels than the control group parents (Table 5-2), and more parents of the intervention group students were technical professionals, managers, or government employees; the proportion of retired or unemployed is significantly higher in the control group (Table 5-3). The difference in the parents' background might affect the students' behavior and may have an effect on the training results. Therefore the background information

Table 5-2. Educational Levels of Parents (%)

	Inter	vention	Control		
Education	Father	Mother	Father	Mother	
Illiterate	0.5	1.8	0.5	1.4	
Primary	7.6	8.1	3.5	3.5	
Middle school	23.8	19.2	32.7	28.6	
High school	46.1	51.4	50.3	55.9	
College and above	20.8	14.7	11.9	7.0	
Other	1.3	4.8	1.1	3.5	

Table 5-3. Occupation of Parents (%)

Intervention			Co	ntrol
Occupation	Father	Mother	Father	Mother
Technical	6.1	5.3	4.3	3.0
Manager	8.9	5.6	7.3	3.5
Government employee	14.2	10.9	8.4	9.2
Self- employed	9.9	9.1	11.4	13.0
Commercial/ service	2.3	5.6	3.0	8.4
Worker	27.1	23.0	34.3	25.9
Farmer	10.9	11.6	2.2	1.6
Unemployed/ retired	10.1	14.9	18.9	27.0
Other	10.6	10.6	10.0	5.4

Table 5-4. Family Economic Status, Baseline (%)

	Intervention	Control
Family economic situation		
Well off	3.5	1.9
Above average	23.8	20.3
Average	63.0	65.7
Below average	6.1	8.6
Well below average	3.5	3.5
Student has own room	75.9	75.4

of students was compared and controlled for in analysis to check for any differences that could be caused by parents' background.

Compared to their neighbors, 23 percent reported that their family economic situation was better off, and 63 percent reported it was about average. Families reported as very rich and very poor were few. Most students live with their parents and have their own room in the home. There was no significant difference between the family economic status between intervention and control group students.

Lifestyles

Lifestyles as reported by students seem quite healthy—only 16.6 percent of students reported that they had ever smoked (Table 5-5).

More than half of surveyed students have been to a KTV, café, or Internet café in the last 3 months, and most of them went with friends of the same sex (Table 5-5). The proportion going out with friends of a different sex was small. In the follow-up survey, in the intervention group the percentage of those going to the movies with friends of a different sex increased to 21.2 percent; however, the cause of that change is not clear.

Leisure time activities were mainly reading, going to the movies, surfing on the Internet, exercising, and taking a walk. There was a gap found between actual leisure activity and desired activity (Table 5-6). Students in both

Table 5-5. Information Related to Lifestyle, Baseline (%)

	Intervention	Control
Have ever smoked	15.5	17.8
Have been in a KTV, café, or Internet café in the last 3 months	55.7	61.4
Alone	12.7	12.8
With relatives	6.4	3.5
With friends of same sex	43.2	47.6
With friends of different sex	1.8	2.2
With many friends of both sexes	34.1	31.3
Went to the movies in the last 3 months	35.2	34.1
Alone	9.4	6.3
With parents	10.8	8.7
With relatives	12.2	8.7
With friends of same sex	25.9	33.3
With friends of different sex	10.1	13.5
With many friends of both sexes	26.6	27.8

intervention and control groups desired to spend more time exercising and playing with friends. The difference between actual and desired activities was consistent across the three surveys.

Communication

Table 5-7 lists responses regarding communication. Most respondents believed that it was not difficult to discuss school issues with parents; only 17.6 percent replied that it was difficult or very difficult. The first person students discuss important issues with is their mother (41.7%); the next is a classmate or friend (32.4%). There was no significant difference between answers of students in the two groups regarding communication questions, and there was no significant difference between boys and girls.

Table 5-7 shows that students did not often discuss sex with parents, siblings or cousins,

Table 5-6. Leisure Activities, Baseline (%)

	Actu	ıal	Desir	red
	Intervention	Control	Intervention	Control
Attend after-school class	38.0	36.5	28.4	18.9
Physical exercise	38.5	40.0	63.3	57.6
Read	65.1	59.2	63.3	53.5
On Internet	39.0	44.6	46.8	52.2
Do chores at home	24.6	27.8	18.7	18.9
Play with friends	43.8	46.5	60.5	55.7
Take a walk	34.2	36.5	29.6	34.9
Go to the movies/watch TV	59.7	60.8	54.2	52.4
Other	26.6	26.8	23.8	27.0

Table 5-7. Responses Regarding Communication From the Three Surveys (%)

	Baseline		End	lline	Follo	w-up
	I	C	I	C	I	C
Not difficult to discuss school issues with parents	83.5	81.1	76.8	79.9	75.4	79.6
First person to talk to about important issues						
Father	14.2	11.4	7.7	12.4	8.0	10
Mother	41.5	41.9	37.4	40.7	34.5	39.6
Friends	30.4	34.6	41.9	36.0	37.4	36.7
Discuss sex-related issues with parents (significantly fewer students think it is difficult after training, p=.015)						
Very easy/easy	18.2	19.5	17.7	17.9	20.8	15.5
Average	21.0	24.3	28.7	22.1	27.1	24.8
Difficult	22.8	19.5	17.7	21.8	14.7	20.8
Not applicable	19.2	21.1	17.1	22.3	22.9	21.6
Parents' attitude toward premarital sex:						
Very conservative	25.6	19.7	18.1	19.6	20.0	12.9
Don't know	32.7	38.9	32.6	34.0	30.2	39.6
Discussed with parents everything about own sexual development	11.4	11.4	12.9	9.4	10.6	10.3
Never discussed anything with parents about own sexual development	40.8	38.6	32.9	39.2	31.6	40.1
Discussed sex issues with siblings	24.3	18.1	25.2	21.6	25.4	24.5
Never discussed sex issues with siblings	68.1	71.1	59.7	66.3	57.7	61.5
Discussed sex issues with friends	22.8	25.4	26.1	19.6	31.2	17.4
First one to talk to about sexual concerns:						
Friend of same sex	28.9	31.1	35.8	30.8	35.0	32.2
Does not tell anyone	25.1	20.5	13.9	14.6	13.0	14.5
Mother	22.3	25.4	23.5	27.3	18.8	22.4

Table 5-8. Parents' Interest Over the Last 12 Months (%)

				Father						Mother		
Interested	Base	eline	End	lline	Follo	w-up	Base	eline	Endline		Follow-up	
in:	I	C	I	C	I	C	I	C	I	C	I	C
Music/TV	38.5	41.6	42.6	39.0	42.3	42.0	58.7	59.5	61.0	55.8	56.0	57.5
Dress/ hairstyle	52.4	54.1	53.9	51.1	51.4	51.7	79.7	80.5	78.4	75.9	72.9	72.0
Books/ magazines	48.6	45.9	52.3	43.7	49.3	50.4	60.8	64.9	64.8	58.8	63.3	61.7
Manners	75.7	79.5	72.3	75.4	70.8	74.4	85.1	86.5	82.3	83.6	78.7	84.2
Habits	68.9	68.4	70.3	74.4	70.0	68.9	76.5	76.2	84.2	82.6	80.0	76.5
Friends of same sex	45.6	52.2	51.9	51.4	51.4	47.2	64.6	70.3	74.8	70.2	64.7	62.0
Friends of opposite sex	46.1	49.7	52.9	49.9	49.3	48.8	63.3	63.8	73.9	64.0	65.7	59.1
Academics	84.6	90.0	85.2	87.3	82.1	87.3	93.9	94.1	94.5	94.3	91.3	92.9
Future career	69.4	70.8	67.1	71.5	70	67.5	78.0	79.5	80.0	78.7	75.8	74.4

Table 5-9. Response on Self-Esteem Items (%)

	Base	eline	End	line	Follov	w-up
	I	C	I	C	I	C
Feel the statement fits well						
Well-received and respected	24.1	14.9	29.7	24.1	30.0*	23.2
As important to my family as other members	82.3	80.3	78.1	84.1	74.4	81.8
Always make myself happy	31.6	29.5	34.2	29.0	33.1*	28.5
Know my weaknesses and know how to deal with them	31.9	29.7	31.6	37.2	31.6	29.0
Quite sure of what kind of person I will be	30.9	31.9	31.3	36.2	30.0	25.1
Capable of doing many things	22.8	15.9	28.1	24.8	27.1*	22.4
Feel the statement does not fit at all						
Not sure how to feel proud of myself	63.5	62.4	65.3	69.2	56.8*	66.0
Not satisfied with relationships with others surrounding me	43.5	41.9	43.9	49.4	43.2	46.2
Many things I do are not meaningful	48.4	50.3	49.0	56.8	45.9*	53.0
I am a failure in many senses	47.8	47.3	50.0	55.6	49.0*	56.5

I-Intervention C-Control

*Significantly different from control group in follow-up survey at 0.05 significance level.

classmates, or friends. However, nearly onethird of respondents said that they would discuss concerns about sex with a friend of the same sex, a higher proportion than for discussing with mothers (see Table 5-7).

Most students believe that parents have shown interest in their school scores, manners, future career, and habits such as smoking and drinking. More students believed that their mother had paid attention to their personal life, grades, and their future career. The changes over time in percentage are not significant for the intervention or control group, except for changes in the mother's interest towards the child's making friends.

Self-Esteem

An important component of LPS training is to encourage a positive self-image; Table 5-9 lists related results from the three surveys. The proportions of positive feelings are very close between the intervention and control groups, except for a few items where the intervention group had more positive feelings (feeling well received and respected, feeling capable of doing many things).

Making Friends and Dating

Dating is not rare among first-year high school students. About two percent of respondents said that no youth their age are dating (see Table 5-10). About 18 percent said that most of their close friends are of a different sex. A majority said that having the same interests is the reason for being friends.

5.2 Knowledge About Adolescent Development

Although there are biology and physiology classes in middle school as well as in high school, topics related to adolescents' growth and changes are not usually discussed. The survey showed mixed results for knowledge about development with some significant changes at endline and follow-up (Table 5-11).

Most of the respondents were knowledgeable about some general issues—for example, that people develop at different ages and that both girls and boys should be aware of hygiene. The effect of training seems mixed, and a clear pattern is not observable. Further analysis found that boys and girls differ in their knowledge in some areas (e.g., wet dreams), and the difference remained after training. This result may indicate inconsistent coverage of training materials related to some important messages.

5.3 Knowledge About Reproduction and Contraception

Compared to knowledge of adolescent development, baseline survey results show that knowledge about reproduction and contraception are poorer among all respondents. The improvement in knowledge was significant right after the training, with a slight drop back after three months (see Table 5-12). There was a larger proportion responding "don't know" in the control group across all three surveys, implying that the changes among the intervention group were due to LPS training. After training, the students should be more aware of the possibility of a girl becoming pregnant. However, there is still some confusion in knowledge about reproduction. For example, the proportion of students agreeing with the statement "Infrequent intercourse cannot cause a girl to become pregnant" increased after training in the intervention group—which is obviously a misunderstanding. It is notable that the percentages giving the right response for some items are less than 50 in the intervention group, implying a need for improvement in the quality of intervention activities. It also raises the question as to whether the complete package of messages has been delivered during the training.

The survey results show that although students had some knowledge about contraceptives at the baseline survey, students in the intervention group had significant knowledge gains after participating in the training. For example, the percentage who had heard of withdrawal, rhythm, and emergency contraception increased significantly at the last two surveys, while remaining almost the same for the control group (Table 5-13).

The knowledge about using condoms correctly also improved significantly (Table 5-14). Since

such information is not taught or mentioned publicly elsewhere, the knowledge gain can be attributed to LPS training. However, there must be some incomplete or wrong information delivered during the training, since the proportion choosing "Wash condom completely after use and keep for reuse" as a correct answer increased in the intervention group.

Table 5-10. Making Friends and Dating Among Youth of Same Age (%)

	Base	eline	Enc	dline	Follo	w-up
	I	C	I	С	I	C
As far as you know, how many youth your age are dating?						
Most	24.3	23.5	22.6	21.6	21.5	15.8
About half	36.5	42.2	34.5	30.8	36.5	32.2
Fewer than half	31.4	28.4	34.5	39.5	31.4	41.7
None	1.3	2.2	1.6	2.2	4.8	3.4
Do not know	6.6	3.8	6.8	6.0	5.8	6.9
How many youth your age do you know who are dating?						
Most	15.4	14.3	17.1	13.2	15.7	10.0
About half	25.1	28.6	29.4	25.3	31.2	24.3
Fewer than half	49.6	45.4	43.2	47.9	40.6	50.1
None	6.3	8.4	3.9	7.9	6.0	7.1
Do not know	3.5	3.2	6.5	5.7	6.5	8.4
Most of your friends are:						
Of same sex	82.0	81.4	81.6	84.6	77.3	82.8
Of different sex	18.0	18.4	18.4	15.4	22.7	16.9
The reason for making friends						
Good grades	25.6	24.9	29.0	27.5	28.0	29.6
Class leader	1.5	4.1	5.8	4.7	6.5	4.0
Have same interest	84.3	82.2	84.8	82.4	77.5	83.6
Talented	39.0	28.1	40.6	38.2	39.4	35.9
Live close by	23.5	26.5	25.2	24.6	24.2	26.9
Friendly/loyal	56.7	52.4	48.4	49.1	48.1	51.2
Can help me	48.1	46.8	50.0	48.4	44.0	44.1

Table 5-11. Knowledge About Development (% Agreeing With Statement)

	Baseline		End	lline	Follo	w-up
	I	С	I	C	I	C
Wet dreams are normal for a boy who has entered puberty.	84.3	73.0	84.2	75.7	81.6	79.9
Only boys masturbate.	6.8	9.2	8.4	8.9	11.8	12.4
Even casual masturbation leads to sexual dysfunction in later life.	12.2	10.0	14.8	15.4	15.7	15.0
Boys and girls enter puberty at the same time.	9.9	13.0	10.0	7.7	13.8.	14.0
Adolescent development differs by person.	98.2	93.2	93.9	91.3	87.2	90.0
A girl can shower during her period.	41.8	35.9	50.6	41.2	45.2	34.3
Both boys and girls should care about reproductive hygiene.	95.7	91.9	94.8	92.6	87.9	90.8

Table 5-12. Knowledge Related to Reproduction and Sexual Contact (% Agreeing With Statement)*

	Baseline		End	lline	Follo	w-up
	I	C	I	C	I	C
A girl is fertile after she has had her period.	50.4	43.8	63.9	40.4	59.2	40.4
A girl can become pregnant the first time she has sexual intercourse if she has already had her period.	34.9	28.1	48.4	27.3	46.9	28.0
A girl stops growing after she has intercourse for the first time.	5.3	5.1	9.7	5.0	11.4	5.0
A girl can only get pregnant during those days in the middle of her menstrual cycle.	12.7	11.4	22.9	10.2	24.4	14.2
Infrequent intercourse cannot cause a girl to become pregnant even if she has started menstruation.	17.5	14.6	22.9	13.2	21.5	16.9
A boy who has experienced wet dreams can make a girl pregnant the first time he has sexual intercourse.	34.4	30.5	51.0	23.8	49.3	28.0
A girl can avoid pregnancy by urinating or washing her genitals immediately after intercourse.	8.4	7.8	15.8	7.9	18.6	7.7

I-Intervention C-Control

^{*} The differences are significant for all items between intervention and control group at the follow-up survey (p<.0005) and endline survey. The changes are significant for all items at the endline survey and follow-up survey for the intervention group (with an increased percentage of agreement). None of the group differences is significant for all items at the baseline survey.

Table 5-13. Knowledge About Contraceptives (%)

	Bas	eline	Enc	lline	Follo	w-up
	I	C	I	C	I	C
Withdrawal:						
Ever heard of	36.2	29.5	50.0	25.1	49.5	25.6
Good effectiveness	10.9	9.2	13.2	6.7	17.9	12.1
Can prevent STI/AIDS	7.8	7.0	8.7	6.2	13.3	6.6
Rhythm:						
Ever heard of	36.7	34.6	50.3	26.6	48.6	29.0
Good effectiveness	12.2	8.6	18.7	10.9	17.9	15.3
Can prevent STI/AIDS	4.6	3.5	8.1	5.0	10.9	8.2
Oral contraceptive pills:						
Ever heard of	83.8	78.1	83.5	73.7	76.6	69.1
Good effectiveness	22.0	21.6	34.2	21.1	31.9	26.1
Can prevent STI/AIDS	7.6	7.0	8.4	8.2	9.4	11.9
Condoms:						
Ever heard of	88.6	84.6	87.4	77.4	84.1	78.1
Good effectiveness	41.5	35.7	61.6	34.0	56.8	40.1
Can prevent STI/AIDS	40.5	33.8	57.1	33.0	55.3	41.2
Foams:						
Ever heard of	39.2	37.8	53.5	31.8	50.0	33.5
Good effectiveness	14.9	14.6	29.7	13.4	26.1	18.2
Can prevent STI/AIDS	9.9	8.1	16.8	8.7	17.9	12.7
Emergency contraception:						
Ever heard of	25.6	23.0	45.5	20.6	39.1	20.8
Good effectiveness	3.5	4.3	8.1	4.2	10.1	6.9
Can prevent STI/AIDS	3.0	3.2	5.8	3.0	7.0	5.5

Table 5-14. Knowledge About Using Condoms Correctly (%)*

	Baseline		End	lline	Follo	w-up
	I	C	I	C	I	C
Use good brand and high-quality condom.	59.7	57.8	73.9	56.1	65.9	51.5
Check the manufacture date and expiry date.	70.1	63.2	79.7	65.0	72.5	55.9
Check the pack and make sure that the condom is not damaged.	71.6	64.1	80.0	66.3	75.6	59.4
Wash condom completely after use and keep for reuse.	4.1	3.8	11.6	9.4	15.0	10.8
Put condom on penis and push out the air from the front tip.	27.1	20.0	42.3	29.0	44.9	31.1
Pull penis and condom out of vagina immediately after ejaculation.	28.9	26.8	41.3	27.3	43.5	33.0

^{*}The differences are significant in all items between intervention and control group at the follow-up survey (p<.0005).

5.4 Knowledge About STIs and HIV/AIDS

Most respondents had some knowledge about STIs and HIV/AIDS; about 90 percent of students in the baseline survey had heard about STIs. They also had some knowledge of prevention, but it was incomplete. For example, about 37 percent of intervention group students believed that "STIs may interfere with a woman's fecundity in later life," and the percentage increased to 53 percent after intervention. Also, after training, more students from the intervention group knew that the statement "If a person is infected with STIs, he/she surely will have noticeable symptoms" was not correct (see Table 5-15). The increase after training and the difference between intervention and control groups are significant for both items (p<.0005). However, students still seemed confused about whether or not sharing washing utensils and sharing toilets can transmit STIs.

Baseline survey results show that most students had heard about HIV/AIDS, and they were also knowledgeable about HIV/AIDS transmission

through sexual intercourse. After training, more students in the intervention group knew more details about possible risk behaviors. For statements such as "A person can contract HIV from having sexual intercourse even once," the positive response from the intervention group at the endline survey was about 54 percent, which is 11 percentage points higher than that of the baseline survey, and although it dropped slightly in the follow-up survey, the positive response was about 12 percentage points higher than that of the control group (Table 5-16). However, it was again surprising to find that a large percentage (almost 70%) of students in both the intervention and control groups believed that insect bites can transmit HIV/AIDS. Although the proportion dropped 10 percentage points after training took place, it was still quite high (55.5%).

5.5 Attitudes and Skills

Another important part of LPS training is to have a positive attitude toward the period of adolescence. Students who participated in LPS training had a better understanding about the stages one experiences during development,

Table 5-15. Knowledge About STI Prevention (% of Positive Response)

	Baseline		End	lline	Follo	w-up
	I	C	I	C	I	C
Ever heard of STIs	90.9	89.5	96.5	88.8	89.1	87.3
Activities that can transmit STIs:						
Sexual intercourse	87.3	81.9	91.9	81.4	83.3	78.9
Kissing	18.5	25.1	22.6	19.9	20.8	22.4
Shaking hands	4.3	6.2	7.7	4.7	8.9	4.7
Hugging	3.0	3.2	5.5	3.0	7.7	4.7
Sharing towels or washing utensils	29.6	36.2	46.1	34.7	39.4	32.7
Sharing toilet	48.9	40.0	63.5	40.9	52.9	35.9
A person with an STI may not have noticeable symptoms	38.0	28.1	56.8	33.0	49.5	31.4
STIs may interfere with a woman's fecundity in later life	37.5	30.5	52.9	32.5	46.6	35.4

and they had more positive attitudes toward the dreams and fantasies one may have (Table 5-17). Compared to the intervention group, a large proportion of respondents from the control group continued to respond "don't know" to questions regarding these issues.

The changes over three surveys about students' attitudes toward dating and sexual behavior do not have any clear direction and pattern. The only item showing a significant increase in positive responses is "I would use appropriate contraceptives if I had sexual intercourse," demonstrating increased awareness of safe sex among intervention students. Table 5-18 lists the results.

Table 5-19 shows the changes in attitudes toward condom use. Some attitudes changed more significantly than others. Unfortunately, a significant increase of agreement with the statement "A girl would make her boyfriend unhappy if she insisted on him using a condom" as well as for "If your partner does not want to use a condom, you can do nothing to change his/her mind" was found for both intervention and control groups. More positively, both groups showed significant decrease in agreement with the statement "It is embarrassing for people of my age to purchase condoms"—from 76 to 54 percent for the intervention group and from 67 to 56 for the control group. Finally, while there were no significant changes for the control group, the intervention group had significant changes in

Table 5-16. Knowledge About HIV/AIDS Prevention (% of Positive Response)

	Base	eline	End	lline	Follo	w-up
	I	C	I	C	I	C
HIV infection is equal to AIDS.	12.7	13.8	16.1	11.7	14.7	16.6
A person can contract HIV from having sexual intercourse even once.*	42.8	40.8	53.9	41.6	49.5	37.7
A teenager may become infected with HIV even when he/she has sex for the first time.*	54.7	45.9	64.2	49.6	60.4	43.0
HIV/AIDS can be prevented.	62.8	57.0	65.8	64.5	58.7	53.0
Behaviors that can transmit HIV/AIDS:						
Shaking hands or hugging	5.8	5.1	5.5	6.0	11.4	6.9
Kissing	34.7	35.7	25.5	33.5	30.0	30.9
Sexual intercourse	93.9	91.4	93.9	91.3	90.3	85.8
Sharing bathroom and swimming pool	51.4	40.3	51.0	40.2	45.2	41.4
Insect bites	66.3	69.5	55.5	68.2	59.4	66.0
Sharing telephone	5.6	5.4	6.5	8.2	12.3	10.8
Blood transfusion	96.7	93.5	94.8	95.3	91.8	90.8
Eating together	29.9	35.1	21.6	28.5	26.6	33.2
Sharing needles	94.2	93.0	92.6	91.1	92.3	90.8

I-Intervention C-Control

^{*}Significant at .001 level compared with control group at the follow-up survey, and also a significant increase from baseline to endline.

Table 5-17. Attitudes Toward Adolescent Development Issues (% Agreeing With Statement)

	Baseline		End	lline	Follow-up	
	I	C	I	C	I	C
It is natural for a boy of my age to have sexual dreams.	67.3	55.7	71.0	52.4	72.0*	60.9
It is natural for a girl of my age to have sexual dreams.	59.7	48.1	64.2	47.4	68.1*	52.8
It is natural for a boy of my age to fantasize about sex.	68.4	60.5	68.1	58.3	70.5**	62.0
It is natural for a girl of my age to fantasize about sex.	60.3	52.4	64.8	49.4	65.2**	56.2
It is okay for a boy of my age to masturbate.	35.4	33.5	49.7	30.5	52.4*	38.8
It is okay for a girl of my age to masturbate.	29.9	25.4	43.5	24.3	48.6*	31.9
It is natural for people at my age to have interest in pornographic materials.	33.9	35.7	41.9	29.5	47.3*	36.9

I-Intervention C-Control

Table 5-18. Attitudes Toward Sexual Relationships and Safe Sex (% Agreeing With Statement)

	Base	eline	End	lline	Follo	ow-up
	I	C	I	C	I	C
It is okay for people of my age to date if it does not interfere with their studies.	53.7	48.6	48.4	45.4	48.3	48.5
When people my age are dating, they will have intercourse.	13.4	15.7	17.4	8.9	18.6	16.1
Sex is a way to show young people's maturity.	17.7	23.5	25.8	16.9	27.8	21.9
People of my age are very unlikely to have sexual intercourse.	28.9	27.8	31.9	28.0	29.5	28.2
I admire people of my age who have a chance to have sex.	8.1	8.9	11.0	9.7	19.3	15.3
Most people of my age wouldn't refuse sex if they had the chance.	23.3	23.5	25.5	21.1	32.1	29.8
Sex before marriage is okay if they are really in love.	46.1	42.4	39.7	41.2	43.8	43.2
Premarital sex can bring loss of self-respect and dignity for girls, but not for boys.	21.5	29.7	24.5	22.1	25.6	23.0
If most people my age have experienced sex, I will also do it in the near future.	5.6	7.6	13.5	7.4	17.6	11.6
Providing contraceptives to unmarried youth implies approval of premarital sex.	22.5	22.7	21.0	18.1	26.6	21.6
If I do not want to have sex, I am able to refuse it	82.0	78.6	78.1	78.4	70.5	66.8
If I were sexually harassed, I know how to protect myself.	79.7	81.1	76.1	77.7	70.5	66.0
I would use appropriate contraceptives if I had sexual intercourse.*	49.9	45.9	61.0	44.7	60.6	42.2

I-Intervention C-Control

^{*}Significant at .001 level compared with control group at the follow-up survey.

^{**}Significant at .05 level compared with control group at the follow-up survey.

There are also significant differences between intervention and control groups at the endline survey; however, results of statistical tests are only marked for follow-up.

^{*}The difference is significant at .001 level compared with control group at the follow-up survey, and an increase is significant from baseline to endline and follow-up (p=.010).

the percentage of students who disagreed that "using condoms is very difficult the first time you have sex" and the percentage who agreed that "most people use condoms for sex before marriage" (p<.0005). The LPS training likely contributed to these significant changes

Responses to scenarios of potential sexual encounters also changed without a clear trend (Table 5-20). Findings may imply a weakness in the LPS training for these topics.

About three to six percent of respondents in each survey reported that they had sexual experience. About half of them (on average) reported using a contraceptive method when having sex for the first time, mainly either a condom or withdrawal. Further analysis could not be done since there were only a few cases. Given that the students filled out the questionnaire on the computer, and the proportion is relatively stable across time except for the intervention group at follow-up, the result is assumed reliable.

The survey included a set of questions about attitudes toward people living with HIV/AIDS

(PLWHA) related to the knowledge students have about HIV/AIDS. The results show some positive changes among the intervention group across different surveys (Table 5-22), but these are not very dramatic. For the statement "PLWHA should be separated from society," the proportion agreeing even increased over time, which was quite unexpected.

Knowledge About Drugs

Drug abuse prevention is one topic of LPS education. The survey found that students had some knowledge about drugs; most of them had heard about drugs, but were not very clear about any specifics. There was no significant difference found across three surveys in either the intervention or control groups, which implies that there are other ways of obtaining related knowledge. Although a majority of students thought that they should not touch drugs, some were still not very aware of the harm drugs can cause (Table 5-23). About one to six percent of respondents reported drug use in each survey.

Table 5-19. Attitude Toward Condom Use (%)

	Baseline		Endline		Follo	w-up
	I	C	I	C	I	C
Agree with statement:						
Knowing more about condoms is a sign of caring about oneself and others.	57.2	48.9	61.0	45.4	60.1	49.1
A girl would make her boyfriend unhappy if she insists on him using a condom.	6.8	9.5	12.6	9.2	20.8	11.9
It is embarrassing for people my age to purchase condoms.	75.7	66.8	62.6	62.5	53.9	55.7
If your partner does not want to use a condom, you can do nothing to change her/his mind.	12.2	12.4	19.0	11.9	24.2	24.0
Most people use condoms for premarital sex.	33.2	33.2	44.8	28.5	45.2	33.8
Disagree with statement:						
Using condoms is very difficult the first time you have sex.	9.9	11.6	20.6	13.6	22.2	14.0

Table 5-20. Responses to Sexual Encounter Scenarios (%)

G	Base	eline	End	lline	Follo	w-up
Scenarios and responses	I	C	I	C	I	C
Your friend is with his/her girl/boyfriend. The girl/boyfriend makes a request to have sex, but your friend does not want to have sex at this age. He/she should:						
Stop and leave	10.9	13.2	16.8	14.4	16.9	14.2
Stop, do something else	30.6	23.5	18.7	25.1	20.3	19.3
Tell partner his/her true feelings and not have sex	38.5	37.0	38.4	40.7	29.7	32.7
Don't know	13.4	19.2	15.2	12.9	20.0	24.8
Your friend wants to have sex with his/her partner. The partner insists on using a condom but neither of them has one. What should they do?						
Not have sex	34.4	30.0	36.5	34.0	33.8	23.7
Not have sex now, and to get condoms for another time	12.4	11.9	19.0	9.9	14.3	13.2
Don't know	31.6	36.5	20.6	38.5	25.4	41.4
Your friend is alone with his/her partner. They have had sex with each other before, but your friend does not want to have sex now. The girl/boyfriend makes the request to have sex again, your friend should:						
Tell partner her/his true feelings and not have sex	39.7	33.2	35.5	44.9	30.4	34.3
Find other topics and shift attention	21.8	13.2	22.9	15.6	18.8	16.9
Have sexual intercourse if she/he insists	6.3	9.2	11.6	6.5	14.3	6.6
Don't know	19.2	28.1	21.0	25.8	23.9	32.7

Table 5-21. Sexual Behavior Reported by Students (%)

		Baseline		End	lline	Follow-up	
		I	С	I	C	I	C
Had sexual intercourse		4.1	4.1	3.2	2.7	6.0	2.9
Contraceptive use at first	sex (% of those who had sex)	41.2	43.8	60.0	45.5	68.0	75.0
Contraceptive method:	Condom	50.0	37.5	50.0	20.0	35.3	30.0
	Oral pills	12.5	25.0	0	0	0	10.0
	Withdrawal	37.5	37.5	33.3	60.0	11.8	10.0

Table 5-22. Attitude Toward PLWHA (%)

	Baseline		End	lline	Follo	Follow-up	
	I	C	I	C	I	C	
Willing to do the following activities with a PLWHA							
Eating with them ¹	40.0	38.4	48.1	35.2	48.3	44.1	
Being classmates	59.7	52.2	55.2	46.9	58.2	54.6	
Receiving their service ²	32.7	29.5	39.7	29.3	40.8	33.8	
Going to their home	34.9	31.1	37.1	30.3	40.3	35.6	
Using the same telephone	44.6	39.5	42.9	34.2	44.4	41.2	
PLWHA should be separated from society ³	6.8	8.4	10.0	10.9	14.7	11.9	

¹ Significant increase in both intervention and control group (p=.03).

Table 5-23. Attitudes Toward Drugs and Drug Use (%)

C4-14-24-4-14	Bas	Baseline		Endline		Follow-up	
Students' attitudes toward drugs	I	C	I	C	I	C	
A small dose is not harmful	5.6	3.0	4.8	4.0	4.1	2.4	
Occasional use does not matter	2.0	3.0	2.6	1.2	2.9	3.7	
Should not touch it	86.3	83.5	78.7	85.1	74.6	80.2	
Will use it even it is harmful	0.5	0.3	1.3	0.5	2.2	2.4	
Don't know	5.6	10.3	12.6	9.2	16.2	11.3	
Ever used drugs	1.3	2.7	3.5	1.2	6.5	4.5	

Table 5-24. Sexual Health Information Sources Reported by Students (%)

	В	aseline	Endline		Fo	llow-up
	I	$\overline{\mathbf{C}}$	I	C	I	C
School education	31.6	42.7	61.3	45.4	54.8	44.6
Classmate/friend	17.5	20.8	11.0	12.7	10.4	15.0
Parent/elder relatives	5.3	4.3	4.5	5.2	5.3	6.9
Sibling/same age relatives	1.3	1.1	0.6	2.0	2.4	2.4
Health professional	4.1	4.9	4.2	7.4	5.1	5.5
TV/radio/newspaper	19.2	12.4	7.1	14.4	8.7	12.7
Internet	1.3	3.0	1.9	2.2	1.7	0.8
Adult materials	1.3	1.1	1.3	1.2	1.0	0.5
Others	18.4	9.7	8.1	9.5	10.6	11.6

² Marginal significance in the increase for intervention group (p=.04).

³ Significant increase in intervention group over three surveys (p<.0005).

Source of Knowledge

The major source of sexual and health knowledge is "school education" across all the surveys and for both intervention and control groups. The difference is that 31.6 percent of respondents selected school as the first source of knowledge at the baseline survey, and the proportion increased to 61.3 percent for the intervention group at endline and remained high at follow-up (see Table 5-24).

The source of HIV/AIDS-related knowledge (Table 5-25) was mainly TV/radio and newspaper/magazine/books. Knowledge from schools and medical professionals increased significantly for the intervention group, demonstrating the implementation of project activities.

Students reported on the content and approaches of ASRH education in school, and Table 5-26 shows the changes after intervention. The reports of ASRH education received went from 42 percent at baseline to 72 percent at endline, then dropped slightly to 62 percent at follow-up. This may be attributed to students' uncertainty about what ASRH education means (the questionnaire asks

"Have you ever had any education about youth development, reproductive health, and HIV/ AIDS prevention in this school?"), or it may be due to the fact that not all students participated in the training.

For those who reported receiving some ASRH education, the main content of the education focused on reproductive biology and health, which is the content that both intervention and control schools taught. The percentage of students who said they had received education about contraception increased significantly for the intervention group at the endline survey; exposure to all other topics of ASRH education also increased for this group.

About 58 percent of students in the intervention group were knowledgeable about the counseling room in their school at the endline survey; however, very few reported that they visited the counseling room. The survey results show that preferred methods of counseling were quite diversified: some prefer the counseling room in school but others prefer talking with friends; some prefer face-to-face counseling and others prefer talking through the Internet (see Table 5-27). Findings indicate

Table 5-25. HIV/AIDS-Related Information Sources Reported by Students (%)

	Baseline Endline		line	Follo	w-up	
	I	C	I	C	I	C
Health professional	29.1	36.8	40.0	42.9	38.4	37.5
Educational pamphlets	22.3	26.5	31.0	30.8	32.6	30.9
Newspaper/magazines/books	57.0	50.5	44.5	43.2	42.5	35.9
TV/radio	69.6	66.5	50.0	60.8	42.8	43.5
Internet	19.7	23.8	32.3	23.6	30.9	19.5
School/teacher	25.6	23.2	53.5	25.1	43.2	25.3
Classmates/friends	19.2	19.2	22.3	13.2	22.5	14.8
Parents/relatives	8.9	8.1	9.4	8.4	12.1	8.2
Public information activity	46.6	46.8	35.5	45.4	35.3	35.6
Other	17.7	18.6	16.1	18.9	18.8	19.0

Table 5-26. ASRH Education Reported by Respondents (%)

	J	Baseline	J	Endline	Fo	ollow-up
	I	C	I	C	I	С
Had ASRH education in school	41.8	44.9	72.3	39.7	62.1	28.2
Topics if had ASRH education						
Reproductive biology and health	92.1	94.6	94.2	92.5	90.3	84.1
Contraception	35.8	26.5	77.2	24.4	69.5	29.9
STI prevention	47.3	42.8	82.1	50.0	73.4	51.4
HIV/AIDS prevention	51.5	44.0	77.2	46.3	71.0	57.9
Values and decision-making	21.2	11.4	52.2	23.1	49.4	28.0
Interpersonal relationships	52.4	40.1	53.1	46.9	59.8	52.8
Drug abuse prevention	57.0	57.5	76.3	56.9	75.7	73.1
Courtship, marriage, and family life	23.0	21.7	42.0	18.8	49.8	20.6
Approaches of the education						
Course	65.7	40.7	82.6	43.1	77.6	33.3
Seminar	54.2	53.9	67.4	62.5	64.1	38.9
Movie/video	10.3	10.8	32.1	13.8	34.4	25.2
Exhibition	6.7	11.4	9.4	19.4	14.7	19.6
Informational material distribution	16.4	13.9	22.8	26.3	27.8	30.8
Billboards	15.8	10.8	21.4	21.9	27.0	28.0
Entertainment show	2.4	1.8	6.3	3.8	12.7	8.4
Others	17.0	22.9	10.3	16.3	15.4	27.1
School has counseling room	44.2	39.0	58.1	44.7	55.1	32.8
Have ever been to the counseling room if there is one in school	4.0	5.6	5.0	8.9	10.5	10.5

Table 5-27. Students' Preferred Counseling Services (%)

	1	Baseline	Endline		Follow- up	
	I	C	I	C	I	C
Preferred counseling service about sexual health:						
School counseling room	12.9	11.9	24.2	14.4	19.1	14.6
Parents	11.9	12.5	11.9	13.6	8.9	11.6
Friends	23.4	21.1	20.3	14.6	24.6	20.6
Community counseling institution	8.1	6.5	7.7	6.2	10.9	9.8
Hospital	11.9	12.5	9.0	16.1	11.8	12.7
Other	31.7	35.5	26.8	35.0	24.6	30.7
Preferred way to learn sexual-related knowledge:						
Face to face	21.3	17.6	18.7	12.7	22.9	14.3
Telephone	4.6	2.7	5.2	5.0	2.2	3.2
Mailbox	9.1	7.9	12.3	9.7	10.4	11.6
Internet talk	19.8	18.7	22.6	14.9	20.3	14.8
E-mail	9.6	8.4	11.0	15.9	10.1	9.0
Other	35.5	44.7	30.3	41.9	34.1	47.1

that service provision to youth should take many forms.

As reported by students, the LPS education activity was significantly strengthened in different ways. More schools opened a health counseling room for students. In focus group discussions, student participants told us that more students visited health counseling since the project had provided training to counselors, "If they (the counseling teachers) could listen to us and provide advice more in the past, we would not have been puzzled so much, and would face the changes more naturally."

From the students, we also learned that they have welcomed the project activity: "It (development) is not so mysterious to us any more after training; we feel more at ease with somebody of the opposite sex, and we know where the limits are when dating."

Overall, the students we talked to and those who participated in the focus group discussions showed approval and acceptance of the approaches of the YRH Project.

5.6 Summary

The results from the three surveys show the impact of the YRH Project activities in the intervention schools. Students who participated in LPS activities gained knowledge from the training: a significant knowledge increase

was observed regarding reproduction and contraception, especially about correctly using condoms. There was also a significant knowledge increase about STI/HIV/AIDS prevention, including some attitude changes toward PLWHA. More students in the intervention group are more aware of safe sex. It was found that students who participated in the project activities had higher self-esteem and more positive attitudes toward some issues. Furthermore, after training, fewer students felt that it was difficult to communicate with their parents about sex-related topics.

The results from the three surveys also show that there are some unstable responses over time and some knowledge has not improved significantly. In intervention schools, about 72 percent of students said that they have participated in ASRH education in school, which is consistent among the different intervention schools. Yet, it seems that not all topics were covered by the education from students' perspectives. Although counseling service is available, and more than 50 percent of the respondents in intervention schools are aware of it, the reported use of the service is low.

To understand some of the unexpected results, further in-depth analysis is needed. For example, the education curriculum and teaching plan need to be analyzed to examine the content and focus of each session.

6. Discussion

6.1 Overall Assessment

Although the China YRH Project has been implemented in both schools and communities, the special feature of the Harbin project site is the institutionalization of youth health education and LPS training in schools. Each school has developed a specific plan for the project activity, to better fit the features and situation of the school. All participating schools have integrated LPS education into teaching plans and have carried out classroom activities for the different topics.

The cooperation between the Harbin FPA and EB has been successful and effective. The collaboration with other sectors of city government has also been successful. The project is running as planned under the management of the Harbin EB and the established city-level Project Office.

The evaluation survey results show that the training had an impact on participating students. They have gained knowledge about themselves, especially increasing their knowledge about reproduction, contraception, and HIV/AIDS prevention. They have also shown a more positive attitude toward healthy, safe, and responsible behavior regarding sexual and reproductive health.

The trainers' training has been implemented with a clear plan; the contents and approaches of training are in accordance with the overall project strategy. The participants of the training workshops not only include school teachers who are going to train school students, but also other related personnel such as project managers. The training of trainers is fundamental to project implementation.

6.2 Lessons Learned

The experience of Harbin shows that the following preconditions need to be provided to ensure the successful institutionalization of LPS into the education system.

Support from the Government

The project has received full support from the City Government.

Policy support

Two official documents were circulated by the Harbin City Government to ensure that the related departments paid attention to the YRH Project. The first was the Working Plan of YRH Education by the Harbin Family Planning Commission in July 2001, and the second was the Implementation Plan of Scale-up of YRH Project City-wide by the Harbin FPA and 10 other departments in November 2003. The support from the government has ensured the organization and implementation of the YRH education activity.

Organizational support

A city leadership group for the YRH Project was established, with multi-sector leaders involved. The group leader is the vice-mayor of Harbin, and the chairperson of Harbin FPA is the deputy leader of the group. The members of the leadership group come from the department of education, public security, finance, public health, population and family planning, industry and commerce, as well as from major nongovernmental organizations such as the Trade Union, the Youth League, and the Women's Federation. A special Project Office with government leadership was set up to coordinate the project activities, and the responsibility of each sector has been clearly defined.

Financial support

The financial support for the project and the matching funds from government ensured the startup and implementation of the project.

Successful Cooperation Between Family Planning Association and Education Bureau

The institutionalization of LPS education was initialized under close cooperation between and combined efforts from the Harbin FPA and EB. Some schools had previously tried to include ASRH education, but it was difficult to sustain due to a lack of support and a shortage of qualified teachers. This project provided an opportunity for schools to have strong support from government and the education department, to have well-trained facilitators, as well as to have appropriate training content and approaches.

The LPS training should be fully integrated into school education over time. This project activity has provided a good start.

Intensified Social Advocacy

ASRH education among school students is new, and a favorable social environment is important to support and ensure the project's successful implementation. The Harbin project site has been working with the media since the beginning to promote the idea of the project through newspapers, magazines, and TV programs. Local media as well as media from other provinces reported on the project activities.

6.3 Sustainability of the Project

Several conditions and aspects of the project approach have made sustainability possible:

Support from local government

Since the project was coordinated by the City Government of Harbin at the start, with the cooperation of the education sector, there is strong policy support and a guarantee of financial and human resource input from the government. The way the project was initiated guaranteed its sustainability.

Project operation system

Under the supervision of the City Government, an operation system was established with leadership groups at each level—the city leadership group, the city project operational office (Project Office), and a leadership group in each district/county. The project's operational system is under the government, with an interdepartment structure to enable the activity to be carried out as part of ongoing work. The system ensures sustainable operation of the project.

Three years' experience with technical support

After three years of project implementation, the LPS content and participatory methods have become anchored in the work carried out by project staff and others trained in ASRH. They have extended beyond training to seminars, production of materials and books, billboards, Internet and phone counseling, and provision of youth-friendly services in communities and family planning service stations. The internal capacity built by technical support to various project activities over the years guarantees sustainability.

Demand from youth

The strong desire of youth to learn and to participate pushes the project to continue. The evaluation shows a significant impact of training on knowledge and awareness improvement and attitude change among the participants. The need from youth and their acceptance of the project is the key for continuation and scale-up of the project.

Positive response from society. Adolescent health issues have become a focus of the whole society, including family planning, public health, and education sectors. The Education Department of Heilongjiang Province required youth health education in all schools in the province recently, and organized a team to work on sexual education curriculum. The YRH Project and LPS in schools will be further developed under such a favorable environment.

Some of the above conditions for sustaining the project may be unique to Harbin City; some of them may be available in other cities. The experiences of Harbin could be introduced to other places with similar conditions and social context.

6.4 Limitations Found and Suggestions for Future Work

Problems and limitations found from the evaluation which need to be addressed include:

- 1. Contents of training. Although the education content of LPS focuses on knowledge and skills about sexual and reproductive health, evaluation findings indicate there may have been some limitations in training implementation. Gaps in knowledge and unexpected results may be due to missing, incomplete, or incorrect information.
- 2. Implementation of training. The expected approach of training is participatory; however, there are often too many students in one classroom (usually each class has more than 50 students). It is difficult to ensure that everyone participates.
- 3. Limitation of facilitators. Some school teachers have limitations of knowledge and skills. Furthermore, some young teachers—especially unmarried young teachers—have concerns when discussing some sensitive issues. These factors may have contributed to some of the gaps in knowledge found in

- the evaluation, since teachers may not be covering all topics completely.
- 4. Limitation of training time. Although LPS was integrated into regular courses, the sessions on the specific topic were usually limited to once every two weeks, and 45 minutes for each session. The activities are usually carried out within half a semester, and students may forget the content afterwards.
- **5. Financial support.** Although there has been a large amount of input to the project implementation, more is needed for citywide scale-up.

The evaluation team proposes the following suggestions to further improve ASRH education in schools and ensure its sustainability:

- 1. Improve the content of LPS education by ensuring both the scientific content as well as age appropriateness of content.
- 2. Increase teaching sessions or increase the teaching time for each session, and carry out other related activities regularly to help students gain a better understanding and a stronger memory of the content taught.
- 3. Encourage teachers to be more creative. Provide teachers with additional training, information, and support to allay their concerns about some topics and further improve their facilitation skills for LPS.
- 4. Maintain necessary financial input to support the expansion of LPS education in schools.

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Appendix 1. Survey Questionnaire, Student Survey

YRH Project Evaluation Survey

L	Individu	ıal Ba	sic In	form	ation
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101.	Birth year and month:
102.	Sex 1) Male 2) Female
103.	 What is the highest education level, if possible, you want to complete? Senior high College (2-year) University (4-year) Graduate degree Don't know

- 104. Do you smoke?
 - 1) Never
 - 2) Sometimes
 - 3) Often but not every day
 - 4) Almost every day
- 105. Have you been in a KTV, café, or internet café in the last 3 months?
 - 1) Every week
 - 2) Once a month
 - 3) Seldom
 - 4) Never (skip to 106)
 - 105.1 Whom did you usually go with?
 - 1) Alone
 - 2) Parents
 - 3) Relatives
 - 4) Friends of same sex
 - 5) Friends of different sex
 - 6) Many friends (of both sexes)
 - 7) Other
- 106. How often do you go to the movies?
 - 1) Every week
 - 2) Once a month
 - 3) Seldom
 - 4) Never (skip to 107)

- 106.1 Whom do you usually go with?
 - 1) Alone
 - 2) Parents
 - 3) Relatives
 - 4) Friends of same sex
 - 5) Friends of different sex
 - 6) Many friends (of both sexes)
 - 7) Other
- 107. How much money do you spend each month on average, not including room and board (including stationery)?
- 108. How well does each of the following statements describe your feelings about yourself?

	Not at all	Less	Much	Best
I feel that I am well received and respected by my friends.				
I feel that I am as important to my family as other members.				
I feel I am the kind of person capable of doing many things.				
Not sure how to feel proud of myself.				
Whatever I do, I can make myself happy.				
I am not satisfied with relationships that I have with people surrounding me.				
I know my weaknesses and know how to deal with them.				
I feel that many things I do are not meaningful.				
I am quite sure what kind of person I will be in the future and know how to realize it.				
I believe that I am a failure in many senses.				

- 109. What responsibilities do you have in your class?
 - 1) Member of class committee
 - 2) Member of youth league
 - 3) Course assistant/group leader
 - 4) Other responsibility
 - 5) None
- 110. How do you usually spend your leisure time? (select all that apply)
 - 1) Attend after-school class
 - 2) Physical exercise
 - 3) Read
 - 4) On Internet
 - 5) Do chores at home
 - 6) Go to the movies/watch TV
 - 7) Play with friends
 - 8) Take a walk
 - 9) Other

- 111. How would you prefer to spend your leisure time? (select all that apply)
 - 1) Attend after-school class
 - 2) Physical exercise
 - 3) Read
 - 4) On Internet
 - 5) Do chores at home
 - 6) Go to the movies/watch TV
 - 7) Play with friends
 - 8) Take a walk
 - 9) Other

II. Family and Friends

201. What family members do you have and what is their background?

	Relationship	Age	Occupation	Education level
Code	 Father Mother Elder brother Younger brother Elder sister Younger sister Grandparent 		 Technical Manager Government employee Self-employed Commercial/service Worker Farmer 	1. Below primary 2. Primary 3. Middle school 4. High school 5. College or above 6. Don't know
			8. Unemployed/retired 9. Other	
1				
2				
3				
4				
5				
6				

- 202. Do you have your own room at home?
 - 1) Yes
 - 2) No
- 203. What is the economic status of your family compared to the local standards?
 - 1) Well off
 - 2) Just above average
 - 3) About average
 - 4) Below average
 - 5) Well below average
- 204. Where do you live to go to school?
 - 1) My own family
 - 2) Dorm
 - 3) With relatives
 - 4) With friends/classmate
 - 5) Other

205.	Do you find it is difficult or easy to talk with your parents about things that happened	in
	school?	

- 1) Very easy
- 2) Easy
- 3) Average
- 4) Difficult
- 5) Very difficult
- 6) Other

206. Who will you first talk to about things that are important to you?

- 1) Father
- 2) Mother
- 3) Grandparent(s)
- 4) Other elder relatives
- 5) Same-age relatives
- 6) Classmates/friends
- 7) Girl/boyfriends
- 8) Other

207. Have your parents ever shown interest in your following activities in the last 12 months?

	Father			Mother		
	Yes	No	Don't know	Yes	No	Don't know
Music or TV program you like						
Your dress and hairstyle						
Books/magazines you like						
Your manners						
Your habits such as smoking or drinking alcohol						
Friends of same sex						
Friends of opposite sex						
Your academics						
Your future career						

208. Do you feel it is difficult or easy to talk about sex-related issues with your parents?

- 1) Very easy
- 2) Easy
- 3) Average
- 4) Difficult
- 5) Very difficult

209.	How would you describe your parents in terms of their attitudes towards sexual affairs among unmarried youths? 1) Very liberal 2) Liberal 3) Average 4) Conservative 5) Very conservative 6) Don't know 7) Not applicable
210.	Have you ever discussed your sexual development with your parents? 1) Yes, almost everything 2) Yes, but tell them only what they would approve of 3) Only talk in a general way about sex, not specifically about me 4) Tell them nothing about my sex life 5) Not applicable
211.	Have you ever discussed sex issues with your brothers/sisters or cousins, if there are any? 1) Yes 2) No, I never have 3) Don't have any siblings
212.	How many of your close friends are out-of-school youths? 1) Most of them 2) About half 3) Fewer than half 4) None
213.	Are "dirty" jokes common among your friends? 1) Yes 2) No
214.	Have you ever discussed sex issues with your best friends?

- 1) Yes
- 2) No
- 215. If you have some sexual concerns about yourself, whom will you talk to first?
 - 1) Mother
 - 2) Father
 - 3) Sibling(s)
 - 4) Teachers
 - 5) Friends of same sex
 - 6) Friends of opposite sex
 - 7) Health professionals
 - 8) Others
 - 9) No one

- 216. As far as you know, how many youth of your age are dating?
 - 1) Most of them
 - 2) About half
 - 3) Fewer than half
 - 4) None
 - 5) Don't know
 - 216.1 How many of your friends are dating?
 - 1) Most of them
 - 2) About half
 - 3) Fewer than half
 - 4) None
 - 5) Don't know
- 217. How many close friends do you have?
- 218. What are the reason(s) you like to be with them?
 - 1) Have good study record
 - 2) Leader in class
 - 3) Have same interest
 - 4) Talented
 - 5) Live close by
 - 6) Friendly and loyal
 - 7) Can help me
 - 8) Other
- 219. Most of your close friends are
 - 1) Of same sex
 - 2) Of different sex

III. Reproductive Health Knowledge

301. Please indicate whether the following statements are true or false.

	True	False	Don't Know
Boys and girls enter puberty at the same time.			
Although a pattern exists, development differs by person.			
Wet dreams are normal for a boy who has entered puberty.			
Only boys masturbate.			
Even casual masturbation leads to sexual dysfunction in later life.			
A girl can shower during her period.			
Both boys and girls should care about reproductive hygiene.			

- 302. When is a woman most likely to get pregnant during her menstrual cycle?
 - 1) Before next menses
 - 2) During menses
 - 3) Right after menses
 - 4) 14 days before next menses
 - 5) Any time between two menses
 - 6) Don't know
- 303. Please indicate whether the following statements about reproduction biology are true or false.

	True	False	Don't Know
A girl can get pregnant the first time she has sexual intercourse if she has already had her period.			
A girl stops growing after she has intercourse for the first time.			
A girl can only get pregnant during those days in the middle of her menstrual cycle.			
Infrequent intercourse cannot cause a girl to become pregnant even if she has started menstruation.			
A boy who has experienced wet dreams can make a girl pregnant the first time he has sexual intercourse.			
A girl can avoid pregnancy by urinating or washing her genitals immediately after intercourse.			

304. How well do you know the following methods of contraception?

Method	Ever h	eard of	Effectiveness			ST	/AIDS p	revention
	Yes	No	Good	Poor	Don't know	Yes	No	Don't know
Withdrawal	1	2	1	2	3	1	2	3
Rhythm	1	2	1	2	3	1	2	3
Oral pills	1	2	1	2	3	1	2	3
Condoms	1	2	1	2	3	1	2	3
Foam	1	2	1	2	3	1	2	3
Emergency contraception	1	2	1	2	3	1	2	3

- 305. Have you ever heard of any sexually transmitted infection (STI)?
 - 1) Yes
 - 2) No (skip to Question 309)

306. Can the following activities transmit STIs?

	Yes	No	Don't know
Sexual intercourse			
Kissing			
Shaking hands			
Hugging			
Sharing towels or washing utensils			
Sharing toilet			

- 307. "If a person is infected with STIs, he/she surely will have noticeable symptoms." Is that right?
 - 1) Yes
 - 2) No
 - 3) Don't know
- 308. "STIs may interfere with a woman's fecundity in later life." Is that right?
 - 1) Yes
 - 2) No
 - 3) Don't know
- 309. Do you think HIV infection is equal to AIDS?
 - 1) Yes
 - 2) No
 - 3) Don't know
- 310. Which body fluids can transmit HIV and lead to AIDS?
 - 1) Blood
 - 2) Sweat
 - 3) Semen
 - 4) Vaginal discharge
 - 5) Saliva
 - 6) Urine
 - 7) Breast milk
 - 8) Don't know

311. Which of the following activities can transmit HIV/AIDS?

	Yes	No	Don't know
Shaking hands or hugging			
Kissing			
Sexual intercourse			
Sharing bathroom and swimming pool			
Insect bites			
Sharing telephone			
Blood transfusion			
Eating together			
Sharing needles			

312.	Can	HIV	7/A	IDS	be	prevented?
J 1 4.	Cull	T T T A	/ 1 1	\mathbf{L}	\sim	provented.

- 1) Yes
- 2) No
- 3) Don't know (skip to 314)

313. Which of the following behaviors do you believe can prevent AIDS? (check all applicable)

- 1) Exercise more
- 2) Stick to one sexual partner
- 3) Use condoms correctly and consistently
- 4) Improve nutritional status
- 5) Avoid unsafe blood transfusions
- 6) Avoid sharing syringes/needles
- 7) Abstinence
- 8) Don't know

314. Which of the following can detect HIV infection?

- 1) Checking blood pressure
- 2) Checking reproductive organs
- 3) Checking body weight
- 4) Blood test
- 5) X-ray
- 6) Don't know

315. "A person can contract HIV from having sexual intercourse even once." Is that right?

- 1) Yes
- 2) No
- 3) Don't know

316. "A teenager may become infected with HIV even when he/she has sex for the first time in his/her life." Is that right?

- 1) Yes
- 2) No
- 3) Don't know

- 317. "Using condoms correctly and regularly can greatly reduce the risk of getting HIV/AIDS." Is that right?
 - 1) Yes
 - 2) No
 - 3) Don't know
- 318. Which of the following describe correct condom use?

	Yes	No	Don't know
Use a good brand and high-quality condom.			
Check the manufacture date and expiry date of the condom.			
Check the pack and make sure that the condom is not damaged.			
Wash condom completely after use and keep for reuse.			
Put condom on penis and push out the air from front tip.			
Pull penis and condom out of vagina immediately after ejaculation.			

- 319. Have you ever used any drug?
 - 1) Yes
 - 2) No
- 320. What do you think about using drugs?
 - 1) A little dose should not be harmful
 - 2) Occasional use should not be harmful
 - 3) Should not touch drugs
 - 4) It makes me excited; would like to use even if it is harmful
 - 5) Don't know

IV. Attitudes and Skill

401. Do you agree or disagree with following statements?

	Agree	Disagree	Don't know
I believe it is natural for <u>a boy</u> of my age to have sexual dreams.			
I believe it is natural for <u>a girl</u> of my age to have sexual dreams.			
I believe it is natural for <u>a boy</u> of my age to fantasize about sex.			
I believe it is natural for a girl of my age to fantasize about sex.			
I believe it is okay for <u>a boy</u> of my age to masturbate.			
I believe it is okay for a girl of my age to masturbate.			
It is natural for people of my age to have an interest in pornographic materials.			

 402. "I think it is okay for people of my age to date if it does not integrate you agree or disagree with that? 1) Strongly agree 2) Agree 3) Unsure 4) Disagree 5) Strongly disagree 	erfere wit	h their stu	idies." Do
 403. When people of your age are dating, will they conduct the following hands 2) Hugging 3) Kissing 4) Petting 5) Intercourse 6) Don't know 	owing bel	haviors?	
404. Do you agree or disagree with following statements?			
	Agree	Disagree	Don't know
Sex is a way to show young people's maturity.			
People of my age are very unlikely to have sexual intercourse.			
I admire people of my age who have a chance to have sex.			
I think most people my age wouldn't refuse sex if they had the chance.			
Sex before marriage is okay if people are really in love.			
Premarital sex can bring loss of self-respect and dignity to girls, but not to boys.			
If most people of my age have experienced sex, I will also do it in the near future	e.		
Providing contraceptives to unmarried youth implies approval of premarital sex.			
If I do not want to have sex, I am capable of refusing.			
If I were sexually harassed, I would know how to protect myself.			
405. What is the youngest age you think is appropriate to start dating 406. Do you agree or disagree with following statements?	ng?	Disagree	Don't know
Knowing more about condoms is a sign of caring about oneself and others.	129100		_ 011 V 11110W
A girl would make her boyfriend unhappy if she insists on him using a condom.			
Asking questions about condom use is difficult because it looks as if I planned to have sex.			
It is embarrassing for people my age to purchase condoms.			
The main purpose for using condoms among people of my age is to prevent pregnancy.			
I don't want to know much about condoms because I don't want to have sex at this time.			

407. Are you willing to do the following activities with an HIV-infected person?

	Yes	No
Eat together	1	2
Work together	1	2
Receive the services provided by them	1	2
Go to his/her home	1	2
Use the same telephone	1	2

- 408. "People with AIDS should be separated from society." Do you agree?
 - 1) Fully agree
 - 2) Agree
 - 3) Uncertain
 - 4) Somewhat disagree
 - 5) Disagree
 - 6) Don't know
- 409. Please imagine what your friend (of same sex) should do in the following situations:
 - 409.1 He/she is home alone with his/her girl/boyfriend. They start to kiss and touch and don't want to stop. The girl/boyfriend makes a request to have sex, but your friend does not want to have sex at this age. He/she should: (check only one)
 - 1) Stop the intimacy and leave as soon as possible
 - 2) Keep going, and if she/he insists, have sex without contraceptives
 - 3) Slow down and try to find a condom and then have sex
 - 4) Stop and do something else before they go too far, like get something to eat or listen to music
 - 5) Tell partner his/her true feelings and not have sexual intercourse
 - 6) Tell partner his/her true feelings and have sexual intercourse if she/he insists
 - 7) Don't know
 - 409.2 Your friend wants to have sex with his/her partner. The partner insists on using a condom but neither of them has one. What should they do? (Check only one)
 - 1) Try to convince her/him to have sex without a condom
 - 2) Go get a condom
 - 3) Tell her/him to forget it and not have sex
 - 4) Not have sex now, and decide to get condoms for another time
 - 5) Don't know

- 409.3 Your friend is alone with his/her partner. They have had sex with each other before, but your friend does not want to have any more sex at this age. The girl/boyfriend makes the request to have sex again. Check the one thing that you think your friend should do.
 - 1) Tell partner his/her true feelings and not have sexual intercourse
 - 2) Shift her/his attention to some other topic
 - 3) Have sexual intercourse if she/he insists
 - 4) Tell partner his/her true feelings and not have sexual intercourse
 - 5) Just ignore her/his request and leave
 - 6) Don't know
- 410. What would you do if you suspected that you were infected with HIV?
 - 1) Tell my parents
 - 2) Go to hospital
 - 3) Keep away from classmates/friends
 - 4) Find some medicine
 - 5) Go to private clinic
 - 6) Keep it a secret
 - 7) Leave school silently
 - 8) Other
- 411. If your friend offered you a cigarette or alcohol, do you believe you would be able to refuse it?
 - 1) Definitely
 - 2) Think so
 - 3) Maybe, not sure
 - 4) Afraid not
 - 5) Definitely not

2) No (skip to 507)

V. Personal Development and Behavior

	·
501.	Have you had your first menstrual period? (Only for girls) 1) Yes 2) No (skip to 507)
502.	How old were you when you had your first period? (Only for girls) I was years old and in grade
503.	What was your reaction to your first menses? (Only for girls) 1) I expected it and I was not worried/scared 2) I expected it and I was worried/scared 3) I did not expect it and I was worried/scared 4) I did not expect it and I was not worried/scared 5) I don't remember
504.	Have you ever had a wet dream (nocturnal emission)? (Only for boys)

505.			ou had your first nd in grade	st wet dream? (Only for boys)
506.	 I expecte I expecte I did not 	ed it and I was ed it and I was expect it and expect it and	your first wet of not worried/sc worried/scared I was worried/s I was not worri	l scared
507.	Have you even 1) Yes 2) Never (sl	er masturbated kip to 508)	d?	
	507.1 Have y 1) Y 2) N	es	ame or anxiety	after masturbation?
508.	Have you even ment? 1) Yes 2) Never	er worried abo	out whether you	are normal in terms of your growth and develop-
509.	Have you even him/her? 1) Yes 2) Never (sl		g of liking som	eone of the opposite sex and wanting to be close to
510.	When was th		nd in grade	
511.	Have you even 1) Yes 2) Never (sl			
512.	When was th		nd in grade	
513.	Have you eve	er done any of	following with	someone of the opposite sex during the last year?
		Yes	No	
Hol	ding hands			
Huş	gging			
Kiss	sing			

Petting

514.	Ha	ve you ever had sexual intercourse with a person of the opposite sex?
	1)	Yes
	2)	No (skip to 524)
	514	4.1. How old were you when you had sex for the first time?
515.		der what conditions did your first sexual intercourse happen?
		It was planned and voluntary
		It was planned but with some opposition from me
		It was planned but with strong opposition from me
		It was unplanned but voluntary
		It was unplanned and not voluntary
		It was unplanned and with my strong opposition
	7)	Don't remember
516.		as your first sexual partner of your age, younger, or older than you?
		More than 3 years younger than you
		A little bit (within 3 years) younger than you
		Almost same age
		A little bit (within 3 years) older than you
		More than 3 years older than you
	6)	Have no idea
517.	Wł	hat was the reason for you to have sexual intercourse for the first time?
	1)	Physical urge
	2)	Most of my friends had already had sex
	3)	To satisfy partner's need
	4)	To express love and intimacy
	5)	To copy adults' behavior
	6)	To get gifts or money
	7)	To show maturity
	8)	Was forced
	9)	Other (please specify):
518.	Wh	at was your feeling after you had sex the first time?
	1)	Excited
	2)	Proud
	3)	Regretful
		Worried
	5)	Disappointed
		Angry
		Ashamed
	8)	Hurt
	9)	Other (please specify):

519.	Did you or he/she do anything to avoid pregnancy or prevent STIs the first time you had sexual intercourse? 1) Yes (skip to 520) 2) No
	 519.1 Why didn't you use contraceptives when you had sex the first time? (Skip to 521 after answering this question) 1) I knew nothing about contraceptives 2) I did not know where to get contraceptives 3) I thought I was too young to get pregnant or STIs 4) There was no need for the first time having sex 5) My partner didn't want to use any 6) Cost too much 7) Because I didn't expect to have sex 8) Worried about the side effects 9) Other (please specify):
520.	What method did you use when you had sex the first time? 1) Condom 2) Pills 3) Injection 4) Withdrawal 5) Rhythm 6) Other (please specify):
521.	Did you or your partner do anything to avoid pregnancy for the most recent sexual intercourse? 1) Yes (skip to 522) 2) No
	 521.1 Why didn't you use contraceptives for the most recent intercourse? (Skip to 523 after answering this question) 1) I knew nothing about contraceptives 2) I did not know where to get contraceptives 3) My partner didn't want use contraceptives 4) I thought I was too young to get pregnant or STIs 5) I didn't think I had sex often enough to get pregnant 6) I thought it cost too much 7) I didn't expect to have sex 8) Contraceptives are unhealthy 9) Other (please specify):

522.	What method did you use in the most recent intercourse? 1) Condom 2) Pills 3) Injection 4) Withdrawal 5) Rhythm 6) Other (please specify):			
523.	Where did you get your current sexual and reproductive health information? (Please list in order the three most important)			
	First Second Third 1) School education 2) Classmate/friend communication 3) Parents/elder relatives 4) Siblings/same-age relatives 5) Health professional 6) Books/journals 7) Novels and leisure readings 8) TV/radio/newspaper 9) Internet 10) Adult materials (pornography) 11) Posters 12) Other (please specify):			
524.	Where do you prefer to get sexual and reproductive health information? (Please list in order the three most preferred) First Second Third 1) School education 2) Classmate/friend communication 3) Parents/elder relatives 4) Siblings/same-age relatives 5) Health professional 6) Books/journals 7) Novels and leisure readings 8) TV/radio/newspaper 9) Internet 10) Adult materials (pornography) 11) Posters 12) Other (please specify):			

525.	1) Hea 2) Edu 3) New 4) TV/ 5) Inte 6) Scho 7) Clas 8) Pare 9) Pub	
526.	1) Yes 2) No 526.1 W	rever have classes on reproductive health or HIV prevention in this school? (skip to 527) That topics did the class include? (Check all applicable) 1) Reproductive biology and health 2) Contraception 3) STI prevention 4) HIV/AIDS prevention 5) Values and decision-making 6) Interpersonal relationships 7) Courtship, marriage, and family life 8) Drug abuse prevention 9) Others (please specify):
		What kind of ASRH activity have you had in your school? 1) Course 2) Seminar 3) TV/movies 4) Exhibition 5) Informational material distribution 6) Billboards 7) Entertainment show 8) Others
527.	mation (1) Yes	our school provide a counseling room and services for students seeking health infor-
528.	1) Yes	ou ever been to the counseling room or received any services? (skip to 529)

528.1 Were you satisfied with the service?

- 1) Satisfied
- 2) So so
- 3) Not satisfied

529. Where do you prefer to have counseling service about sexual health?

- 1) School counseling room
- 2) Parents
- 3) Friends
- 4) Community counseling institution
- 5) Hospital
- 6) Other

530. In which way do you prefer to learn sexual-related health information?

- 1) Face to face
- 2) Telephone
- 3) Mailbox
- 4) Internet talk
- 5) E-mail
- 6) Others

This is the end of the questionnaire. We thank you for your participation!



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