

# **The Jamaica Adolescent Study**

**Final Report**



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Women's Studies Project, Family Health International  
Research Triangle Park, NC, USA**

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## **I. Background:**

### **Adolescent Sexual Activity and Pregnancy in Jamaica**

In Jamaica, as elsewhere in the Caribbean, adolescent pregnancy presents a serious social and health problem (McNeil, 1983). Before they reach the age of 20, 40 percent of Jamaican women have been pregnant at least once, and 85 percent of these pregnancies are unplanned. Sexual activity begins at an early age for many Jamaicans. Among 15-year-olds, the youngest age group surveyed in the 1993 Contraceptive Prevalence Survey, 35 percent of females and 43 percent of males reported having had sexual intercourse. The younger adolescents begin sexual activity, the less likely they are to use contraception, thus increasing their risk of pregnancy (Morris et al., 1995).

Early childbearing often ends a young woman's education, limiting her future job prospects, and thus her own and her child's economic well-being. Among ever-pregnant Jamaican women ages 15 to 24, almost one-third became pregnant while still in school, and almost 60 percent of these pregnancies occurred before the fourth year of secondary school. Among adolescent females who became pregnant before the fourth year of secondary school, only 14 percent of those returned to school after the birth of their child. Among adolescents who became pregnant while in primary school, 20 percent returned to school (Morris et al, 1995).

Adolescent sexual activity and pregnancy in Jamaica have been associated with such factors as poverty, absence of male role models in the home, and a social context of conservative sexual ideals coexisting with tacit approval of early childbearing (Barnett et al, 1996; Brody, 1981; Jagdeo, 1984; Blake, 1961; Kitzinger, 1982). Jamaica's education system may also contribute to early sexual activity and unintended pregnancy. An UNESCO report (1983) noted that children who do not gain admittance to a traditional, college preparatory high school after elementary school are viewed as failures by parents, teachers, and society. Smith (1993) found that students who attend "all-age" and "new secondary" schools are more likely to suffer from low self-esteem, a trait that may be related to early sexual activity and pregnancy (Kissman, 1990). In general, the type of school attended is associated with social class, with children from the lower socioeconomic strata more likely to attend the all-age and new secondary schools that generally do not prepare their students for university education.

While a number of studies have been conducted of pregnancy and sexual knowledge, attitudes and behavior among adolescents in the Caribbean (Archer, 1990; Donoghue, 1993; Keddie, 1992; Powell and Jackson, 1988; Rawlins, 1984; Russell-Brown et al, 1992), very few have included younger adolescents -- those under age 15 -- in their study population. It is important to include young adolescents in these studies because sexual activity in Jamaica often begins in the early teen and even pre-teen years, and attitudes about gender roles, sexual activity, and family planning are likely to be formed during these early years.

## II. Objectives

This study was conducted by the Fertility Management Unit of the University of the West Indies (UWI) in Kingston, Jamaica, with assistance from the Women's Studies Project at Family Health International, Research Triangle Park, NC, USA. The study had two main objectives:

### **1. To learn about the knowledge, attitudes and behavior of young adolescents in Jamaica in the areas of sexuality, reproduction, and family planning.**

This study is the first to examine sexual and reproductive knowledge, attitudes, and behavior among a large sample of Caribbean adolescents under age 15. The findings of this longitudinal study will be important in informing the development of reproductive health services and family life education programs for Jamaican adolescents and youth in other Caribbean countries.

### **2. To evaluate the Grade 7 Project.**

This longitudinal study documented the implementation of the Grade 7 Project and assessed its impact on self-esteem, reproductive knowledge and attitudes, sexual activity, and use of family planning among a group of young adolescents at high risk of early sexual activity.

The Grade 7 Project was an in-school family life education program implemented in seventh grade classrooms in 10 Jamaican schools between 1994 and 1996 by the Women's Center of Jamaica Foundation (WCJF), as a part of their Program to Delay First Pregnancy among Jamaican Adolescents.<sup>1</sup> AVSC International provided technical assistance and financial support to the Grade 7 Project. The Project's goal was to delay first pregnancy among adolescents by providing information about issues surrounding sexuality and reproductive health, including family planning, raising self-esteem, and influencing attitudes about sex, family planning and pregnancy. According to the Executive Director of the WCJF, the Grade 7 Project focused on two main messages: (1) young adolescents should wait until they are older to engage in sexual activity; (2) when a young person does decide to become sexually active, it is important to use family planning to prevent unplanned pregnancy and sexually transmitted diseases.

The Grade 7 Project was aimed at students in new secondary and all-age schools because these young people are believed to be at a higher risk of early sexual activity and pregnancy than students who attend more prestigious types of schools. Students at new secondary and all-age schools are usually disappointed at failing to gain admittance to a traditional high school, the most prestigious institute of secondary education in Jamaica, and as a result may be suffering from low self-esteem. In addition, students at all age and secondary schools are generally from families of

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<sup>1</sup> The Women's Center of Jamaica Foundation addresses the socioeconomic and health consequences of adolescent pregnancy by offering the Program for Adolescent Mothers (Barnett et al, 1996). Since its inception in 1978, the Program has had two goals: 1) to enable adolescent mothers ages 12-16 to continue their schooling during pregnancy and return to the school system after the birth of their child; and 2) to educate young women about family planning to prevent a second pregnancy during the adolescent years.

low socioeconomic status, a factor that may be associated with early sexual activity (Kissman, 1990; Morris et al, 1995).

### III. Study Design and Methods

#### A. The Study Population

At the study’s onset, the initial sample consisted of 945 seventh grade students. Selection of study participants grew out of the study objective of evaluating the Grade 7 Project. A quasi-experimental study design was used. First, five of the 10 schools participating in the Grade 7 Project were selected for study participation. These five schools were chosen because they were located in different parishes across Jamaica and because they represented both urban and rural locations. Next, for each Grade 7 Project school, a nearby comparison school was selected. Each comparison school was selected because it was similar to a Grade 7 Project school in terms of parish, urban or rural location, size, and student demographics. (Table 1 lists participating schools and their location.) Within all 10 of these selected schools, every seventh grade student was asked to participate in the study. No student refused, but some students were absent when the survey was first conducted.

**Table 1. Schools participating in the Jamaica Adolescent Study, 1995-1997**

School	Number of study participants	Parish	Participated in Grade 7 Project
Stony Hill All Age	91	Kingston/St. Andrew	✓
Constant Spring All Age	97	Kingston/St. Andrew	
Cockburn Gardens All Age	102	Kingston/St. Andrew	✓
Seaward All Age	112	Kingston/St. Andrew	
Kitson Town All Age	80	St. Catherine	✓
Point Hill All Age	94	St. Catherine	
May Day Secondary	71	Manchester	✓
Villa Road All Age	106	Manchester	
Knockalva Comprehensive High <sup>1</sup>	82	St. James/Hanover	✓
Cambridge Secondary	110	St. James/Hanover	

<sup>1</sup> formerly Knockalva Secondary

## **B. Data Collection Instruments**

### **1. Classroom Observation and Educator-Counselor Interviews**

To describe the Grade 7 Project and document its implementation, researchers visited five schools to observe classroom sessions and interview the Project's four educator-counselors. The observations and interviews were conducted in March and April, 1996 at the following schools: Stony Hill All Age; Cockburn Gardens All Age; Kitson Town All Age; May Day Secondary; Knockalva Secondary. The observation and interviews were structured by guides designed to collect information on the Grade 7 Project's content and messages, teaching methods, and educator-counselors' training and resources.

### **2. Survey**

Study participants were surveyed at three points in time: (1) September 1995, when about half the sample first entered the Grade 7 Project; (2) June 1996, immediately after the Grade 7 Project ended; and (2) June 1997, one year after the Grade 7 Project ended. The survey questionnaire asked students about their knowledge, attitudes and behavior in areas such as home life, relationships, sexual activity, family planning, and pregnancy. Most of the questions were closed-ended questions, and the few open-ended questions required only short answers. This format was selected because when a previous version of the questionnaire was pretested, many of the students had great difficulty writing answers to open-ended questions.

The questionnaire and methods of administering it were pretested on two separate occasions, at different schools in Kingston. At the first pretest, one group of students completed a self-administered questionnaire, and an interviewer guided a second group through the questionnaire, reading aloud each question and its possible responses. This first pretest determined that a large proportion of seventh grade students could not read and write well enough to complete a self-administered questionnaire. Discussion sessions with small groups of these students also revealed that students did not understand the wording of some questions. After the first pretesting, the questionnaire was revised considerably. The second pretest, conducted at a different Kingston school, resulted in only minor changes to the questionnaire.

Students filled out the questionnaire in single-sex groups of eight to 15, in a classroom setting. The pretesting had determined that a large proportion of them could not read well enough to complete a self-administered questionnaire. Therefore, an interviewer read aloud each question and its possible responses to students, who were asked to follow along as the questions were read. The interviewer and an assistant also provided individual assistance with reading and writing to any student who requested help.

Even though the questionnaires were filled out in a "group" setting, adolescents' privacy was maintained. Respondents wrote their responses alone, without being observed by the interviewers or other students. Empty desks were left between adolescents, who used a blank sheet of paper to cover their responses.

### **3. Focus Group Discussions**

A subsample of the students who filled out the questionnaire participated in focus group discussions (FGDs). In February 1996, seventh graders participated in single-sex focus group discussions at four different schools. Two of the schools were in rural areas (in the parishes of the Manchester and St. Catherine); one was located on the outskirts of Kingston; and the fourth was in an inner-city neighborhood of Kingston. In March 1997, when study participants were in eighth grade, a second set of FGDs was held. Both times, two FGDs were held at each school, one with girls, and one with boys. Eight or nine adolescents participated in each group. No adolescent participated in both the 1996 and 1997 FGDs.

At each school, a guidance counselor or teacher selected students to participate in the FGDs from among volunteers. At most of the schools, virtually all the students volunteered to participate. The researchers asked the teacher or guidance counselor to avoid selecting groups of close friends and, if possible, to seek variety in terms of academic performance and socioeconomic level. Each FGD contained students from different seventh grade classes within the school. For the most part, participants in each focus group were acquainted with one another, at least by name.

Each FGD was led by a facilitator of the same sex as the students. The cofacilitator, also of the same sex as students, was responsible for taking notes on the proceedings but did not participate in the discussion. For the 1996 FGDs, three of the facilitators were students at the UWI in their early 20s; the fourth was in her 30s and an employee of the Ministry of Health. In the 1997 FGDs, the facilitators were all students of social work at the University of the West Indies. In both 1996 and 1997, the facilitators all participated in a three-day training workshop held at the Fertility Management Unit, UWI. The training included holding practice FGDs with seventh grade students at Kingston schools and then listening to the tape-recorded discussions and critiquing their performance.

Focus group discussions were conducted during school hours on the grounds of the participants' schools. The researchers originally intended to conduct the FGDs away from school grounds and hoped to use a site such as a community center. However, the only alternative sites available were churches, and researchers thought that the young people might feel inhibited discussing sex in a church. The FGDs were conducted in a quiet private room, and a member of the research team was posted outside the room to make sure that other students, teachers or other school staff did not intrude.

The focus group discussions centered on a story about "Ted" and "Nell," two fictional characters who are very similar to the young people participating in the focus groups. In the story, Ted and Nell are students in seventh or eighth grade at a secondary school who become romantically involved. The facilitators asked participants to help develop the story about Nell and Ted -- to elaborate on their lives, describe what they might be thinking, and suggest how they might behave in a given situation. At several points, the facilitators also asked the participants what they themselves would do in a similar situation.

Each FGD lasted from sixty to ninety minutes and was tape-recorded. Students gave their verbal consent to participate and were assured of the confidentiality of all that was said in the FGDs; the facilitators told them that none of their teachers, other school staff, or parents would be allowed to listen to the tapes or be told what any participants said. (Each adolescent's parent or guardian consented in writing to their child's participation in the focus groups.) After the discussion was finished, students were given the opportunity to listen to themselves on tape. Drinks and a snack were provided for all participants.

### **C. Loss to Follow-up**

Loss to follow-up is a common challenge faced in longitudinal studies. In the baseline survey for this study, administered in September 1995, 945 students (490 girls and 455 boys) filled out the questionnaire. In June 1996, in the second survey, eight percent of the original 945 students did not fill out the questionnaire, and the sample size was reduced to 872 adolescents. In June, 1997, when the survey was conducted for the third and final time, an additional 16 percent of the 945 students could not be located. The sample size at the study's end was 719 students; 23.9 percent of students were lost to follow-up. This rate of loss to follow-up is similar to that of a 17-month study of U.S. adolescents (Kirby et al, 1997).

A number of factors contributed to the loss to follow-up. First, some students attended school only sporadically, and thus were rarely at school when interviewers arrived. Although interviewers returned to schools on several occasions, some students still could not be located there. Some students, particularly males, dropped out of school during the study period. Researchers tracked many absentee students to their homes, where the questionnaire was filled out. However, limited funds prevented multiple home visits to seek out a study participant.

Some study participants were lost because their families moved or they changed schools. Funding limitations prohibited locating all of these students. If the students moved to a nearby neighborhood or town, he/she was tracked. However, students who migrated overseas or moved a great distance were not tracked. Some students changed schools during the study period. If a student transferred schools within the same town or community (as was often the case), researchers sought out those students at their new school to fill out the questionnaire. In one confirmed case, a female student was not in attendance at school due to pregnancy. (Several other cases of loss to follow-up due to suspected pregnancies were not confirmed by the researchers.) One student died during the study period.

We conducted bivariate statistical analysis to compare adolescents lost to follow-up to those who remained in the study. Between the baseline survey and the first follow-up survey, in June 1996, there was no difference between these two groups in terms of school attended, group (Grade 7 Project or comparison group), or urban-rural school location. However, boys were more likely than girls to be lost to follow-up in this time period; ten percent of boys were lost, compared to five percent of girls.

Different factors accounted for loss to follow-up between June 1996 and the final survey in June 1997. During this time period, there was no gender difference between adolescents lost to follow-

up and those who remained in the study. Nor was there any urban-rural difference. However, there was a difference by school; students from Seaward, Kitson Town, and Point Hill were more likely than others to be lost to follow-up between June 1996 and June 1997. In addition, adolescents in the comparison group (27 percent) were more likely than those who participated in the Grade 7 Project (20 percent) to be lost during this time period.

## **D. Data Analysis**

### **1. Survey Data**

Data from the survey questionnaires were analyzed using SAS for microcomputers. First, frequency distributions and cross-tabulations of variables are presented. In the instances in which multivariate analysis was not conducted, bivariate associations between variables were tested using the chi-square test of association.

Logistic regression analysis was conducted to assess jointly the effects of factors such as gender, the Grade 7 Project, and the passage of time on dichotomized measures of adolescents' self-esteem, knowledge, attitudes, and behaviors. To assess the factors associated with sexual activity and use of family planning among adolescents, as reported at one point in time (June 1997), standard logistic regression was conducted. Where researchers were interested in the association of various factors with the response variables across all three time points (baseline, immediately after implementation of the Grade 7 Project, and one year after completion of the Grade 7 Project), logistic regression using generalized estimation equations (GEE) as an estimator was conducted. GEE accounts for the correlation of multiple responses (at different points in time) for each adolescent. An independent correlation structure was chosen that provided estimates assuming that the observations were independent conditionally within each adolescent. However, robust variance estimates were calculated to account for the correlation of the multiple measures across adolescents.

### **2. Focus Group Data**

The moderator and assistant moderator worked together to transcribe the focus group proceedings in verbatim form, and the written transcripts included comments on non-verbal communication and reactions in the groups. The researchers reviewed the transcripts extensively to identify themes that emerged in the focus groups. After coding the transcripts based on these recurrent themes, the text analysis software DT Search was used to facilitate analysis of the focus group data.

The focus group data from 1996 and 1997 are presented together because few differences were found between the ideas and opinions of seventh graders and those of eighth graders. In the few instances in which differences were apparent, the adolescents' grades are specified.

## **IV. Findings:**

### **Classroom Observation and Educator-Counselor Interviews**

To learn more about the Grade 7 Project and to document its implementation, this study conducted classroom observation of Project sessions and personal interviews with the educator-counselors responsible for implementing the Project. The following section presents the findings from the observation and interviews.

#### **1. Project Description**

Educator-counselors, employees of the Women's Center of Jamaica Foundation, conduct Grade 7 Project sessions once per week. The educator-counselors are all women with educational backgrounds in counseling. The sessions are held in the students' schools, and the observed sessions lasted 45 minutes to one hour.

The only written curriculum for the Grade 7 Project is a list of potential topics regarding sexuality and reproduction compiled by the Women's Center. The educator-counselors said that they used the list of topics as a guide for selecting subjects to cover in the classroom, sometimes after discussion with their center manager<sup>2</sup>. As the list of topics is very extensive, the educator-counselors can only cover some of them in their classroom sessions. The educator-counselors reported finding additional guidance in developing Grade 7 Project sessions in a curriculum on family life education prepared by the Ministry of Education. The four educator-counselors had not met with one another to develop class plans for Grade 7 Project sessions.

In the Grade 7 Project sessions observed, most of the educator-counselors highlighted reproductive anatomy and physiology and the benefits of sexual abstinence, and most presented detailed descriptions of sexually transmitted diseases (STDs). The following topics were covered in at least one of the observed Grade 7 Project sessions:

- reproductive anatomy and physiology
- the benefits of sexual abstinence
- the negative consequences of teenage sexual activity and pregnancy
- sexually transmitted diseases -- method of transmission, symptoms, treatment
- family planning -- advantage of using, methods available, myths
- peer pressure regarding sexual activity and drug use

Observation revealed that the conditions under which the Grade 7 Project educator-counselors worked varied considerably. At two schools, classrooms were merely partitioned areas that did not allow for privacy or controlled noise levels. Some of the schools did not have enough desks and chairs for all students, and several had poor lighting. Other schools, however, had enclosed

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<sup>2</sup> The Women's Center of Jamaica Foundation operates seven main centers across Jamaica. Each educator-counselor reports to her center's manager, who supervises all the center's activities.

classrooms with adequate furniture and lighting. All Grade 7 Project sessions were coeducational, and class size in observed sessions varied from about 33 to 60 students.

## **2. Objectives and Messages of the Grade 7 Project**

The interviewers asked each educator-counselor what she viewed as the primary objective of the Grade 7 Project. With slight variations, all four educator-counselors cited delaying parenthood and helping children build self-esteem as the Project's major goals. Other objectives mentioned by some but not all educator-counselors included:

- help students recognize the adverse consequences of sexual activity and the responsibility of parenthood
- raise awareness of sexually transmitted diseases (STDs)
- give adolescents accurate information about reproduction, family planning and STDs
- discourage drug use
- offer individual counseling to any student who needs additional support

In the observed Grade 7 Project sessions, the primary message emphasized by all the educator-counselors was that young adolescents should wait until they are older to have sex and that sexual activity has many negative consequences. This was confirmed in interviews with the educator-counselors; all said they gave the most emphasis to the message that adolescents should abstain from sexual intercourse because, for young teenagers, sex has negative economic, educational and health-related consequences. Some of the educator counselors also mentioned stressing to students that sexual relations should take place within a committed relationship.

The role of family planning in the Grade 7 Project varied by educator-counselor. In the sessions observed, some of the educator-counselors stressed to students that when a young person does have sex, he or she should use a family planning method to prevent pregnancy and STDs. Other educator-counselors focused largely on saying no to sex as a young teen, giving less weight to the role of family planning.

In interviews, when asked what message they gave students about family planning, all the educator-counselors reported telling students that it is important to use family planning for protection against pregnancy and STDs if one is sexually active. However, the educator-counselors' efforts clearly were directed at convincing students to delay sexual experiences. As one educator-counselor put it, "*We talk about family planning to avoid unwanted pregnancy, but I made it clear that they should not have to need it now because they should be delaying sex until later.*"

### 3. Teaching Methods and Materials

The Women's Center does not specify Grade 7 Project activities or teaching materials to be used by the educator-counselors. In the observed Grade 7 Project sessions, all educator-counselors used primarily didactic teaching methods to provide information to students. Most class sessions consisted of a lecture, with question-and-answer sessions. The educator-counselors we observed encouraged students to speak up, to ask questions and share personal experiences.

Educator-counselors sometimes supplemented lectures with visual teaching aids. In several observed sessions, they used charts and diagrams, of the male and female reproductive systems for example, that they drew themselves using paper and markers provided by the Women's Center. One educator-counselor handed out a booklet about pregnancy published by the Jamaica National Family Planning Board to students. Another educator-counselor presented a video about teen sexuality called "Vibes," obtained from the Women's Center.

To build adolescents' self-esteem, some of the educator-counselors said they focused on students' goals and aspirations. They discuss examples of adolescents who attended all-age or secondary schools and went on to successful careers. According to one educator-counselor, *"We let them feel that there is hope -- we give examples of students who have gone on now and have achieved academically or have a good skill. We let them know that you have all-age school children at the University of the West Indies and at teachers colleges."*

Two counselors also reported that they address student's self-esteem by giving examples of their own lives and some of their hardships. Several of the counselors also felt that the students' self-esteem was raised simply by being a part of a program like the Grade 7 Project that encourages them to express their own views about themselves, their families and communities.

The educator-counselors said that they prepare for the class sessions independently from one another and often with limited guidance from the Women's Center. They use Women's Center materials and books purchased with their own money to research topics to cover in the classroom. The Women's Center has compiled a manual for peer counselors, which some of the educator-counselors reported was a useful reference. Several educator-counselors reported using materials from the National Family Planning Board to help develop sessions.

In interviews, all the educator-counselors noted that they had not received instruction or training from the Women's Center regarding teaching methods or classroom activities. Center managers, who supervise the educator-counselors, sometimes offered assistance to the educator-counselors. Two educator-counselors said their center managers were supportive and occasionally helped secure teaching materials or communicate with schools. The other two educator-counselors perceived their center managers as less involved with the Grade 7 Project. One educator-counselor described her center manager as aware of the Grade 7 Project's progress, but not directly involved in its implementation.

#### 4. Summary of Findings and Program Recommendations

The Grade 7 Project educator-counselors all are hardworking and dedicated to helping prevent early pregnancy among the young adolescents participating in the Grade 7 Project. They made the best of a difficult situation -- working with disadvantaged adolescents with myriad needs in a sometimes adverse working environment. They are committed to the welfare of the young people in the Project and clearly value the role they are playing in the students' development.

In interviews, the educator-counselors offered constructive suggestions for improving the Grade 7 Project. Here, those suggestions are summarized and expanded on.

(1) There is a need for a common curriculum to be used in all participating schools. A written curriculum would offer clear guidance to educator-counselors regarding specific messages, the scope of information given, teaching methods, and materials to be used. In that way, the Women's Center could be sure that all students in the project are receiving the same information and messages, and that the information and messages are transmitted in similar ways.

(2) There is a need for a common set of teaching materials to be provided to the educator-counselors. Currently, educator-counselors are not given a standard set of teaching materials, and many receive little guidance in selecting teaching materials. Materials developed by one educator-counselor are unlikely to be seen by other educator-counselors. Holding meetings of all the educator-counselors would provide a setting in which educator-counselors could share the materials they have developed.

(3) The use of participatory teaching methods and visual aids should be encouraged to the greatest extent possible. Research on adolescent education has demonstrated that students remember more from activities that require their active participation than from those which simply require them to listen (Kirby and DiClemente, 1994; Wilson et al, 1992). The education-counselors all made use of participatory teaching methods and visual aids at times. However, most sessions were largely didactic. Observers noted that the students seemed to have very short attention spans and frequently lost interest when the educator-counselor was speaking. This presents a considerable challenge for the educator-counselors. Expanding the use of participatory methods, such as skits, role-playing, videos, and group discussion may help retain students' interest.

(4) Family planning should be emphasized equally with abstinence. In most of the sessions observed, family planning was not a focal point.<sup>3</sup> The educator-counselors gave students a consistent message of abstaining from sexual intercourse until one is older. While a message of abstinence for young teens is appropriate, it may not be adequate for all adolescents, particularly boys. Adolescents who are already sexually active need specific information about family planning methods, including where to obtain them and how to use them. Such information may also help ensure that students who have not yet had sex do use family planning when they decide to become sexually active.

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<sup>3</sup> The educator-counselors may have covered family planning in greater detail during sessions not observed by the Fertility Management Unit researchers.

(5) Finally, the educator-counselors want more training to improve their job performance. Training sessions held before each school year begins could ensure that all educator-counselors have the same understanding regarding the objectives and messages of the Project. Training could also provide them with guidance in teaching and counseling methods appropriate for young adolescents.

## V. Findings: Survey and Focus Groups

### A. Background Sociodemographic Information

The study population of 945 adolescents was divided fairly evenly between girls (52 percent) and boys (48 percent). Half of the schools attended by adolescents in the study were in urban or peri-urban areas, and half were in rural areas. All students were in seventh grade when the study began, and the mean age of study participants was 12.1 years.

Most study participants lived with their mother (42 percent) or with both parents (37 percent) (Table 2). Smaller proportions lived with their father (9 percent) or with a guardian or other relative (12 percent).

**Table 2. Residential caregiver for adolescents.  
September, 1995 (n=943)**

Relationship	Percent
Mother and father	36.8
Mother	41.5
Father	9.0
Relative or other guardian	11.6
Other	1.2

Percentages may not add to 100 due to rounding.

The majority of students in the study said they were frequent church-goers. Approximately 62 percent of respondents reported that they attended church at least once per week at the study's onset, with girls significantly more likely than boys to attend weekly (Table 3). The churches most frequently attended by respondents were Church of God (33 percent) and Seventh Day Adventist (20 percent) (data not shown).

**Table 3. Church attendance among adolescents (in percent), by survey date and sex**

Attendance	September 1995* (n=945)			June 1997* (n=719)		
	Girls	Boys	Total	Girls	Boys	Total
At least once per week	67.1	55.9	61.7	62.8	50.6	57.1
At least once per month	14.6	13.9	14.3	15.5	17.4	16.3
Hardly ever	16.5	24.3	20.2	18.9	27.0	22.6
Never	1.9	6.0	3.8	2.9	5.1	3.9

\* Differences between boys and girls tested with chi-square test and were significant at  $p < .05$ . Percentages may not add to 100 due to rounding.

At the study's onset, there were no statistically significant differences in background characteristics, including male/female distribution, residential caregiver, church attendance, type of church attended, or urban/rural school location, between adolescents in the Grade 7 Project and those in the comparison group.

## B. Use of Alcohol and Marijuana

In the first survey, in September 1995, fewer than half (43 percent) of the study participants reported that they had used alcohol at least once (Table 4). Boys were far more likely than girls to have tried alcohol (53 percent versus 33 percent). Few adolescents (7 percent) had experimented with marijuana, but boys were more likely than girls to have tried marijuana. There were no significant differences in alcohol and marijuana use between adolescents in the Grade 7 Project and those in the comparison group. Use of both alcohol and marijuana increased only slightly during the study period.

**Table 4. Ever-use of alcohol and marijuana among adolescents (in percent), by survey date and sex**

Substance	September, 1995* (n=945)			June, 1997* (n=719)		
	Girls	Boys	Total	Girls	Boys	Total
Ever used alcohol	32.6	53.1	42.5	37.3	59.9	47.8
Ever used marijuana	2.9	12.2	7.4	5.2	16.1	10.3

\* Differences between boys and girls tested with chi-square test and were significant at  $p < .05$ .

## C. Self-esteem and Goals

### 1. Self-esteem

Self-esteem was measured in this study using six dichotomous-response items adapted from the Hare self-esteem scale. The Hare scale is comprised of 30 items measuring self-esteem in three different areas: home, peers and school. Each item consists of a statement to which the child

responded on a Likert scale, with four responses ranging from strongly disagree to strongly agree. The Hare scale was found to be an effective measure of self-esteem among a U.S. population of 10 and 11 year-olds of varied social classes and ethnic backgrounds (Shoemaker, 1980).

When the Hare scale was pretested among Jamaican youth in seventh grade at an all-age school in Kingston, several problems emerged. First, most of the students could not read well enough to complete all 30 items in a reasonable length of time. Nor could most students understand the Likert scale response options. In addition, many did not understand compound sentences, negatively-worded questions, or the wording of some questions in the Hare scale. After reviewing the pretest results and conducting small discussion groups with students in the pre-test group, the researchers selected six items from the Hare scale -- two items from each of the three areas. The responses to these items were modified to “agree” or “disagree,” rather than the four-level Likert scale responses.

Table 5 shows study participants’ responses to self-esteem items. Agreement with an item was considered an indicator of high self-esteem on that item, and disagreement was considered an indicator of low self-esteem. For all items and on all survey dates, self-esteem was quite high among this population of young adolescents. Only on the items measuring self-esteem related to school did the proportion of adolescents indicating higher self-esteem drop below 90 percent.

**Table 5. Self-esteem among adolescents. Percentage of respondents agreeing with statements, by survey date and sex**

Item	September 1995 (n=945)		June 1996 (n=872)		June 1997 (n=719)	
	Girls	Boys	Girls	Boys	Girls	Boys
I have as many friends as most people my age.	78.9	78.7	78.6	79.9	77.3	81.5
Other people my age enjoy being with me.	90.2	90.2	93.3	93.6	94.0	94.6
My parents are proud of me.	96.5	94.5	97.4	96.3	97.7	93.8
I am an important person to my family.	95.5	94.5	96.1	94.8	97.6	95.8
I am usually proud of my school report.	91.4	91.4	94.2	86.4	88.8	87.8
My teachers are usually satisfied with the work I do.	86.5	85.1	87.3	83.5	89.8	82.9

Logistic regression was used to assess jointly the effect of an adolescent’s sex and the Grade 7 Project on adolescents’ self-esteem over time. The results of this multivariate analysis are shown in Table 6. Each self-esteem item was coded 1=agree, 0=disagree. The coefficients are measures of the effects of each explanatory variable on the log odds of agreeing to the self-esteem item. The coefficient associated with “Group” is the effect of participation in the Grade 7 Project on the log odds of agreeing with a self-esteem item. This variable was coded 1 if the adolescent was in the Grade 7 Project, 0 if in the comparison group. The coefficient associated with “Sex” is an

estimate of the effect of being female. “Sex” was coded 1 for female and 0 for males. The coefficient associated with “Time2” is the effect of the passage of time from September 1995 to June 1996, when the Grade 7 Project ended. The coefficient associated with “Time3” is the effect for responses given in June 1997, one year after the completion of the Grade 7 Project. With the particular model fitted here, the log odds of boys at baseline (September 1995) in the comparison group forms the reference group to which effects of the specified explanatory variables are measured

Negative coefficient estimates indicate a negative probability of agreeing with the self-esteem item, or reporting high self-esteem. Similarly, positive coefficients indicate a positive probability of agreeing with a self-esteem item. In this report, the effects of time, an adolescents’ sex, and the Grade 7 Project, and their interactions are reported as the effects on the probability of the response, rather than the log odds.

Boys and girls indicated similar levels of self-esteem. On only one item, “my parents are proud of me,” did a larger proportion of girls than boys indicate high self-esteem (as indicated by the positive significant coefficient for the variable “Sex.”). Change in self-esteem was the same between girls and boys for all but one item. Between September 1995 and June 1996, the proportion of girls who reported being “proud of their school report” increased more than the proportion of boys who reported this (as indicated by the significant positive coefficient for “Sex\*Time2”). The level of change from June 1996 to June 1997 was not significantly different between girls and boys.

**Table 6. Coefficients from logistic regression analyses showing likelihood of adolescents agreeing with self-esteem items**

Variable	Self-esteem items					
	I have as many friends as most people my age.	Other people my age enjoy being with me.	My parents are proud of me.	I am an important person to my family.	I am usually proud of my school report.	My teachers are usually satisfied with the work I do
Group	.2035	-.0447	.3151	<b>.9793*</b>	-.2917	-.2123
Sex	-.0087	-.0656	<b>.8079*</b>	.5770	.2831	.1455
Time2	.2977	.4896	.2749	.3912	<b>-.5886*</b>	.0277
Time3	.1813	.6943	-.1364	.4846	<b>-.6448*</b>	-.3311
Group*Sex	.0786	.1281	-.7189	<b>-.9772*</b>	-.5560	-.0796
Group*Time2	<b>-.4668*</b>	-.0525	.3761	<b>-.8857*</b>	.1502	-.2789
Group*Time3	-.0125	-.1140	-.0197	-.5890	.5105	.3376
Sex*Time2	-.1192	-.0554	-.1530	.2222	<b>.9231*</b>	.1777
Sex*Time3	-.2757	-.1103	.5596	.4896	.0813	.4922

Coefficients significant at p<.05 level are bolded and indicated with an asterisk. Self-esteem items were coded 1=agree, 0=disagree. Group was coded 1=Grade 7 Project, 0=comparison group. Sex was coded 1=girl, 0=boy.

In general, self-esteem remained constant throughout grades seven and eight. Self-esteem levels on five of six items did not change significantly throughout the study period (as indicated by the

nonsignificant coefficients for “Time2” and “Time3” on the other self-esteem items). However, the proportion of adolescents who reported feeling “proud of their school report” fell significantly over time (as indicated by the significant negative coefficients for the variables “Time2” and “Time3”).

Participation in the Grade 7 Project did not raise self-esteem levels among adolescents, in either the short-term or the long-term. The variable “Group\*Time2” indicates short-term impact, and “Group\*Time3” indicates long-term impact. On four of six items, there was no difference between Grade 7 Project participants and other adolescents. Between the study’s onset (September 1995) and the second survey (June 1996), self-esteem scores on two self-esteem items (“I have as many friends as most people my age” and “I am an important person to my family”) fell significantly more among Grade 7 Project participants than among youth in the comparison group. However, by the time the third survey was conducted, that difference was no longer evident.

After examining the six self-esteem items separately, we created a self-esteem scale by summing the scores of the six items. The possible score on this scale ranged from zero to six, with a score of six representing the highest self-esteem. Self-esteem was quite high among both sexes, on all surveys (Table 7). On all survey dates, the mean score was 5.4 among girls and 5.3 among boys.

**Table 7. Mean self-esteem score among adolescents, by survey date and sex**

Item	September 1995 (n=945)		June 1996 (n=872)		June 1997 (n=719)	
	Girls	Boys	Girls	Boys	Girls	Boys
Mean self-esteem score	5.4	5.3	5.4	5.3	5.4	5.3

Possible self-esteem score ranged from zero to six.

A dichotomous self-esteem variable was created using a median split, so that adolescents scoring six were categorized as having high self-esteem, and those scoring five or lower were categorized as having low self-esteem. Logistic regression was used to assess jointly the effect over time of an adolescent’s sex and the Grade 7 Project on the dichotomous self-esteem measure. The results of this analysis, indicated in Table 8, indicated that neither sex, the Grade 7 Project, nor the passage of time had a significant effect on the adolescents’ self-esteem score.

**Table 8 . Coefficients from logistic regression showing likelihood of adolescents having high self-esteem**

Variable	Coefficient
Group	-.06
Sex	.13
Time2	.13
Time3	.00
Group*Sex	.01
Group*Time2	-.31
Group*Time3	.16
Sex*Time2	.17
Sex*Time3	.12

Dependent variable coded 1=self-esteem score of 6, 0=self-esteem score of 0-5. Group coded 1=Grade 7 Project, 0=comparison group. Sex coded 1=girl, 0=boy. No variable had a significant effect on the self-esteem score (at  $p < .05$ ).

## 2. Goals

In September 1995, some of the study participants, especially boys, indicated interest in careers that do not require post-secondary education. The most popular intended careers among boys were soldier and policeman (20 percent total) (data not shown). Boys were also likely to report that they wanted to be mechanics, welders, or carpenters. Hairdresser, flight attendant, and dressmaker were popular job choices among girls.

Many other students, particularly girls, reported that they plan to pursue careers that require post-secondary education. The most popular career choice among girls was teaching (chosen by 25 percent of girls) (data not shown). Business management and accounting were also frequently cited as intended careers among both girls and boys. Quite a few boys and girls said they planned to work as doctors or scientists. Career goals changed little over the course of the study period.

At baseline (September 1995), when the adolescents were starting seventh grade, most (74 percent) reported that they planned to complete college or university (Table 9). Girls tended to have higher educational goals than boys; 80 percent of girls, compared to 67 percent of boys, reported that they plan to finish college or university. Adolescents' academic goals were modified only slightly over the course of the study period. In June 1997, in the study's final survey, 74 percent of adolescents (82 percent of girls and 64 percent of boys) reported that they intended to attend college or university.

**Table 9. Percentage of adolescents planning to attend college or university, by survey date and sex**

Item	September 1995 (n=945)			June 1996 (n=868)			June 1997 (n=718)		
	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total
Plan to attend college or university	80.2	66.6	73.7	84.8	66.8	76.4	81.9	64.0	73.5

Both boys and girls in this study appeared to be very hopeful about the future, some perhaps to the point of being unrealistic about their academic and career goals. A career as a doctor or scientist, popular career choices of study participants, requires a college or university degree; young people who attend secondary and all-age schools, like the youth in this study, have only a slim chance of attending college or university. While holding unrealistic goals is perhaps typical for 12 and 13-year-olds, these students may experience serious disappointment when they realize that they are unlikely to attain their goals.

## D. Information about Sex

### 1. Survey Findings

In the survey, adolescents were asked the source of their *most important* information about sex. (Table 10). At all three points in time, girls most often reported “clinic” as the source of their most important information about sex (30-34 percent). “Friend” was the second most common response among girls, particularly as they grew older. At the beginning of seventh grade (September 1995), many girls (16 percent) said their mother was the source of their most important information about sex. Over time, girls became less likely to give this response.

**Table 10. Adolescents’ most common responses to the item, “The most important thing I know about sex, I learned from...” (in percent), by survey date and sex**

Response	September 1995 (n=945)			June 1996 (n=868)			June 1997 (n=718)		
	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total
Mother	16.2	17.6	16.9	10.8	10.2	10.5	6.6	9.1	7.8
Father	10.2	16.4	13.2	4.1	11.0	7.3	1.1	12.7	6.5
Other relative	6.8	19.9	13.1	6.1	14.7	10.0	9.0	17.0	12.7
Friend	18.7	13.9	16.4	28.4	33.8	30.9	24.2	21.5	22.9
Clinic	31.5	11.8	22.1	33.6	8.9	22.2	29.5	8.8	19.8
Other	16.6	20.4	18.3	17.0	21.4	19.1	29.6	30.9	30.3

In September 1995, boys reported their parents and other relatives as the source of their most important information about sex (Table 10). Like girls, however, boys became less apt to rely on parents and more likely to turn to their peers for sexual information as they grew older. On all survey dates, many boys reported learning about sex from other relatives, such as brothers and cousins. The proportion of boys who received their most important sexual information from a friend rose from 14 percent in September 1995 to 34 percent in June 1996.

## **2. Focus Group Findings**

The focus groups were used to determine what information young adolescents receive from their parents. The findings suggested that mothers of both seventh and eighth grade girls offered their daughters little, if any, factual information about sexual intercourse, contraception, or pregnancy. Instead they simply warned their daughters to stay away from boys. Some seventh grade girls said that common advice from mothers included: *“Don’t let boys sweet talk you,”* and *“only one thing them want.”* An eighth grade girl offered, *“I think [her] mother would tell her to beware of boys because they are very much clever and tricky.”* No girl mentioned receiving any positive message about boys or any factual information about reproduction, and girls in eighth grade received no more information than girls in seventh grade.

Boys were much more likely than girls to receive a positive message about the opposite sex, one that praises the virtues, usually sexual, of women. A seventh grade boy in one group offered that a boy’s male relatives tell him that *“girls will make him feel like a big man.”* *“Them tell him ‘bout that girls is very sexy and nice,”* continued another boy. Boys were encouraged to initiate contact with girls: *“Them look nice and him must go talk to them.”* Boys in FGDs also were likely to have been advised about the facts of life or how to have a relationship with a girl. *“Him father would talk to him and make him take time with the girl,”* related one boy. An eighth grade boy offered, *“His brother would tell him fi use condom.”*

## **E. Knowledge about Sex and Reproduction**

### **1. Survey Findings**

In general, students demonstrated a very low level of knowledge about reproductive matters in the surveys (Table 11). The answer most frequently chosen, by both girls and boys, to all questions pertaining to knowledge of reproduction was “I don’t know.” Only one of seven knowledge questions was answered correctly by at least half the students, on all the survey dates. For example, even at the end of eighth grade (June 1997) about half of boys (49 percent) and 66 percent of girls did not know that pregnancy was possible at first intercourse. Adolescents seemed most knowledgeable about condom use; at the end of the study period (June 1997), approximately 78 percent of boys and 57 percent of girls responded “true” to the statement “using a condom is a good way to avoid getting a sexually transmitted disease (STD).”

**Table 11. Percentage of adolescents correctly answering selected questions about reproduction, by survey date and sex**

Item	September 1995 (n=945)		June 1996 (n=868)		June 1997 (n=718)	
	Girls	Boys	Girls	Boys	Girls	Boys
Time during menstrual cycle when pregnancy most likely to occur.	4.3	9.3	4.8	8.1	5.7	10.4
Pregnancy is possible at first intercourse.	27.3	32.7	31.7	47.4	33.7	50.6
Condoms protect against STDs.	52.5	77.7	60.2	81.2	57.4	78.0
Birth control pills protect against STDs.	14.7	16.1	21.5	18.6	21.2	26.0
Sex with a virgin will cure a STD.	16.4	28.8	27.8	32.7	27.0	44.2
Having sex while standing prevents pregnancy.	14.9	30.3	23.4	41.4	27.0	46.1
Drinking Coke or Pepsi after sex prevents pregnancy.	16.4	23.9	23.3	35.3	24.3	36.3

For every knowledge item on the questionnaire, a higher proportion of boys than girls answered correctly. However, this sex difference was strongly influenced by the fact that girls were far more likely than boys to choose “I don’t know” as their response (Table 12). For every knowledge item, in all three surveys, girls chose “don’t know” more often than boys. Thus, the fact that boys demonstrated higher knowledge than girls may be partly explained by their greater aversion, relative to girls, to admitting a lack of knowledge.

**Table 12. Percentage of adolescents answering “I don't know” to selected questions about reproduction, by survey date and sex**

Item	September 1995 (n=945)		June 1996 (n=868)		June 1997 (n=718)	
	Girls	Boys	Girls	Boys	Girls	Boys
Time during menstrual cycle when pregnancy most likely to occur. <sup>1,3</sup>	73.5	63.9	68.6	67.2	73.9	60.4
Pregnancy is possible at first intercourse. <sup>1,2,3</sup>	61.4	33.8	55.5	29.7	55.9	28.0
Condoms protect against STDs. <sup>1,2,3</sup>	41.4	17.0	34.6	13.4	38.1	14.6
Birth control pills protect against STDs. <sup>1,2,3</sup>	60.0	38.3	56.0	36.2	58.4	28.7
Sex with a virgin will cure a STD. <sup>1,2,3</sup>	72.6	39.9	60.5	36.4	64.9	37.6
Having sex while standing prevents pregnancy. <sup>1,2,3</sup>	73.1	41.1	67.5	39.2	66.2	39.0
Drinking Coke or Pepsi after sex prevents pregnancy. <sup>1,2,3</sup>	75.8	51.9	64.4	41.0	68.7	44.9

<sup>1</sup> September 1995 girl-boy difference significant at p<.05

<sup>2</sup> June 1996 girl-boy difference significant at p<.05

<sup>3</sup> June 1997 girl-boy difference significant at p<.05

Logistic regression was used to assess jointly the effect of time, sex, and the Grade 7 Project on adolescents' knowledge about reproduction. The results of this multivariate analysis are indicated in Table 13. For most knowledge items, the proportion of adolescents answering correctly increased over time (as indicated by the positive coefficients for the variables "Time2" and "Time3"), regardless of the student's sex or participation in the Grade 7 Project. Knowledge was highest in June 1997, when adolescents were at the end of eighth grade. By June 1997, the percentage of adolescents giving correct responses was significantly higher than at baseline (September 1995) for four items. However, as indicated in Table 10, knowledge about reproduction was very low at all times -- even at the end of eighth grade only one question was answered correctly by more than half the adolescents.

Boys appeared more knowledgeable than girls (as indicated by the variable "Sex"). On six of seven knowledge items, boys were significantly more likely than girls to choose the correct answer. (Since girl was coded as 1, a negative coefficient indicates higher knowledge among boys.) However, for most items, the proportion of adolescents answering correctly *increased* equally over time between girls and boys (as indicated by the nonsignificant coefficients for the variables "Sex\*Time2" and "Sex\*Time3"). Only for the item "Pregnancy possible at first intercourse" did knowledge increase more among adolescents of one sex. The increase in the proportion of adolescents who knew that pregnancy is possible at first intercourse was larger among boys than girls, in both June 1996 and June 1997. As shown in Table 10, the proportion of boys answering correctly rose almost 18 percent, while the proportion of girls who answered correctly rose only about six percent..

**Table 13. Coefficients from logistic regression analyses showing likelihood of adolescents correctly answering selected knowledge items**

Variable	Knowledge items						
	Time during menstrual cycle when pregnancy most likely	Pregnancy possible at first intercourse	Condoms protect against STDs	Birth control pills protect against STDs	Sex with virgin will cure STD	Having sex while standing prevents pregnancy	Drinking Coke/Pepsi after sex prevents pregnancy.
Group	.36	-.18	-.29	-.15	.23	.05	.13
Sex	<b>-.79*</b>	<b>-.41*</b>	<b>-1.25*</b>	-.22	<b>-.79*</b>	<b>-1.02*</b>	<b>-.59*</b>
Time2	.35	<b>.43*</b>	-.08	.05	-.01	-.01	.19
Time3	.50	<b>.62*</b>	-.06	.40	<b>.54*</b>	<b>.38*</b>	<b>.37*</b>
Group*Sex	-.01	.33	.19	.24	.15	.23	.26
Group*Time2	<b>-1.13*</b>	<b>.39*</b>	<b>.61*</b>	.26	.36	<b>.97*</b>	<b>.69*</b>
Group*Time3	<b>-.77*</b>	.26	.16	.41	.26	<b>.58*</b>	.42
Sex*Time2	.17	<b>-.39*</b>	.14	.30	<b>.51*</b>	.07	-.10
Sex*Time3	.13	<b>-.44*</b>	.19	-.16	-.03	.07	-.11

Coefficients significant at  $p < .05$  are bolded and indicated with an asterisk. Knowledge items were coded 0=incorrect or don't know. Group was coded 1=Grade 7 Project, 0=comparison group. Sex was coded 1=girl, 0=boy.

The Grade 7 Project appeared to have a positive short-term effect on adolescents' knowledge. In June 1996, when the adolescents were finishing seventh grade, knowledge scores on four of seven items had increased more among youth in the Grade 7 Project than among youth in the comparison group (as indicated by the positive coefficients for the variable "Group\*Time2").

However, the impact of the Grade 7 Project was not sustained over time. In June 1997, one year after the adolescents finished participating in the Grade 7 Project, there was little evidence of knowledge differences between the two groups (as indicated by the nonsignificant coefficients for "Group\*Time3" for most items). While knowledge on one item ("Having sex while standing prevents pregnancy") had increased more among Grade 7 Project participants than among comparison group youth, knowledge levels fell on another item ("Time during menstrual cycle when pregnancy most likely").

## **2. Focus Group Findings**

Although they tended to answer knowledge questions incorrectly in the surveys, both seventh and eighth graders in the FGDs were very aware of methods of preventing pregnancy and STDs. In the FGDs, students often spontaneously suggested that adolescents should use family planning if they are going to have sex. They frequently mentioned the condom and the pill as appropriate methods for young people and volunteered that these contraceptives are available from doctors, health centers and pharmacies. In a Kingston group, a boy in seventh grade even specified: *"from the shelf in the pharmacy where you get all the ointment and cream from."* Boys and girls also suggested that a teenager might get pills or condoms from an adult friend or family member.

When a few students expressed doubt in the efficacy of the pill, their classmates responded by asserting that human error was probably responsible for unintended pregnancies. In a FGD with girls in seventh grade, a member of the group told the others, *"My cousin that's 14, she have sex and she was taking the pill...and she still get pregnant!"* *"Maybe she miss the pill,"* suggested a classmate.

While adolescents were familiar with many modern contraceptive methods, there was evidence of incomplete or inaccurate knowledge. A girl in one FGDs offered, *"Some of them say when they have sex, they can drink a Pepsi or take an aspirin [to prevent pregnancy]."* While many adolescents in the FGDs were aware that conception occurs at a particular time during the menstrual cycle, neither seventh nor eighth graders seemed to know what that time was. At a rural school, a seventh grade girl offered that a girl got pregnant *"because she had sex with the boy while she was seeing her period."*

## F. Sexual Mores

### 1. Survey Findings

In the surveys, most adolescents disapproved of an adolescent having sexual intercourse outside an established romantic relationship (Table 14). While boys appeared more permissive than girls, they were more disapproving of a girl who has sex with a boy other than her boyfriend than of a boy with multiple sexual partners. Most girls showed no gender bias in their disapproval of young adolescents with multiple sexual partners.

Many young adolescents felt that sex was required or expected in certain situations (Table 14). About two-thirds of boys and one-quarter of girls shared the opinion that “if you really love your boyfriend or girlfriend, you should have sex with them.” Moreover, many adolescents, particularly boys, thought that a girl should have sex with a boy who spent a lot of money on her.

**Table 14. Percentage of adolescents agreeing with statements reflecting sexual mores, by survey date and sex**

Statement	September 1995 (n=945)		June 1996 (n=868)		June 1997 (n=718)	
	Girls	Boys	Girls	Boys	Girls	Boys
It is okay for a girl to have sexual intercourse with a boy who is not her steady boyfriend.	3.5	17.8	2.2	14.7	2.9	17.6
It is okay for a boy to have sexual intercourse with a girl who is not his steady girlfriend.	5.1	28.4	4.5	35.1	2.9	30.7
If you really love your boyfriend or girlfriend, you should have sex with him/her.	32.0	69.2	24.4	64.0	24.3	57.4
If a boy spends a lot of money on a girl, she should have sexual intercourse with him.	29.8	57.6	18.5	48.8	14.1	46.1

Logistic regression analyses were used to assess the short-term and the long-term effects of time, sex and the Grade 7 Project on adolescents’ sexual mores (Table 15). Overall, adolescents’ sexual mores did not change over the study period (as indicated by the nonsignificant coefficients for the variables “Time2” and “Time3”). For all four items reflecting sexual mores, there was no significant change in the “short-term” (from September 1995 to June 1996). In the “long-term” (from September 1995 to June 1997), study participants became less likely to agree that an adolescent who is in love should have sex with her/his boyfriend or girlfriend. On the other hand, by the end of eighth grade they were more likely to think that a girl should have sex with a boy who spends money on her.

However, there were significant interactions between time and “group”, so that the effects of time differed for adolescents in the Grade 7 Project and those in the comparison group. The Grade 7

Project affected several of adolescents' sexual mores in the short-term. For two items ("It is okay for girl to have sex with boy who is not steady" and "If you really love your boy/girlfriend, you should have sex with him/her"), the mores of adolescents in the Grade 7 Project were more likely to become more conservative by the end of seventh grade (June 1996), compared to adolescents in the comparison group. However, adolescents in the Grade 7 Project became *more* likely to agree with the statement, "If a boy spends money on a girl, she should have sex with him," than adolescents in the comparison group. The Grade 7 Project did not have a long-term effect on sexual mores. By the time adolescents were at the end of eighth grade, the differences in sexual mores between the two groups were no longer evident.

Girls were significantly less permissive than boys in their sexual mores. (Since girl was coded as 1 for the variable "Sex," a negative coefficient indicates higher knowledge among boys.) Girls were less likely than boys to agree with any of the four statements in Table 15. There was no difference between boys and girls in *change* in most sexual mores items over the study period (see nonsignificant "Sex\*Time2" and "Sex\*Time3" coefficients on three of four items.)

**Table 15. Coefficients from logistic regression analyses showing likelihood of adolescents agreeing with statements reflecting sexual mores**

Variable	Statements reflecting sexual mores			
	Okay for girl to have sex with boy who is not steady boyfriend.	Okay for boy to have sex with girl who is not steady girlfriend.	If you really love boyfriend/girlfriend, should have sex with him/her	If boy spends money on girl, she should have sex with him.
Group	-.07	<b>-.72*</b>	.01	.05
Sex	<b>-1.55*</b>	<b>-2.17*</b>	<b>-1.65*</b>	<b>-1.27*</b>
Time2	.06	.31	.01	-.02
Time3	-.15	.06	<b>-.57*</b>	<b>-.50*</b>
Group*Sex	-.78	.42	.15	.26
Group*Time2	<b>-.72*</b>	.05	<b>-.47*</b>	<b>-.61*</b>
Group*Time3	.24	.15	.05	.07
Sex*Time2	-.44	-.47	-.21	-.35
Sex*Time3	-.11	-.73	.13	<b>-.51*</b>

Coefficients significant at  $p < .05$  are bolded and indicated with an asterisk. Sexual mores items were coded 1=agree, 0=disagree. Group was coded 1=Grade 7 Project, 0=comparison group. Sex was coded 1=girl, 0=boy.

## 2. Focus Group Findings

The focus groups explored adolescents' sexual ethics in more detail than was possible in the surveys. Opinions regarding the acceptability of adolescent sexual activity varied. Boys in all the groups were divided on the issue. Some felt that young people should wait until they are older and have finished school before having sex. Many boys did not disapprove of adolescent sex, but expressed concern about the risk of pregnancy or STDs. A boy in one FGD warned, "*Him would feel big, but suppose him do it and the girl get pregnant? Him would be in a lot of trouble.*" A

sizable proportion of boys, however, thought that a boy should have sex in the early teen years. *“Him should a try it out,”* insisted a boy at a rural school.

Without exception, girls in the FGDs disapproved of a girl their age engaging in sexual intercourse, and they appeared to be well schooled about the dangers of sexual involvement. Girls in all the FGDs give very similar reasons why girls their age should not have sex. Most girls were quick to present the risk of pregnancy as the predominant reason not to have sex. A girl in seventh grade warned, *“my auntie say when it go in, it sweet, but when it come out, it bring sorrow -- baby come.”* Like boys, many girls were aware of the risk of STDs. *“She could catch a lot of diseases”* suggested a girl in eighth grade.

Girls cautioned that a girl risks acquiring a bad reputation if she has sex, and they expressed disdain for girls their age whom they believed to be sexually active. A seventh grade girl in one FGD warned that a boy is unlikely to be discreet if he has sex with a girl: *“If Nell broke up with Ted, Ted gonna go about and tell him friends. He will disgrace her.”* Both seventh and eighth grade girls in all the FGDs made derogatory comments about girls their age who were sexually active, but no girls indicated disapproval of boys their age having sex.

Most girls said a girl should have sex only when she was *“out of school”* or *“when she finish school and have a job.”* Marriage was never mentioned as a precondition for sex among girls, and only one seventh grade boy ventured that a boy should wait until marriage to have sex.

## **G. Sexual Activity and Attitudes**

### **1. Survey Findings**

#### ***a. Reported Sexual Experience***

We advise interpreting data regarding sexual behavior collected from young adolescents with caution. Adolescents’ responses may not be accurate in all cases, due both to the sensitive nature of the questions and the low literacy levels of some students. In the questionnaire administration, researchers took care to assure adolescents of the confidentiality of their responses. Adolescents were assured that teachers, classmates and parents would not be able to learn of their responses, and adolescents’ names and other identifying information were kept separate from the questionnaire. Nevertheless, given prevailing social norms regarding adolescent sexual activity, adolescents may not have felt comfortable in revealing their sexual experience.

In addition, many students had a low level of literacy that may have limited their ability to answer questions accurately, despite the fact that an interviewer read the questions and responses aloud and offered additional personal assistance with reading and writing.

By the end of eighth grade (June 1997), 13 percent of girls and 75 percent of boys in the Jamaica Adolescent Study reported having had sexual intercourse (Table 16).<sup>4, 5</sup> The proportions of boys and girls reporting sexual experience were vastly different throughout the study period. Interestingly, the proportion of boys reporting sexual experience did not increase between the end of seventh grade (June 1996) and the end of eighth grade (June 1997) while the proportion of girls experiencing sexual intercourse increased noticeably during that period.

Among those reporting sexual activity in June 1997, the mean age at first intercourse was 12.4 years for girls and 9.3 years for boys (Table 16). Quite a few boys (53 percent of those reporting sexual activity in June 1997) claimed they first had sexual intercourse at age nine or younger. Seven girls (of the 51 who reported having had sex) said they had sex prior to age ten. Most boys, even those who reported having sex at a very young age, said that their first sexual partner was just about one year older than they were. On average, a girl's first sexual partner was three years older than she.

**Table 16. Reported sexual activity among adolescents, by survey date and sex.**

Item	September 1995		June 1996		June 1997	
	Girls	Boys	Girls	Boys	Girls	Boys
Percentage reporting sexual intercourse	5.8 (n=490)	64.4 (n=455)	5.6 (n=464)	75.5 (n=408)	13.4 (n=383)	75.4 (n=336)
Mean age at first sexual intercourse	11.3 (n=28)	9.4 (n=284)	12.2 (n=26)	9.8 (n=308)	12.4 (n=51)	9.3 (n=251)
Mean age difference between respondent and first sexual partner (partner age - respondent age)	3.2 (n=28)	1.2 (n=284)	4.1 (n=26)	0.6 (n=308)	2.9 (n=51)	1.2 (n=251)

Ns for "mean age at first sexual intercourse" and "mean age difference with partner" represent number of adolescents who reported sexual experience, reported their age at first intercourse, and gave consistent answers to questions regarding sexual activity (see footnote 4).

<sup>4</sup> Interviewers defined sexual intercourse aloud to students in simple terms as meaning heterosexual vaginal intercourse.

<sup>5</sup> On the survey, adolescents were asked a series of questions about their sexual experience, such as age at first sex, age of first partner, and reasons for engaging in first sex. Because there were no skip patterns on the survey, "I have not had sex" was a possible response to each question. A few adolescents' responses contained discrepancies regarding whether they had experienced sexual intercourse. For example, a boy might respond that he had not had sex, but in following questions he indicated that he first had sex at age 12 and his partner was 13. If it was unclear whether an adolescent had experienced sexual intercourse, his or her responses about sexual experience were not included in this report. However, these adolescents' responses to other questions are included in the report. In September 1995, 1.8 percent of adolescents had discrepancies regarding sexual activity; fewer than one percent gave discrepant answers in June 1996 and June 1997.

It is likely that some boys in this study exaggerated the extent of their sexual experience. The reported prevalence of sexual activity among males is markedly lower in other surveys of Jamaican adolescents. In the 1993 Contraceptive Prevalence Survey (CPS), among 15-year-olds (the youngest age group surveyed), 43 percent of boys reported being sexually experienced (Morris et al, 1995). On the 1987 Young Adult Reproductive Health Survey, 27 percent of 15 year-old girls and 58 percent of 15 year-old boys said they had experienced sexual intercourse (Powell and Jackson, 1988). On the CPS, the reported mean age at first intercourse among 15-24 year-olds was 15.9 among females and 13.9 among males.

To assess the factors associated with adolescents experiencing first intercourse, a logistic regression was conducted among all study participants, using their reports on the June 1997 survey. The results of this analysis are shown in Table 17. An adolescent's sex was the strongest predictor of his/her reporting having experienced first sexual intercourse. Controlling for other factors, boys were 17 times more likely than girls to report having had sex!<sup>6</sup> Adolescents who had experimented with alcohol were 2.4 times more likely than others to say they had experienced sexual intercourse, other factors being equal. Age<sup>7</sup>, who an adolescent lived with, and church attendance were not associated with reporting sexual experience.

**Table 17. Odds ratios from logistic regression showing likelihood of adolescents reporting experience of first sexual intercourse, June 1997 (n=706)**

Variable	Odds ratio
Sex	<b>.06*</b>
Age	1.20
Ever-use of alcohol	<b>2.41*</b>
Residential caregiver	1.01
Church attendance	.68

Odds ratios significant at  $p < .01$  are bolded and marked with an asterisk. Dependent variable coded 1=experienced first sexual intercourse, 0=had not experienced first intercourse. Independent variables: Sex coded 1=girl, 0=boy. Alcohol coded 1=yes, 0=no. Residential caregiver coded 1=mother and father, 0=other. Church attendance coded 1=at least once/week, 0=less than once/week. Age was a continuous variable.

To evaluate the effect of the Grade 7 Project on an adolescent's odds of experiencing first sexual intercourse during the study period, two logistic regression models were conducted -- one examining the short-term impact, and the other looking at the longer-term impact. The population for these analyses included only adolescents who said they had not experienced first intercourse at the study onset in September 1995.

<sup>6</sup> The odds ratio of .06 indicated in Table 16 indicates that girls were only .06 times as likely as boys to report sexual intercourse; to interpret this finding in terms of boys, it is necessary to divide one by .06, which equals 16.67.

<sup>7</sup> There was almost no variation in age among study participants,

The Grade 7 Project did not have a significant impact on young adolescents engaging in first sexual intercourse, either during seventh grade or by the end of eighth grade. The factors associated with reporting experiencing first sexual intercourse during the study period were very similar for both the short-term and long-term (Table 18). As in the model representing all adolescents (Table 17), sex of the adolescent and alcohol use were significantly associated with reported experience of first intercourse during the study period. In addition, among the adolescents in this analysis, those who attended church weekly were significantly less likely to have engaged in first sexual intercourse between September 1995 and June 1996.

**Table 18. Odds ratios from logistic regression analyses showing likelihood of adolescents reporting experience of first sexual intercourse during Jamaica Adolescent Study, in short-term and long-term**

Variable	Short-Term (September 1995 - June 1996) (n=567)	Long-Term (September 1995 - June 1997) (n=472)
Sex	<b>.04*</b>	<b>.10*</b>
Group	.85	.89
Age	1.01	1.18
Ever-use of alcohol	<b>1.79*</b>	<b>2.42*</b>
Residential caregiver	.84	1.18
Church attendance	<b>.39*</b>	.89

Odds ratios significant at  $p < .05$  are bolded and marked with an asterisk. Dependent variable coded 1=experienced first sexual intercourse during study period, 0=did not experience first intercourse during study period.

Independent variables: Sex coded 1=girl, 0=boy. Group coded 1=Grade 7 Project, 0=comparison group. Alcohol coded 1=yes, 0=no. Residential caregiver coded 1=mother and father, 0=other. Church attendance coded 1=at least once/week, 0=less than once/week.

***b. Reasons for First Sexual Intercourse***

On the questionnaires, when choosing among responses to a closed-ended question, adolescents indicated that curiosity was the most common motivation for engaging in sexual intercourse for the first time (Table 19). At the end of eighth grade, when the highest proportion of adolescents reported sexual experience, about half of girls (53 percent) and 63 percent of boys reported that they had sex the first time to “see what it was like.” “To show love” was the second most frequently cited reason for first sex (14 percent of girls and 18 percent of boys). A number of girls (16 percent) and boys (10 percent) also said they were “convinced” by their partner to have sex for the first time. It is disturbing to note that six girls (12 percent) and seven boys (3 percent) said they were raped or forced to have sex. Just one girl said that the desire for pregnancy motivated her to have sex for the first time.

Among seventh graders, the reasons given for engaging in first sexual intercourse were much the same. Curiosity was the most commonly reported reason, followed by the desire to express one’s love for a boyfriend or girlfriend. (These data are not shown because so few girls, 28, reported sexual experience in September, 1995.)

**Table 19. Reported reasons for first sexual intercourse among adolescents (in percent), June 1997**

Reason	Girls (n=51)	Boys (n=251)	Total (n=302)
To see what it was like	52.9	63.0	61.3
To show love for boyfriend/ girlfriend	13.7	18.3	17.6
Convinced by boyfriend/girlfriend	15.7	10.4	11.3
Raped or forced	11.8	2.8	4.3
To get pregnant	2.0	3.2	3.0
Other	2.0	1.2	1.3
No response	2.0	1.2	1.3

## 2. Focus Group Findings

### a. *Very Young Age at First Intercourse*

Given the high prevalence of reported sexual activity on the survey among boys and the relatively high proportion of boys reporting sex at a very young age, researchers questioned if some were misrepresenting their actual experience or had misunderstood the meaning of sexual intercourse. Therefore, in the FGDs with seventh grade boys, moderators specifically explored these issues. Boys in all the groups clearly understood “having sex” to mean vaginal intercourse with penetration. “*Him put his penis inside her, kiss her, and have a nice romance,*” one boy described. “*Him put him penis inside her pot. Him push it in and work it,*” specified a boy in another group.

In each group, some boys confirmed that a boy might have sex at age eight or nine, or younger. A boy at a rural school related how sex at this age might occur: “*A boy and a girl a play dolly house -- the boy the father and the girl the mother. Them a sleep and things get outta hand. Him start feel her up, you know, them take off clothes, kissing go on, by you know, him push it in, she start cry.*” Other boys, however, doubted that a young adolescent couple would actually have sex at such a young age. “*No, him just kiss her up,*” a boy disagreed.

### b. *Likelihood of Having Sex*

While most boys, particularly seventh graders, did not advocate sex for youth their age, many admitted that it might happen. Most boys thought that if given the opportunity, few boys would decide not to have sex. When asked what he would do if faced with such a decision, one seventh grade boy laughed incredulously and said “*She want to have sex with me? Sir, me would a have sex!*” Boys did not seem to question the conflict between their stated sexual mores and their actual or intended behavior. The same boys who said young adolescents should not have sex, often admitted minutes later, that they themselves would have sex if given the opportunity.

For the most part, boys viewed saying no to sex as a girl's responsibility. In fact, many boys phrased their willingness to delay sex in terms of accepting the girl's refusal to have sex. "*Me would think about it until she ready fi say yes,*" a boy explained. Some boys mentioned that they would wait because, with persistence, a boy could convince a girl to have sex. An eighth grade boy explained, "*He could ask her for a long time, and keep asking until she get fed up and say yes.*"

Boys disagreed over whether a girl their age would agree to have sex, but most seventh grade boys doubted she would. Some boys said a girl would reject a boy's sexual advances outright. Most boys, however, offered that a girl would decline sex politely, leaving open the possibility of something in the future or explaining her fear of pregnancy. "*She would say 'another time,'*" described one boy. Another added, "*Maybe she would say she no want any pickney [child] yet.*"

While many boys predicted that a girl would refuse to have sex, others said she was likely to at least consider having sex. Boys in eighth grade were more likely than those in seventh grade to say that a girl would have sex with her boyfriend. "*She would want to try it,*" speculated a Kingston boy. "*She would reject him the first time and give in the second time,*" said an eighth grader at a rural school. Several boys suggested that the girl's consent was dependent on several factors. In one rural school a seventh grade boy offered, "*Maybe she would say 'if you have a condom.'*"

Girls were less likely than boys to concede that a young adolescent girl would have sexual intercourse. Most girls in the FGDs, particularly those in seventh grade, at first insisted that Nell would not have sex with Ted. A girl in eighth grade offered, "*I don't really know a lot about [Nell], but if I were in her place, I would not be ready.*" When the moderator asked, "*What would you do if you were in Nell's place?*" one seventh grade girl retorted, "*I would not be in Nell's place in the first place -- I wouldn't have sex with a boy.*" In each group, however, two or three girls said that although she shouldn't, Nell might eventually decide to have sex with Ted.

Eighth grade girls were more likely than seventh grade girls to say that a girl would have sex with her boyfriend. "*Maybe she get sexual feelings, and she just give him,*" offered a girl in eighth grade at a Kingston school. "*Some girls are ready for sex,*" added another girl. At another school, a girl in eighth grade suggested, "*She would think about it.*"

### ***c. Motivations for Engaging in Sexual Intercourse***

In the FGDs, adolescents introduced a variety of motivations for becoming sexually active. While girls and boys often presented similar motivations, their demeanors during the discussions were very different. Girls were often shy in talking about sex, and many used negative words like "*sad*" and "*embarrassed*" to describe how a girl would feel after losing her virginity. In comparison, boys discussed sex with little embarrassment or hesitation, and most, even those who earlier expressed disapproval of adolescent sexual activity, were enthusiastic about discussing sexual intercourse.

Girls in the FGDs concurred that love would be the strongest impetus for having sex. A seventh grade girl declared, *“If she say yes, that mean she really love him and she will give him anything him want.”* While boys in the FGDs never mentioned love as a reason for a boy to have sex, they did think love might motivate a girl to have sex.

Some boys and girls shared the perception that love, or being in a relationship, obligates a girl to have sex with her boyfriend. Girls were especially likely to say that a girl might have sex to make her boyfriend *“feel good”* or so he would *“love her more.”* A seventh girl in one group suggested, *“Maybe if she don’t have sex with him, him dump her. Probably she wouldn’t want to lose him.”*

Both girls and boys acknowledged that a boy might pressure a girl to have sex. An eighth grade girl described how a boy pressures a girl to have sex by challenging her love for him: *“Maybe at first she would say no, and the boy would keep on saying, ‘You don’t love me. If you love me, you would have sex with me.’ And maybe she would say yes. Maybe she would have sex with him because she love him and she wouldn’t like him [leave] her and another girl get him.”*

In several of the FGDs, a few boys and girls suggested that a boy would react angrily if a girl resisted his sexual advances. *“If him ask her and she say no, him would a cuss her,”* predicted a seventh grade girl. Most boys and girls, however, doubted a boy would actually resort to force as a means of having sex with a girl. *“Not if she say no,”* said a girl in Kingston. *“If him love her and want to get into a relationship with her, him wouldn’t force her. Him would wait until another time and ask her again,”* explained a boy.

Many adolescents suggested that curiosity might be a motivating factor for a young adolescent to have sex for the first time. Girls in eighth grade were more likely than girls in seventh grade to bring up this motivation. *“I think she would have sex with him because they way her friends talk about it at school, she will want to go and try it herself and see how it stay,”* said an eighth grade girl from Kingston. Boys in both seventh grade and eighth grade mentioned that a boy would try sex out of curiosity. A seventh grade boy in one FGD explained, *“Him want to try it, to see how it feel -- if it feel sweet, or what.”*

Boys in the FGDs suggested that boys have sex for physical pleasure and to enjoy the elevated status among peers that accompanies sexual experience. A boy in one focus group related, *“Him friends, them tell him that him gonna love it!”* For boys who have not yet had sex, encouragement from friends to engage in sex may turn into pressure. *“If him no do it, them a go call him chicken.”* explained a boy. Some boys downplayed the role of peer pressure: *“Me no care ’bout my friend, them. Me a go take it!”* a boy in one group said.

Very few seventh grade girls mentioned perceiving pressure from other girls to engage in sexual activity. Among girls in eighth grade, however, peer pressure was discussed in every focus group. An eighth grade girl in one group explained, *“Some of them have friends who are doing it, and them say ‘do it, nothing wrong with it,’ and they boots [encourage] them to do it, them say ‘try it out man and you will see.’”*

Losing one's virginity often signifies a passage into adulthood, and having sex can be a way for an adolescent to assert that he or she is no longer a child. Boys were particularly likely to view losing one's virginity as an important sign of manhood. A boy in another group of seventh graders explained that after having sex for the first time, "*Him feel that him is a man now.*" An eighth grade boy from Kingston thought that once a boy had lost his virginity, "*He would feel more mature...like a big man. He would stop walk with the little youth, them, and walk with the bigger youth, them.*"

In a couple of the FGDs with girls, some girls also viewed engaging in sexual intercourse as symbolic of adulthood. In one FGD, a girl explained that a girl might have sex because, "*She want to think she is a big woman.*" However, most girls thought a girl their age who had sexual intercourse would be afraid of getting pregnant and her mother finding out.

Focus group participants rarely mentioned that a girl would have sex because a boy gives her money or presents. A girl in eighth grade at an inner-city Kingston school described: "*If she down town Kingston and she meet a boy...and him selling brand name things and she go a buy something and him say 'You don't haffta buy, come home and live with me.'*" *And him cook good and wear brand name, so she will have sex with him.*" At a rural school, a girl in seventh grade speculated, "*Some girls love money. She might do it with him for money.*"

#### **d. Peer and Parental Reactions to Adolescent Sexual Activity**

Girls in the FGDs said that a girl their age who has sex is unlikely to tell friends or family members that she is sexually active, fearing their disapproval and reproach. According to girls in every FGD, in both seventh and eighth grade, a mother would severely punish a daughter discovered to be sexually active. And a girl's peers are likely to react with taunts. "*Them would a call her sketel,*" a seventh grade girl declared. Girls in several FGDs said that girls are likely to inform adult authority figures if they discover that a friend is sexually active. One girl related what happened at her school: "*A girl...she had sex with this boy and she tell her friends what happen to her, and her friends go and tell the principal.*"

While girls are vilified for engaging in sexual intercourse, boys who have sex generally receive admiration and encouragement from their peers. A seventh grade boy in one FGD said, "*Him would feel good 'cause him friends biggin' him up.*" An eighth grade boy described, "*Them would say him a big man now. Them would respect him.*" When the moderator asked boys in seventh grade at a rural school if Ted would tell anyone that he had sex with Nell, the response was "*Him a go tell him friend, big brother. Him tell him relative and cousin and friend and everybody!*"

## H. Family Planning Behavior and Attitudes

### 1. Survey Findings

#### a. Use of Family Planning

Survey findings indicated that the majority of sexually experienced adolescents did not use family planning at first intercourse (Table 20). On all three survey dates, girls were more likely than boys to report having used a contraceptive method at first intercourse. Girls reporting sexual experience in June 1997 were particularly likely to say they had used contraception at first intercourse – 67 percent, versus 35 and 43 percent in earlier surveys.

**Table 20. Reported use of contraception at first intercourse (in percent), by survey date and sex**

Item	September 1995		June 1996		June 1997	
	Girls (n=28)	Boys (n=284)	Girls (n=26)	Boys (n=308)	Girls (n=51)	Boys (n=251)
Used family planning at first sexual intercourse	42.9	37.7	34.6	31.2	64.7	29.5

Among adolescents who reported using family planning at first sexual intercourse, the condom was the most frequently used method (Table 21). Approximately 55 percent of girls and 27 percent of boys used the condom the first time they had sex.

**Table 21 . Family planning method used at first sexual intercourse, among sexually experienced adolescents (in percent), June 1997**

Method	Girls (n=51)	Boys (n=251)	Total (n=302)
Condom	54.9	27.1	31.8
Pill	5.9	0.8	1.7
Withdrawal	2.0	2.0	2.0
Foam, cream	0.0	0.8	0.7
Rhythm	2.0	0.0	0.3
Other method	0.0	0.8	0.7
No method	35.3	68.5	62.9

To assess the factors associated with adolescents using family planning during their first sexual intercourse, a logistic regression was conducted among all study participants who said they had experienced sexual intercourse by June 1997 (Table 22). An adolescent's sex was the strongest predictor of his/her having used family planning. Controlling for other factors, girls were three times more likely than boys to report having used family planning. Age at first intercourse was

also associated with using family planning. For each additional year of age at first intercourse, an adolescent was 1.2 times more likely use family planning, other factors being equal. The other variables -- partner three or more years older, alcohol use, who an adolescent lived with, and church attendance -- were not associated with use of family planning.

**Table 22. Odds ratios from logistic regression showing likelihood of adolescents reporting use of family planning during first sexual intercourse, June 1997 (n=297)**

Variable	Odds ratio
Sex	<b>3.00*</b>
Age	<b>1.19*</b>
Partner 3+ years older	.91
Ever-use of alcohol	1.20
Residential caregiver	1.14
Church attendance	.86

Odds ratios significant at  $p < .01$  are bolded and marked with an asterisk. Dependent variable coded 1=used family planning, 0=did not use family planning. Independent variables: Sex coded 1=girl, 0=boy. Partner 3+ years old and ever-use of alcohol coded 1=yes, 0=no. Residential caregiver coded 1=mother and father, 0=other. Church attendance coded 1=at least once/week, 0= less than once/ week.

Two logistic regression models were conducted to evaluate the impact of the Grade 7 Project on an adolescent's odds of using family planning (Table 23). One examined the short-term impact, and the other looked at the longer-term impact. The population for these analyses included only adolescents who said they experienced first intercourse during the study period, that is between September 1995 and June 1997. (The variable indicating if an adolescent's partner was three or more years older than he/she was omitted from the short-term model because over half the responses were missing for this item.)

The Grade 7 Project had a short-term impact on young adolescents' use of family planning during first sexual intercourse. Adolescents in the Grade 7 Project were more than twice as likely than adolescents in the comparison group to use family planning. However, this relationship fell short of statistical significance, with a p-value of 0.08. The Grade 7 Project did not have a long-term impact on use of family planning.

**Table 23. Odds ratios from logistic regressions showing likelihood, in the short term and long-term, of adolescents using family planning at first sexual intercourse, among adolescents who reported experience of first intercourse during Jamaica Adolescent Study**

Variable	Short-Term (September 1995 - June 1996) (n=91)	Long-Term (September 1995 - June 1997) (n=108)
Sex	1.11	<b>3.26*</b>
Group	2.25	1.06
Age	.86	<b>1.27*</b>
Partner 3+ years older	na	1.84
Ever-use of alcohol	.78	1.62
Residential caregiver	.84	1.40
Church attendance	1.14	1.21

Odds ratios significant at  $p < .05$  are bolded and marked with an asterisk. Dependent variable coded 1=used family planning at first intercourse, 0=did not use family planning. Independent variables: Sex coded 1=girl, 0=boy. Group coded 1=Grade 7 Project, 0=comparison group. Partner 3+ years old and Ever-use of alcohol coded 1=yes, 0=no. Residential caregiver coded 1=mother and father, 0=other. Church attendance coded 1=at least once/ week, 0= less than once/ week.

**b. Attitudes about Family Planning**

Both survey and focus group findings shed some light on why some adolescents do not use family planning. In the survey, adolescents displayed mixed attitudes toward family planning (Table 24). A large majority agreed that using oral contraceptives is responsible behavior and that a boy who uses a condom is treating his girlfriend with respect. However, many adolescents, particularly boys, also associated family planning with promiscuity, agreeing with statements that condoms and oral contraceptives are used only by boys and girls who have multiple sexual partners.

**Table 24. Percentage of respondents agreeing with statements reflecting attitudes about family planning, by survey date and sex.**

Statement	September 1995 (n=945)		June 1996 (n=872)		June 1997 (n=719)	
	Girls	Boys	Girls	Boys	Girls	Boys
A girl who uses birth control pills is being responsible.	64.7	67.3	74.8	76.0	80.4	78.3
A boy who uses a condom is showing respect to his girlfriend.	85.7	85.7	88.8	91.2	90.1	92.0
Condoms are only for boys who have sex with more than one girl.	53.9	71.4	43.8	59.3	37.6	54.5
Birth control pills are only for girls who have sexual intercourse with more than one boy.	42.5	58.9	36.4	52.9	31.3	49.4

Logistic regression analyses were conducted to assess the short-term and the long-term effects of sex and the Grade 7 Project on adolescents' attitudes about family planning. The results of this multivariate analysis are shown in Table 25. Over time, adolescents' attitudes became more supportive of family planning. They became more likely to agree that a girl who uses birth control pills is behaving responsible and that a boy who uses a condom is showing respect to his girlfriend (as indicated by the positive coefficients for "Time2" and "Time3"). In addition, they became less likely to agree that condoms and pills are only for adolescents who have multiple sexual partners (as indicated by the negative coefficients for "Time2" and "Time3").

Girls were less likely than boys to think that condoms and pills are only for adolescents with multiple sexual partners. An adolescent's sex did not have a significant effect on the other two items regarding family planning attitudes (columns 1 and 2 of Table 25). The Grade 7 Project did not have a significant effect on attitudes about family planning, either at the end of seventh grade or by the end of eighth grade (as indicated by the nonsignificant coefficients for the variables "Group\*Time2" and "Group\*Time3").

**Table 25. Coefficients from logistic regression analyses showing likelihood of adolescents agreeing with statements reflecting family planning attitudes**

Variable	Statement reflecting family planning attitudes			
	Girl using birth control pills is being responsible.	Boy using condom shows respect to girlfriend.	Condoms only for boys who have sex with more than one girl.	Pills only for girls who have sex with more than one boy.
Group	-.10	-.27	-.13	-.07
Sex	.01	.26	<b>-.91*</b>	<b>-.70*</b>
Time2	<b>.41*</b>	.41	<b>-.45*</b>	-.27
Time3	<b>.49*</b>	<b>.77*</b>	<b>-.72*</b>	<b>-.50*</b>
Group*Sex	-.12	-.34	.33	.10
Group*Time2	.13	.54	-.14	.06
Group*Time3	.13	.17	-.08	.23
Sex*Time2	-.03	-.39	.09	-.03
Sex*Time3	.21	-.36	.07	-.11

Coefficients significant at  $p < .05$  are bolded and indicated with an asterisk. Family planning attitude items were coded 1=agree, 0=disagree. Group was coded 1=Grade 7 Project, 0=comparison group. Sex was coded 1=girl, 0=boy.

## 2. Focus Group Findings

### a. Family Planning

In the FGDs, adolescents expressed generally positive attitudes toward family planning. Both boys and girls advocated that teenagers use family planning if they have sex, often recommending the condom as the best method for young people. A boy advised, "*when him use the condom, it would be more safe for the girl.*" "*And for the youth too,*" added a second boy.

Eighth grade boys, in particular, expressed positive attitudes about condoms, and most said they would use one. *“Me would use a condom ‘cause me love my life, you know. Can’t bother with no AIDS thing, you know. Me would prefer go the safer way.”*

Both boys and girls, however, acknowledged that a girl is more likely to insist on using family planning because unprotected sex poses a greater risk to her. *“She don’t want to have any baby, and she don’t want to get pregnant, for her mother would find out,”* explained a girl.

Many adolescents, however, doubted that a young couple would use family planning, for various reasons. Despite their own awareness of contraceptive methods, FGD participants, particularly seventh graders, suggested that young people their age sometimes fail to use family planning due to lack of knowledge. *“Them wouldn’t use it because them wouldn’t know the meaning of it,”* a girl in seventh grade stated. Eighth grade boys and girls were much less likely to suggest that lack of knowledge would explain failure to use family planning.

In the focus groups with eighth graders, boys in most groups mentioned that an adolescent boy might not use family planning because he had not expected to have sex and did not think about family planning until it was too late. At a Kingston school, boys in eighth grade described the unanticipated nature of a sexual experience. *“Him only think about having fun,”* explained one boy. Another added, *“True, because it come ‘pon you unexpected, she just come ‘pon you and you never expected her to want it!”*

Institutional barriers may make it difficult for younger adolescents to access contraceptives. A seventh grade girl in one FGD thought a teenage girl would encounter difficulty in buying oral contraceptives: *“They wouldn’t sell it to her because she too young.”* An eighth grade girl echoed the same sentiment: *“The nurse would not give her the injection because she is 13, because she is just a child.”* The cost of contraceptives may also help explain why young adolescents don’t use them. When discussing Nell’s pregnancy, a seventh boy suggested, *“Maybe she had used the condom at first, but they didn’t have any money to buy any more.”* Despite acknowledging the cost of modern contraceptives, no adolescents ever mentioned traditional methods of family planning, such as withdrawal or rhythm.

Cultural values regarding adolescent sexuality may contribute to nonuse of family planning among both boys and girls. Some boys had heard that sex was less pleasurable with a condom, and said they would have sex *“bareback.”* In one FGD, a boy offered *“Nuff boy around here don’t use the condom. Them say it not nice with the condom.”* A boy in another FGD expressed concern about STDs and advocated using a condom, but when asked if he would use one himself, replied *“No, sir. Me wouldn’t use it,”* amidst the laughter of other boys.

Some boys thought that a boy who did use a condom would keep it a secret: *“Him no tell nobody because them a go laugh after him and say him a little boy.”* But most boys thought their peers were supportive of condom use. When the moderator asked a group of eighth grade boys what Ted’s friends would think of his using a condom, a boy responded, *“They would feel good because they would say that them don’t want him fi catch no AIDS.”* A classmate added, *“Me would say a good thing -- that if you love your life, you use a condom for safe sex.”* At another

school, a boy stated, *“Him friends would say, that’s a smart move because you never know what can happen.”*

Both seventh and eighth grade girls stressed that a young adolescent girl may be hesitant to use family planning because if parents and friends learned of her contraceptive use, they would, by association, know she was sexually active. Seventh grade girls in particular thought that friends and parents would disapprove. One seventh grade girl predicted that if a girl’s mother found her daughter’s contraceptive supplies, *“[She] would curse her. She would think that she was having sex.”* Girls thought that girls their age would taunt and shun a friend whom they discovered was using family planning. *“They would say she taking it [the pill] ‘cause she having sex a lot of time,”* a girl in seventh grade predicted. An eighth grade girl stated, *“Them tease her and go tell the teacher.”*

Perceptions of parents’ and peers’ reactions to a young adolescent girl using family planning were more varied among girls in eighth grade. Some girls in eighth grade suggested that a mother would be supportive of her daughter using family planning because it was better than pregnancy. A girl from Kingston suggested that if Nell decided to have sex with Ted, *“she can go to her mother, talk to her mother and ask her for help. Might be her mother will tell her to use the condom.”* A classmate elaborated: *“Maybe because the girl’s mother got pregnant at a young age, maybe she wouldn’t want the same thing to happen to her daughter.”* Eighth grade girls also mentioned that although they would not approve of her having sex, a girl’s friends might think she was wise to use family planning. *“Some of her friends would think good of her and say ‘yes, use the family planning,’ but some are bad-minded persons and say ‘no, don’t use it,”* suggested an eighth grade girl at a rural school.

A couple of seventh grade boys brought up the belief that adolescents need not use family planning because they are too young to get pregnant or impregnate a girl. A boy explained that he would not use a condom because *“me no think me can get her pregnant.”* But in most instances, other boys in the group disagreed. *“Them would a use it, because them big enough know she can get pregnant when them do it,”* a boy insisted. Only one girl, among all the FGD participants, mentioned doubting that a young adolescent was capable of getting pregnant or fathering a child.

A few girls expressed fears that young teens who use family planning would suffer side effects. A girl in one FGD warned that the pill, *“...will mash up her insides.”* In one FGD, an eighth grade girl stated that injectable contraceptives *“block up”* a woman’s fallopian tubes. While fears of contraceptive side effects were mentioned briefly in most FGDs, girls did not express a great deal of concern regarding contraceptive side effects, perhaps due to lack of actual contraceptive experience.

Very few adolescents, usually boys, offered that young adolescents would fail to use family planning because they desire pregnancy. One boy speculated that Ted would not use a condom because, *“Him wanna get the girl pregnant.”* Only rarely did girls suggest that a girl might consciously desire a pregnancy. In an inner-city school, a girl said, *“Maybe she wanted to have a baby with him, thinking he would stay.”*

## I. Sexually Transmitted Diseases

Most adolescents in this study were keenly aware of HIV and other STDs, although some lacked complete and accurate knowledge. As reported in Section V.E., most boys and girls who completed the questionnaire knew that using a condom is one way to prevent the spread of STDs.

Focus group participants frequently expressed concern about STDs. Both boys and girls suggested that the risk of contracting an STD, as well as the fear of pregnancy, would motivate a teenager to use family planning. Nell would decide to use a condom, offered a girl in a FGD, *“because probably she want to protect herself from STDs, if Ted have any.”* Boys often disagreed with fellow FGD participants who said they would not use a condom. *“I would use [a condom] because I know of all the diseases,”* a boy in seventh grade stated firmly.

FGD participants sometimes corrected misconceptions about STDs held by others. In a FGD of seventh graders, a boy doubted that a teenage couple would use family planning; however, he said, *“them would go a riverside and do it.”* *“Why riverside?”* asked the moderator. *“So it wash away anything and them no get no AIDS,”* the boy explained. Another boy added, *“The AIDS gone in the river and wash gone.”* A classmate, however, quickly disputed that claim: *“Them a chat pure foolishness!”*

At ages 12 and 13, adolescents’ incomplete cognitive development makes it difficult for them to realistically assess risks and to recognize the probable consequences of their behavior (Hofman, 1984). Many adolescents in the FGDs, especially boys, seemed to lack full understanding of the fatal consequences of contracting HIV; nor did they fully understand how to protect themselves against STDs. Some boys believed that only a promiscuous girl could have an STD. *“If it’s a girl everybody talk about, say get it [an STD] already, I like to use a condom. But if it’s a new girl I wouldn’t use any,”* a boy explained to the group. Other boys advocating staying on the safe side by always using a condom; although it is encouraging that they intend to use condoms, the content of these seventh grade boys’ conversation suggests they lack the practical knowledge and experience needed to assess their risk of contracting an STD:

Boy 1: *I’d use it [a condom] ’cause I don’t want to catch AIDS.*

Boy 2: *How you a go know if she has AIDS?*

Boy 1: *Probably you know from last time you have sex. If she say she have it then, you a gwan remember she say she have AIDS.*

## J. Pregnancy Experience and Attitudes

### 1. Survey Findings

We expected that a very few study participants would have been pregnant during the study period, given their young age. At the end of eighth grade (June 1997), three girls (0.4 percent) said they had been pregnant, and 14 boys (approximately two percent) said they had impregnated a girl (data not shown). Survey respondents were not asked if they (or a partner) had given birth to a child. It should be noted that girls who became pregnant were likely to be lost to follow-up, as they would have left school during the pregnancy, and perhaps permanently. If a girl returned to school after giving birth, she is not likely to have returned to the same school she attended previously.

Most respondents expressed negative attitudes toward adolescent pregnancy (Table 26). At the end of eighth grade (June 1997), only 12 percent of girls and 21 percent of boys agreed that a girl should have a baby as a teenager to prove her fertility. Similarly, few adolescents thought that a girl or boy their age was responsible enough to be a parent. Girls were particularly likely to say that young adolescents were not old enough to be parents. As boys matured (perhaps as teen pregnancy became more relevant to their lives), they became less likely to express positive attitudes about adolescent pregnancy. Although a stigma is often attached to girls who have babies in their teen years, both boys and girls thought that a girl who has a baby should return to school and finish her education after her baby is born.

**Table 26. Percentage of adolescents agreeing with statements reflecting attitudes about pregnancy, by survey date and sex.**

Statement	September 1995 (n=945)		June 1996 (n=872)		June 1997 (n=719)	
	Girls	Boys	Girls	Boys	Girls	Boys
A girl should have a baby when she is a teenager to prove she is not a mule.	28.0	40.0	15.3	23.3	11.8	20.8
A girl my age is responsible enough to be a mother.	9.2	22.2	5.0	13.2	4.2	10.4
A boy my age is responsible enough to be a father.	9.4	25.9	6.0	14.0	3.9	10.4
If a schoolgirl gets pregnant, she should be allowed to finish school after her baby is born.	70.6	67.7	71.3	71.6	80.2	73.5

Logistic regressions analyses were used to assess the short-term and the long-term effects of sex and the Grade 7 Project on adolescents' attitudes about pregnancy (Table 27). Over time, adolescents became less likely to think a young person their age was responsible enough to be a parent, or that a teenage girl should have a baby to prove her fertility (as indicated by the negative coefficients for variables "Time2" and "Time3"). Girls were less likely than boys to view teen pregnancy favorably (as indicated by the negative coefficients for the variable "Sex" in the first three columns of Table 27).

**Table 27. Coefficients from logistic regression analyses showing likelihood of adolescents agreeing with statements reflecting pregnancy attitudes**

Variable	Statements reflecting pregnancy attitudes			
	Girl should have baby as teen to prove fertility.	Girl my age responsible enough to be mother.	Boy my age responsible enough to be father.	Pregnant girl should be allowed to finish school after baby born.
Group	.15	.29	.01	.19
Sex	<b>-.76*</b>	<b>-1.07*</b>	<b>-1.25*</b>	.28
Time2	<b>-.60*</b>	-.37	<b>-.58*</b>	.17
Time3	<b>-.86*</b>	<b>-.84*</b>	<b>-1.15*</b>	.24
Group*Sex	<b>.44*</b>	-.06	.19	-.28
Group*Time2	<b>-.44*</b>	-.69	-.43	.06
Group*Time3	-.21	-.25	.09	.16
Sex*Time2	.04	<b>-.01*</b>	.22	-.19
Sex*Time3	-.13	.11	.11	.18

Coefficients that were significant at  $p < .05$  are bolded and indicated with an asterisk. Pregnancy attitude items were coded 1=agree, 0=disagree. Group was coded 1=Grade 7 Project, 0=comparison group. Sex was coded 1=girl, 0=boy.

The Grade 7 Project had a favorable short-term impact on one item reflecting change in pregnancy attitudes. Between September 1995 and June 1996, adolescents in the Grade 7 Project were less likely than those in the comparison group to adopt the view that a teenage girl should have a baby to prove her fertility. However, the Grade 7 Project did not have a short-term impact on any of the other items regarding pregnancy attitudes (as indicated by the nonsignificant coefficients for “Group\*Time2”); nor did it have an impact on long-term attitude change (“Group\*Time3”).

## 2. Focus Group Findings

### a. Pregnancy

Adolescents in the focus groups were highly aware of the risk of unintended pregnancy. A boy warned that once Ted started having sex, “*him a gonna have to think about if she pregnant.*” However, many lacked more precise knowledge about pregnancy. In one FGD, a girl suggested, “*If they are virgin and them never had sex before, probably she couldn’t get pregnant.*”

Both girls and boys in the FGDs viewed adolescent pregnancy as unintended and unwelcome. Girls said a girl their age would feel “*useless*” and “*embarrassed*” if she got pregnant. Without prompting, they described what pregnancy would mean -- financial burdens, family strife, and potential abandonment by the baby-father. “*If she get pregnant, her mother a go kick her out, and the boy would a run left her,*” related a girl seventh grade at a rural school.

A boy too would be unhappy and scared if he impregnated a girl. "*Him start panic and fret,*" a boy predicted. The pregnancy would evoke angry reactions from both his own and the girl's parents. "*Him mother and father would throw him outta the house,*" a boy predicted. Another boy expected that the girl's mother "*would come over to [his] yard and cuss him.*" Boys in all the FGDs thought a boy might try to absolve himself of blame by implying that the girl was impregnated by another boyfriend.

In every focus group, both seventh and eighth grade girls mentioned that a teenager who is pregnant might seek an abortion. "*A girl that get pregnant when she thirteen [might] dash it away,*" suggested a girl. "*If I was in her position and I get pregnant, me no make nobody know. Me dash that away,*" a girl stated firmly. Some girls thought that a girl's mother or boyfriend would encourage her to seek an abortion. Only in one FGD with boys was abortion mentioned as an option, suggesting that in Jamaica abortion may be a topic considered the domain of women (Sobo, 1996).

A pregnant girl faces disapproval and derision from her peers and community. "*She would [be] afraid to walk with the big belly,*" another girl stated, and a chorus of laughter arose from her classmates. Much as they would respond to news of a friend's sexual activity, teenage girls are likely to chastise and ridicule a pregnant peer. A girl in one FGD offered, "*Some of them, because she get pregnant, might not want to talk to her.*" A few girls suggested that a pregnant friend would be a dangerous role model. But others disagreed, "*maybe when they see the condition she in, they wouldn't want to go!*" Only a few girls suggested that girls might pity a pregnant friend and offer her support. "*Some of her friends will stick by her, 'cause it could happen to them,*" a girl stated.

Although focus group participants described adolescent pregnancy as an unplanned and unhappy event, they did not consider it utterly disastrous. Both girls and boys acknowledged that teenagers would probably have mixed feelings about an unexpected pregnancy. A pregnant girl "*would feel happy in a way and sad in a way,*" said a girl in one FGD. In another group, a girl presented several negative aspects of pregnancy but then qualified, "*if he [her boyfriend] treatin' her good, well that different.*" A girl at a rural school offered that parental support would make things easier: "*If she know that her mother is going to mind the baby, she is not going to fret. She will feel okay.*"

Boys were more likely than girls to express enthusiasm about an unexpected pregnancy. "*Him feel good. Feel on top of the world,*" a boy described. Boys suggested that a boy who impregnates a girl is the object of his friends' admiration and envy. "*Them would big him up and say him a big man!*" a boy in one FGD described. Still, some boys in the FGDs acknowledged that peers' reactions would not be wholly admiring: "*The good ones would ask him why him do such a thing, him should've wait. But the bad ones would big him up and say 'gwan man, you get a son!' and them would want to try it.*" A boy in eighth grade said, "*Them would a say him should of protect himself, and yet them still boots him up.*"

**b. Parenthood**

In the FGDs, few adolescents expressed the desire to become a parent as young adolescents. But in several groups, a couple of boys expressed enthusiasm about becoming a father at their current age (12 or 13 years): *“Me want my first child now, because time a fly fast, so get a boy or a girl, and just gwan cool.”*

Girls’ conversations suggested that they expect to financially support themselves and their children. They maintained that a young woman should have a child only *“when she out of school and have a job,”* or *“when she can support herself and maintain herself.”* No girls ever mentioned the role of a baby’s father, suggesting that these girls view child rearing as something a woman does without assistance from the baby’s father. Only one girl mentioned marriage preceding childbearing, suggesting that a young woman have a child, *“when she have a husband, or whoever she gwan settle down with.”* No boys mentioned marriage preceding fatherhood.

Both boys and girls in the FGDs viewed parenthood as a serious undertaking and were very informed about the specific responsibilities required of a new parent. Girls in particular were aware of the work involved in caring for a baby. In one group, a girl predicted, *“The baby would wake her in the night, and in the morning she goin’ to want to sleep.”* Girls also expressed concern about the cost of raising a child. *“She have to go to work to feed the baby,”* a girl offered.

Boys too voiced concerns about the financial burden that a child represents, and they gave males more credit than girls did about the role an adolescent father should and would play in trying to support his child. *“Him would have to stop from school and work, so that him can be the best baby-father,”* stated a boy in one FGD. Some boys thought the prospect of becoming a father would inspire a boy to behave more maturely and responsibly. *“Him would start a proper relationship,”* a boy suggested. A few boys mentioned that a young father would help care for his child. *“Him would mind the baby,”* predicted one boy.

While they recognized the hardships associated with teenage parenthood, adolescents sometimes also mentioned positive aspects of having a child. Some girls thought a teenager who had a baby would *“look more mature.”* *“She feel like she responsible for herself,”* offered a girl in one FGD. A few boys suggested that a child would bring happiness to teenage parents. *“Them would enjoy their child,”* predicted a boy.

While adolescents in the FGDs considered teenage pregnancy very undesirable, they did not think it had to destroy a young person’s future. A girl in eighth grade suggested, *“After she have her baby, she can attend evening classes...But I think it’s best if she would not have sex and get pregnant in the first place.”* In one FGD, when seventh grade boys suggested that a teenage father would be forced to quit school to work to support his child, a classmate disagreed: *“Him can still go to school and work. Him a go work Saturday and Sunday.”*

In Jamaica, pregnant girls who decide to carry their pregnancy to term must leave school when their pregnancy becomes noticeable, and although they are usually allowed to return to school

after the child's birth, many do not. Girls in all the FGDs expressed concern that a pregnant girl might not complete her education. At a rural school, a girl told the group that her cousin had a baby at age twelve and dropped out of school.

Many adolescents, especially girls, felt that a teenage mother's own mother would play an important role in raising her daughter's child. They said that a pregnant teenager's mother would be horribly angry at first and kick her daughter out of the house, but eventually she would accept the pregnancy and help raise the baby. Many girls in the FGDs thought a mother would encourage her daughter to continue her education after the baby was born. *"If I was the mother, I would make her have it and then send her back to school,"* a girl recommended.

## **VI. Summary and Policy Recommendations**

This study found that a high proportion of young adolescents, particularly boys, in Jamaica say they have had sex. It is important that family planning providers and family life educators recognize that many adolescents as young as 12 and 13 are sexually active. These young people are in need of family planning and other reproductive health services, such as treatment for STDs. It is important that reproductive health services be targeted at adolescents, and that providers receive special training in meeting the needs of this age group.

The focus group findings indicated that even before they enter the teen years, these young adolescents' sexual attitudes and behavior have been significantly shaped by sociocultural and gender norms that send contradictory messages to boys and girls about sexuality and impose different standards of behavior for boys and girls. The gender difference in reported levels of sexual activity likely reflects the different standards of behavior for boys and girls. Males, even young adolescents perceive social encouragement and pressure to be sexually active. In contrast, girls who have sex, particularly if a pregnancy reveals their sexual activity, are branded as having inferior moral standards.

Boys were more likely than girls to report having experienced sexual intercourse, and they were less likely to have used family planning at first intercourse. It is possible that some boys exaggerated the extent of their sexual experience, and girls may have been hesitant to reveal that they have had sex. Nevertheless, the differences in reported behavior between the sexes remain striking. These findings, along with the attitudes expressed by boys in both focus groups and surveys indicate that boys need particular attention in reproductive health programs. More innovative and interactive methods of education and service delivery may be needed to reach young males, who are influenced by strong social pressures to engage in early sexual activity.

In all three surveys, knowledge about reproduction was very low. Even at the end of eighth grade, almost all the knowledge questions were answered correctly by fewer than half the young adolescents. On the other hand, the 12 and 13-year-olds in the focus groups appeared very knowledgeable about sex, family planning, and STDs. Still, misperceptions existed about pregnancy and pregnancy prevention existed among many young adolescents in the focus groups.

The low levels of knowledge about reproduction, combined with the number of adolescents who reported having had sex, suggests that programs for adolescents, such as family life education, must be introduced among younger children, not just those entering puberty. Youngsters need to be informed about the risks inherent in engaging in sexual activity before they first have sex. Policymakers, program managers, and family life educators should be aware of the strong influence of gender norms on the attitudes and behavior of boys and girls.

The Grade 7 Project had a short-term impact on some elements of adolescents' knowledge and some of their sexual mores. It did not, however, have a significant impact on family planning attitudes or most attitudes pertaining to pregnancy; nor did it have an effect on adolescents' engaging in first sexual intercourse. The Grade 7 Project did have a short-term effect on use of family planning at first intercourse among adolescents. However, at the end of eighth grade, one year after participating in the Project, there was no measurable difference between adolescents in the Grade 7 Project and those in the comparison group.

It is encouraging to find that the Grade 7 Project, a family life education program that meets just one hour per week, was able to affect some aspects of young people's knowledge and sexual values. However, it is disappointing that the Project did not have a significant impact on more aspects of knowledge and attitudes, and that it did not delay first sexual activity. The finding that the Project's impact was no longer measurable one year after it ended implies that family life education programs may need to be offered throughout the teen years to have a lasting impact. Additional funding would allow the Women's Center to expand the Grade 7 Project program to younger children, offer the Project more often than once per week, or offer it to young adolescents for more than one year. With adequate funding, the Project would also be able to incorporate the recommendations for improvement specified in section IV of this report and perhaps strengthen the program's impact. These recommendations include establishing a common curriculum and teaching materials, using participatory teaching methods, and introducing training for educator-counselors.

## VII. References

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## **Appendix 1. Participating Women's Center of Jamaica Foundation Staff**

National Director: Pamela McNeil

Center Managers:

Margaret Warren, Kingston  
Beryl Weir, Spanishtown  
Lurline Mitchell, Montego Bay  
Valerie Robinson, Mandeville

Grade 7 Project Educator-Counselors:

Yvonne Eubank, Kingston/St. Andrew  
Evette Bernard, Spanishtown/St. Catherine  
Joan Whiting, Mandeville/Manchester  
Edna Daley, Montego Bay/St. James and Hanover

## **Appendix 2. Jamaica Adolescent Study Interviewers and Focus Group Moderators**

Marcia Bariffe  
Betty Barnett  
Arlene Bradford  
Christopher Brown  
Debbie Bryan  
Ina Cole  
Phillip Downer  
Stacy Gordon  
Sheldon Gray  
Shakira Lee  
Shirley Gordon Lee  
Ricardo Mallett  
Desmalee Nevins  
Hazel Neysmith  
Cloverline Thompson  
Desrine Walters  
Sandra Williams  
Ava Woolcock