

# **Jamaican Youth Risk and Resiliency Behaviour Survey 2005**

School-based Survey on Risk and Resiliency Behaviours  
of 10-15 year olds

Kristin Fox  
Georgiana Gordon-Strachan

March 2007



This report was made possible by support from the U.S. Agency for International Development (USAID) under terms of Cooperative Agreement GPO-A-00-03-00003-00. The authors' views expressed in this publication do not necessarily reflect the views of USAID or the United States Government. This publication can be accessed online at the MEASURE Evaluation Web site: [www.cpc.unc.edu/measure](http://www.cpc.unc.edu/measure).

## TABLE OF CONTENTS

|                                                                |     |
|----------------------------------------------------------------|-----|
| List of Tables.....                                            | iv  |
| List of Figures .....                                          | vi  |
| Acknowledgements .....                                         | vii |
| EXECUTIVE SUMMARY.....                                         | 1   |
| CHAPTER 1 INTRODUCTION.....                                    | 4   |
| 1.2 Goals and Objectives of the Survey.....                    | 4   |
| 1.3 Study Design .....                                         | 5   |
| 1.4 Questionnaires .....                                       | 7   |
| 1.5 Recruitment, Training and Fieldwork .....                  | 9   |
| 1.6 Data Management and Analysis.....                          | 11  |
| CHAPTER 2 BACKGROUND CHARACTERISTICS OF RESPONDENTS .....      | 13  |
| 2.1 Demographic Characteristics .....                          | 13  |
| CHAPTER 3 ADOLESCENTS AND SCHOOL.....                          | 14  |
| 3.1 Employment .....                                           | 17  |
| 3.2 Academic Performance .....                                 | 18  |
| 3.3 Literacy and Numeracy .....                                | 19  |
| CHAPTER 4 HEALTH OF ADOLESCENTS .....                          | 26  |
| 4.1 Health Care-Seeking Behaviour .....                        | 26  |
| 4.3 Dietary Patterns .....                                     | 30  |
| 4.4 Physical Exercise .....                                    | 33  |
| 4.5 Emotions and Mental Health.....                            | 34  |
| CHAPATER 5 RESILIENCY AND RISK.....                            | 36  |
| 5.1 Resiliency .....                                           | 36  |
| 5.1.1 Religion and Religiosity .....                           | 36  |
| 5.1.2 Involvement in extracurricular activities at school..... | 37  |
| 5.1.3 Protective factors inside and outside the home.....      | 38  |

|                                                                              |           |
|------------------------------------------------------------------------------|-----------|
| 5.2 Risky Behaviour .....                                                    | 40        |
| 5.2.3 Physical abuse and violence.....                                       | 53        |
| 5.2.4 Drug use .....                                                         | 65        |
| <b>CHAPTER 6 SOURCES OF INFORMATION .....</b>                                | <b>76</b> |
| 6.1 Listening to the Radio .....                                             | 76        |
| 6.2 Sources of Information about Sex and Other Health Issues .....           | 76        |
| <b>CHAPTER 7 CONCLUSIONS AND RECOMMENDATIONS .....</b>                       | <b>80</b> |
| <b>References .....</b>                                                      | <b>85</b> |
| <b>APPENDIX 1. Breakdown of Schools and Student Enrolment by Parish.....</b> | <b>86</b> |
| <b>APPENDIX 2. Definitions of Literacy .....</b>                             | <b>87</b> |
| <b>APPENDIX 3. Literacy Test .....</b>                                       | <b>88</b> |
| <b>APPENDIX 4. Questionnaire.....</b>                                        | <b>94</b> |

## LIST OF TABLES

|                                                                                                                                                                       |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Table 1.1 Number of study participants required by parish and school type, Jamaica, 2005 .....                                                                        | 7  |
| Table 1.2 Number of schools required to fill sample quota by parish and type.....                                                                                     | 8  |
| Table 2.1 Percent distribution of adolescents aged 10-15 by selected background characteristics and sex, Jamaica, 2005.....                                           | 13 |
| Table 2.2 Percent distribution of adolescents by parental figure in the home and by age and sex of adolescent, Jamaica, 2005 .....                                    | 14 |
| Table 2.3 Mean household size and mean number of persons per bedroom by selected background characteristics, Jamaica, 2005.....                                       | 15 |
| Table 2.4 Percentage of adolescents who reported that they slept by themselves by selected background characteristics, Jamaica, 2005 .....                            | 16 |
| Table 3.1 Percentage of adolescents who are employed by selected background characteristics, Jamaica, 2005.....                                                       | 17 |
| Table 3.2 Academic performance by sex of adolescents, Jamaica, 2005 .....                                                                                             | 18 |
| Table 3.3 Academic performance of adolescents by school type, Jamaica, 2005.....                                                                                      | 19 |
| Table 3.4 Mean numeracy and literacy scores by sex, Jamaica, 2005 .....                                                                                               | 19 |
| Table 3.5 Literacy levels by sex and age of adolescents, Jamaica, 2005 .....                                                                                          | 21 |
| Table 3.6 Numeracy levels by age and sex, Jamaica, 2005.....                                                                                                          | 22 |
| Table 3.7 Percent distribution of adolescents by literacy and numeracy level and school type, Jamaica, 2005.....                                                      | 23 |
| Table 3.8 Odds ratios, confidence intervals and significance levels for factors influencing whether adolescent is functionally literate, Jamaica, 2005.....           | 24 |
| Table 3.9 Literacy Level and Self-reported academic and behavioural problems, Jamaica, 2005 ....                                                                      | 25 |
| Table 4.1 Percent of adolescents seeking health care by type of care and location of school, Jamaica, 2005 .....                                                      | 27 |
| Table 4.2 Mean height, weight and body mass index by age and sex of adolescents, Jamaica, 2005                                                                        | 28 |
| Table 4.3 Prevalence of overweight and obesity by age, sex and location of school, Jamaica, 2005.                                                                     | 29 |
| Table 4.4 Percent distribution of adolescents by nutritional status (BMI) and perception of body size, Jamaica, 2005.....                                             | 30 |
| Table 4.5 Usual weekly dietary consumption by sex, age and location of school, Jamaica, 2005.....                                                                     | 32 |
| Table 4.6 Percentage of adolescents who engaged in physical activity last week and who exercised at school by selected background characteristics, Jamaica, 2005..... | 33 |
| Table 4.7 Emotions by sex of adolescent, Jamaica, 2005.....                                                                                                           | 34 |
| Table 4.8 Suicidal ideation and attempted suicide by sex of adolescent, Jamaica, 2005.....                                                                            | 35 |
| Table 4.9 Relationship between suicidal ideation and emotional state of adolescents, Jamaica, 2005 .....                                                              | 35 |
| Table 5.1 Frequency of church attendance in past month by sex, Jamaica, 2005 .....                                                                                    | 36 |
| Table 5.2 Involvement of adolescents in organized extra-curricular activities by sex, age, school type and location of school, Jamaica, 2005 .....                    | 37 |
| Table 5.3 Protective factors inside and outside the home for adolescents aged 10-15 years by sex, Jamaica, 2005.....                                                  | 39 |
| Table 5.4 Lifetime risky behaviour of adolescents, Jamaica, 2005 .....                                                                                                | 40 |
| Table 5.5 Sexual activity by sex and age of adolescent, Jamaica, 2005 .....                                                                                           | 41 |
| Table 5.6. Percentage of adolescents aged 10-15 who have ever had sexual intercourse by sex and background characteristics, Jamaica, 2005 .....                       | 42 |
| Table 5.7. Percentage of adolescents aged 10-15 who have ever had sexual intercourse by sex and protective factors inside the home, Jamaica, 2005.....                | 43 |
| Table 5.8 Percentage of adolescents aged 10-15 who have ever had sexual intercourse by sex and protective factors outside the home, Jamaica, 2005.....                | 44 |
| Table 5.9 How first sex occurred and number of times had sex by sex and age of sexually active adolescent, Jamaica, 2005 .....                                        | 47 |
| Table 5.10 Percentage of sexually-active male adolescents aged 10-15 who used a condom at last sexual intercourse by background characteristics, Jamaica, 2005 .....  | 49 |

|                                                                                                                                                                                         |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Table 5.11 Percentage of sexually-active adolescents aged 10-15 who used a condom at last sexual intercourse by sex and protective factors in the home, Jamaica, 2005 .....             | 50 |
| Table 5.12 Percentage of sexually-active adolescents aged 10-15 who used a condom at last sexual intercourse by sex and protective factors outside the home, Jamaica, 2005 .....        | 52 |
| Table 5.13 Physical abuse and physical attacks among adolescents by sex, age and school type, Jamaica, 2005.....                                                                        | 54 |
| Table 5.14 Percentage of adolescents aged 10-15 who were victims of a physical attack or fight during the past year by sex and background characteristics, Jamaica, 2005.....           | 56 |
| Table 5.15 Percentage of adolescents aged 10-15 who were victims of a physical attack or fight during the past year by sex and protective factors in the home, Jamaica, 2005 .....      | 57 |
| Table 5.16 Percentage of adolescents aged 10-15 who were victims of a physical attack or fight during the past year by sex and protective factors outside the home, Jamaica, 2005 ..... | 59 |
| Table 5.17 Percentage of adolescents aged 10-15 who caused a fight or attacked someone during the past year by sex and background characteristics, Jamaica, 2005 .....                  | 61 |
| Table 5.18 Percentage of adolescents aged 10-15 who caused a fight or attacked someone during the past year by sex and protective factors in the home, Jamaica, 2005.....               | 62 |
| Table 5.19 Percentage of adolescents aged 10-15 who caused a fight or attacked someone during the past year by sex and protective factors outside the home, Jamaica, 2005.....          | 63 |
| Table 5.20 Carrying of a weapon and involvement in a gang by sex of adolescent, Jamaica, 2005...                                                                                        | 64 |
| Table 5.21 Drug use by sex of adolescent, Jamaica, 2005 .....                                                                                                                           | 66 |
| Table 5.22 Percentage of adolescents who used drugs in the past year by age, Jamaica, 2005 .....                                                                                        | 66 |
| Table 5.23 Percentage of adolescents aged 10-15 who have ever been really drunk by sex and background characteristics, Jamaica, 2005 .....                                              | 68 |
| Table 5.24 Percentage of adolescents aged 10-15 who have ever been really drunk by sex and protective factors in the home, Jamaica, 2005.....                                           | 69 |
| Table 5.25 Percentage of adolescents aged 10-15 who have ever been really drunk by sex and protective factors outside the home, Jamaica, 2005 .....                                     | 70 |
| Table 5.26 Percentage of adolescents aged 10-15 who used any drugs in the past year by sex and background characteristics, Jamaica, 2005 .....                                          | 72 |
| Table 5.27 Percentage of adolescents aged 10-15 who used any drugs in the past year by sex and protective factors in the home, Jamaica, 2005.....                                       | 73 |
| Table 5.28 Percentage of adolescents aged 10-15 who used any drugs in the past year by sex and protective factors outside the home, Jamaica, 2005 .....                                 | 73 |
| Table 5.29 Percentage of adolescents reporting level of ease or difficulty in accessing drugs .....                                                                                     | 75 |
| Table 6.1 Frequency with which adolescents listen to the radio by sex, age, school type and location of school, Jamaica, 2005.....                                                      | 76 |
| Table 6.2 Sources of information about sex by sex age school type and location, Jamaica, 2005 ....                                                                                      | 78 |
| Table 6.3 Sources of information about health issues by sex and age group, Jamaica, 2005 .....                                                                                          | 79 |

## LIST OF FIGURES

|                                                                           |    |
|---------------------------------------------------------------------------|----|
| Figure 3.1 Mean total literacy and numeracy score by age of student ..... | 20 |
| Figure 5.1 Probability of not having sex by age and sex of student .....  | 45 |
| Figure 5.2 Carry a weapon by age of child .....                           | 65 |

## **ACKNOWLEDGEMENTS**

This survey was funded by the United States Agency for International Development (USAID) through the MEASURE Evaluation project, with technical and other assistance from the National Healthy Lifestyle Project. This study would not have been possible without the collaboration of the Ministry of Education. Special thanks go to the teachers and students who participated in the study.

The contribution of the following persons to the successful completion of this survey and final report is appreciated:

### ***Project Proposal Preparation***

- Deanna Ashley
- Ayesha Johnson
- Georgiana Gordon-Strachan

### ***Data Analysis and Interpretation***

- Kristin Fox
- Anastasia Gage
- Georgiana Gordon-Strachan

### ***Instrument Development***

- Georgiana Gordon-Strachan
- Ayesha Johnson
- Ingrid Thame
- Kristin Fox
- Ilene Speizer
- Uki Atkinson

### ***Feedback on Draft Reports***

- Sheila Campbell-Forrester
- Eva Lewis-Fuller
- Andriene Grant
- Jennifer Knight-Johnson
- Anastasia Gage
- Ayesha Johnson

### ***Logistics***

- Marcia Phillips-Dawkins
- Faith Aljoe
- The Permanent Secretary, Ministry of Education

### ***National Dissemination Meeting***

- Eva Lewis-Fuller
- Andriene Grant
- Jennifer Knight-Johnson
- Anastasia Gage
- Nadine Tarawali
- Ayesha Johnson
- Ava-Gail Simpson
- Andreen Ellis

### ***Field Work***

- Uki Atkinson
- All Field Team Supervisors
- All Interviewers
- The staff and students of all participating schools

### ***Data entry***

- Michelle Cole
- Calette Gordon
- Beverley Young
- Simone Robinson

## EXECUTIVE SUMMARY

The 2005 Jamaica Youth Risk and Resiliency Behaviour Survey (2005 JYRRBS) interviewed a nationally representative sample of 3003 in-school youth aged 10-15, of whom 1,422 were males and 1581 were females. The main purpose of the survey was to determine health status, nutritional habits and lifestyles of children and young teenagers aged 10-15 years in a nationally representative sample of Jamaican children currently in school and relate these to demographic and socio-economic factors. In addition, the 2005 JYRRBS included questions on risk and resiliency to determine factors which provide protection from teen pregnancy, HIV/AIDS, violence and obesity to inform programs targeted at the early adolescent period. The survey included the following modules: demographic information; the child and school; physical activity; dietary practices; medical care and perception of self; emotions and mental health; resiliency; violence and unintentional injuries; alcohol, tobacco and drug use; sexual behaviour; sources of information; anthropometry - weight, height, and waist and hip circumference; and literacy and numeracy.

### *Health care-seeking behaviour*

There were no significant differences in health care-seeking behaviour between males and females but there were differences by location of school. Students attending schools in rural and remote rural areas were significantly less likely to have had their eyes or hearing checked or to have seen a dentist than those living in urban areas. Significantly more girls in the urban areas had had a vaginal examination.

### *Nutritional status*

Seven per cent of adolescents aged 10-15 are overweight and almost four per cent are obese. At all ages more female than males are obese. Urban males and females are significantly more likely to be overweight or obese than their rural counterparts. In the 13-15 age group 11% of urban girls were obese compared with 3-4% of their rural counterparts.

### *Emotions and mental health*

Three out of four adolescents were happy most or all of the time and 14% felt lonely, sad or wanted to cry most of the time/always. One in ten seriously considered attempting suicide during the past year; 3% tried to commit suicide during the past year; and 4% made plans to commit suicide in the past year. There was a significant relationship between suicidal ideation and feeling lonely, sad or wanted to cry most of the time. Significantly more adolescents with suicidal ideation experienced worry affected sleep. While 13% of the adolescents had a family member or a friend who tried to commit suicide this was not significantly associated with attempted suicide. Having a friend who tried to commit suicide was significantly associated with attempted suicide.

### *Physical activity*

In a typical week 16% of students exercised for 5 days a week and 24% exercised one day a week for at least 30 minutes. For physical activity in the last week, boys were significantly more physically active in the last week than girls (86.3% of boys compared with 75% of girls). Physical activity was significantly different by age. It peaked at age 13 years and was lowest at ages 11 and 15 years; this corresponds with national examinations at age 11 years and Caribbean Regional examinations at age 15 years.

### *Dietary patterns*

Approximately 1 in every 4 children (24%) reported that they went hungry because there was a lack of food in their home. More boys (26.5%) than girls (22%) reported going hungry. Boys and girls have similar consumption patterns, but adolescents attending school in remote rural areas had higher consumption of fruit and lower consumption of fast foods. Consumption of sodas was widespread.

### *Sexual behaviour*

Thirteen per cent adolescents 10-15 years reported that they had sexual intercourse, with boys being three to four times as likely as girls to report sexual activity (21% of boys and 6% of girls). Four per cent of the adolescents reported that they had sex in the past three months and boys were 5 times more likely than girls to have had sex in the past three months. Sexual activity increased with age, the major increase being after 12 years old. Among those who had sexual intercourse, the mean age of first sex was 11.02 years (95% CI=10.76-11.29) (median age was 11.00 years). Since the age range of the sample was 10-15 years and previous analysis showed that sexual initiation increased with age, life tables were used to predict the age of sexual debut. This yielded a median age for boys of 15.43 yrs for boys and over 15 years for girls.

Most adolescents agreed to their first sexual encounter. However, 9% of boys and 24% of girls stated that they were forced to have sex on their first sexual encounter. An additional 9% of boys and 11% of girls said they did not agree but did not say anything. Among the Jamaican adolescents who had ever had sex, 44% had one partner and 17% had 6 or more partners. One in five worried about getting AIDS but significantly more of the adolescents who had sex (33%) worried about getting AIDS "a lot" compared with those who were not sexually initiated (15%). When asked whether they or their partner had used a condom the last time they had sexual intercourse, a little over half of the respondents stated that they had done so. Significantly more girls (73%) than boys (52%) used a condom at last sexual intercourse.

### *Physical Abuse and violence*

Thirteen per cent of adolescents reported a lifetime experience of any physical abuse (lifetime experience defined as when someone causes you to have a scar, black and blue marks, welts, bleeding or a broken bone). There was no difference between males and females. The proportion of adolescents who reported being a

victim of physical abuse in the past year declined as age increased from 10-14 years. Some 4% of adolescents carried a weapon to school almost all the time during the past month. The weapon most often carried (to school and elsewhere) during the past month was a knife. Boys were 5 times more likely than girls to carry a weapon.

Approximately 2% of adolescents were currently a member of a gang, 4% used to be a gang member and 94% have never belonged to a gang. The percentage of adolescents who had ever been stabbed or shot at least once during their lifetime was 5%. Almost five out of every 10 adolescents (48%) had seen a dead body other than at a funeral. Thirty-nine per cent of those who had seen a dead body other than at a funeral reported the cause of death to be “shot and killed”.

#### *Drug use*

One in every three adolescent drank alcohol in the past year. Significantly more boys (37%) than girls (11%) consumed alcohol in the past year. One in 10 had ever smoked a cigarette. More boys (12%) than girls (9%) had ever smoked a cigarette. Three percent had smoked marijuana in the past year with significantly more boys (4%) than girls (2.0%) reporting marijuana use. Only two of the 3,003 adolescents interviewed (less than one percent) reported ever using cocaine or crack.

#### **Adolescents and school**

Over ninety per cent of the students had positive feelings about school - they liked school, planned to finish and had a teacher who had got to know them well. However, half of them reported having problems getting their homework done; one-third reported having problems reading; and half of them said that keeping up with schoolwork was hard.

Less than 50% of adolescents 10-15 years old were functionally literate. Girls were significantly more likely to be “functionally numerate than boys (67% and 52%, respectively). One in every four of the boys surveyed was “not numerate”.

#### **Resiliency and risk**

The majority of adolescents (over 70%) reported that there was someone in the home who had high expectations of them and cared about their school work. However, a much smaller percentage reported that there was an adult who listened to their problems (58%). Outside of the home, girls received more emotional support than boys. Protective factors inside the home had a significant influence on all forms of risky behaviour with adolescents being less likely to become involved when protective factors inside the home exist. For each yearly increase in age, adolescents were 1.5 times more likely to carry a weapon, and 1.9 times more likely to have had sex or to use drugs. Age did not influence causing a fight or having suicidal ideation.

# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the Survey

In Jamaica, lifestyle habits such as smoking, alcohol consumption, among others have been identified as risk factors for violence, aggression and inappropriate sexual behaviours. These and other lifestyle issues have now begun to have a significant impact on the profile of the adolescent's life and the nation's health issues. Jamaica has the highest rate of adolescent fertility in the Caribbean [1]. By the age of twenty, 40% of Jamaican women have been pregnant at least once and 80% of these pregnancies are unplanned [2]. Adolescents and young adults also suffer disproportionately from sexually-transmitted infections. While HIV infection rates in Jamaican youths are not readily accessible, the national HIV/STD control programme reports that 10-14 year old girls have twice higher risk and those 15-19 year old have thrice higher risk than boys of similar age group of contracting HIV/AIDS [3].

In 1998, 31% of all suicides in Jamaica were amongst youth 15-24 years old. Between 1996 and 1998 suicide rates doubled. Overall, 11% of Jamaican youth 15-24 contemplated suicide at least once and 3% attempted it multiple times [5]. These data suggest that mental health should be given priority within health programs for adolescents and youth. Concerning violence perpetration, studies suggest that perpetrators of crime and violent acts are mostly young men. In 2000, adolescent males accounted for 26% of the total visits to the accident and emergency units at all government hospitals [4].

Monitoring tobacco use and preventing smoking among adolescents and young people are important health goals as tobacco is often considered the gateway to the abuse of other harmful substances. Alcohol is very widely used as it is readily available and inexpensive. [6]. It is also not considered a hard drug and is socially acceptable.

Studies have highlighted resiliency and risk factors associated with violence and aggressive behaviour in Jamaican children [7]. Childhood exposure to violence, television viewing, the lack of organized activities and low levels of literacy have been highlighted as factors associated with violence in children. Church attendance and having a caring mother or father have been identified as protective factors [7].

### 1.2 Goals and Objectives of the Survey

This study sought to determine health status, nutritional habits, and health risk behaviours among young adolescents aged 10 - 15 in a nationally representative sample of in-school adolescents and relate these to relevant demographic and

socio-economic variables. The behaviours explored include: violence, drug use, tobacco use, sexual activity, and mental health problems. The study recruited male and female participants in school settings, following receipt of parental consent to participate. The information from this study will be used by the Ministry of Health to inform the development of programmes to encourage young people to engage in healthy lifestyles. In addition, the study sought to provide information on risk and resiliency factors associated with healthy lifestyles among young people aged 10-15 in Jamaica. The Ministry of Health has committed itself to using the survey results in developing programmes for youth development such as the prevention of Chronic Non-Communicable Diseases (CNCDs) and Health Promotion.

The specific objectives of the study are:

- To describe lifestyles (for example, exercise, cigarette smoking and alcohol consumption) and examine how they vary by demographic and socio-economic characteristics.
- To identify the sources of information influencing youth.
- To determine and document the context of adolescent reproductive and sexual health, including the magnitude, determinants and consequences for adolescents' lives.
- To determine the association between lifestyles and the risk of violence.
- To determine which factors protect youth from choosing an unhealthy lifestyle.

### **1.3 Study Design**

The study was a cross-sectional, interviewer-administered school-based survey conducted in all parishes of Jamaica. Children within the ages of 10-15 years who are attending a primary or secondary school were eligible to participate. Most children within this age group attend school regularly. The average daily rate of attendance for primary school children is 78.5% [8].

#### ***Sampling Strategy***

A listing of schools and their enrolment records obtained from the Ministry of Education, Youth and Culture and school attendance registers from selected schools provided the sample frames used in this study. Multi-stage random sampling was the method of sampling. The first stage was random selection of

schools within each region with probability proportional to size. The second stage was a random selection of children within the grades with the required age groups. The number of schools selected and the number of students per school were proportional to the total number of children within the required age group per parish and school.

### ***Recruitment process***

The children were selected randomly from the school register. Each selected child received a consent form to take home to his/her parent/guardian describing the study and requesting permission for the child to participate in the study. Only children who returned signed consent forms from their parent/guardian were interviewed. Some 64% of the consent forms were returned. The percentage of children with signed consent forms was somewhat higher for primary school and all age school children 66% and 71% respectively when compared with junior high (57%) and high school (56%) children. It was not possible to determine whether the non-return of signed forms was a result of parental refusal or whether the children neglected to obtain consent.

To ensure privacy, interviews were conducted in private rooms/offices/cubicles at the school. Teachers and parents were not present at the interview. The survey was introduced to the participant (see description of the study at the beginning of the questionnaire) and assent to participate was requested. The interviewer checked the box “yes” or “no”, depending on the participant’s willingness to participate. This provided documentation of assent by the participating youth.

### ***Sample Size Calculation***

In 2003, there were 279,986 children in the 10-14 years age group and 250,352 in the 15-19 years age group. This represents approximately 20% of the Jamaican population [9]. Using the rate of tobacco use among youths aged 10 - 14 as 19% (Global Tobacco Youth Survey, Jamaica, 2000), a confidence level of 95% and an error of  $\pm 2\%$ ; yielded a sample size of 2,500 children (*EPI-Info 2000*). Based on an expected refusal rate of 10% the sample size was adjusted to 2,800.

A minimum of 24 students per school in each primary, all-age and high school were selected. For junior high schools a minimum of 12 students per school were selected. This minimum number corrected for the number of students who did not return the signed consent form and for those whose parents refused to have their child participate.

Breakdowns of the sample required by parish and school type are detailed in Tables 1 and 2. A complete listing of schools in electronic form was obtained from the Ministry of Education, Youth and Culture and imported into SPSS version 12.0. The sample of schools was then selected using the sample selection procedure. Sampling for the age group 13-15 was at the secondary school level (junior high and

high schools) grades 7-10, and 10-12 year olds were selected from primary level (All Age and Primary) schools grades 5 and 6. Although all, except one school, agreed to participate, the interviewers experienced problems of sampling in high schools where the non-response (consent forms not returned) was much higher. This led to under-sampling of adolescents over 13 years. Therefore another random sample of children from high schools was selected (high schools (2)).

**Table 1.1**  
**Number of study participants required by parish and school type, Jamaica, 2005**

| Parish        | Number of students | School Type |             |             |             |                |
|---------------|--------------------|-------------|-------------|-------------|-------------|----------------|
|               |                    | All Age     | Primary     | Junior High | High School | High School(2) |
| Clarendon     | 307                | 105         | 120         | 18          | 63          | 40             |
| Hanover       | 80                 | 40          | 25          | 0           | 15          | 20             |
| Kingston      | 190                | 15          | 90          | 10          | 75          | 60             |
| Manchester    | 174                | 86          | 48          | 8           | 33          | -              |
| Portland      | 87                 | 35          | 33          | 7           | 12          | -              |
| St. Andrew    | 466                | 115         | 155         | 53          | 142         | 60             |
| St. Ann       | 186                | 110         | 42          | 7           | 27          | 20             |
| St. Catherine | 456                | 149         | 186         | 24          | 97          | 60             |
| St. Elizabeth | 172                | 71          | 71          | 4           | 26          | 60             |
| St. James     | 204                | 88          | 54          | 17          | 46          | 40             |
| St. Mary      | 124                | 44          | 54          | 4           | 22          | 20             |
| St. Thomas    | 102                | 19          | 64          | 4           | 15          | 20             |
| Trelawny      | 91                 | 41          | 33          | 5           | 14          | -              |
| Westmoreland  | 159                | 71          | 58          | 10          | 20          | -              |
| <b>TOTAL</b>  | <b>2800</b>        | <b>989</b>  | <b>1033</b> | <b>171</b>  | <b>607</b>  | <b>400</b>     |

#### 1.4 Questionnaires

The questionnaire (Appendix 2) was compiled using validated questions from previous surveys on the same age group of Jamaican children. These previously used surveys included:

1. The Global Youth Tobacco Survey 13-15 years (WHO/CDC) [10]
2. The Caribbean Adolescent Health Survey 10-18 years (Pan American Health Organization) [11]
3. Global School Health Survey (World Health Organization) [12]
4. Healthy lifestyles survey, 2000 (MoH) [13]
5. The Jamaican Cohort study, 2002 (MoH, UWI) [14]

6. Patterns of drug abuse in secondary schools [6].

**Table 1.2**  
**Number of schools required to fill sample quota by parish and type**

| Parish             | School Type |           |             |             |
|--------------------|-------------|-----------|-------------|-------------|
|                    | All Age     | Primary   | Junior High | High School |
| Clarendon (16)     | 5           | 6         | 2           | 3           |
| Hanover (4)        | 2           | 1         | 0           | 1           |
| Kingston (11)      | 1           | 5         | 1           | 4           |
| Manchester (9)     | 4           | 2         | 1           | 2           |
| Portland (6)       | 2           | 2         | 1           | 1           |
| St. Andrew (26)    | 6           | 8         | 5           | 7           |
| St. Ann (10)       | 6           | 2         | 1           | 1           |
| St. Catherine (23) | 7           | 9         | 2           | 5           |
| St. Elizabeth (10) | 4           | 4         | 1           | 1           |
| St. James (11)     | 4           | 3         | 2           | 2           |
| St. Mary (7)       | 2           | 3         | 1           | 1           |
| St. Thomas (6)     | 1           | 3         | 1           | 1           |
| Trelawny (6)       | 2           | 2         | 1           | 1           |
| Westmoreland (9)   | 4           | 3         | 1           | 1           |
| <b>Total (150)</b> | <b>49</b>   | <b>52</b> | <b>19</b>   | <b>30</b>   |

The questionnaire collected information under the following themes:

- Demographic information
- The child and school
- Physical activity
- Dietary behaviour
- Medical care and Perception of self
- Emotions and mental health
- Resiliency
- Violence and unintentional injuries
- Alcohol, tobacco and drug use
- Sexual behaviour
- Sources of information
- Anthropometry
- Literacy & Numeracy

Validation of the final questionnaire for this study was done during the pre-testing phase of the project.

In addition, anthropometric measurements were taken (weight and height, waist circumference, and hip circumference) at the subjects' schools on the day of interview by a trained interviewer. Weight and height measurements were taken after the questionnaire was completed. No invasive procedures were performed. A literacy and numeracy test was also administered upon the request of the Ministry of Education Youth & Culture. The Adult Literacy Test utilized in 1999 was deemed appropriate for children 10 years and older and this was used [15]. Literacy Tests - the literacy tests were conducted in a classroom after the questionnaire was administered. To minimize cheating, children were spaced a desk apart and monitored by interviewers during the test.

### **1.5 Recruitment, Training and Fieldwork**

The project team comprised at least: four interviewers per parish, data entry clerks, a field and data manager, a biostatistician, and the principal investigator.

A total of 57 interviewers were employed. Interviewers were placed in teams of approximately four members, led by a team leader. In order to minimize travelling costs, most interviewers collected data from the parish in which they resided. Team Leaders were responsible for school contact, general preparation and scheduling of the data collection in their respective parishes, and anthropometric measurements. There were 13 teams. The following parishes were merged for the collection of data by one team: St. Mary and Portland; St. James and Trelawny; Westmoreland and Hanover, respectively. All other parishes had one team with the exception of Kingston & St. Andrew, and St Catherine which had three teams each. St. Thomas schools were visited by teams from St. Catherine and Portland.

Training of the interviewers occurred over a two-day period (October 19<sup>th</sup> & 20<sup>th</sup> 2005). The following topics were covered during the sessions:

#### **Day One**

- Overview of the Project
- Ethics in Research
- How to Make School Contact
- Selection of Students
- The Questionnaire - explanation of each question and difficult concepts
- Procedures for Referral
- Anthropometry

#### **Day Two**

- Selection of Team Leaders
- Logistics of Teamwork
- Supervision - Questionnaire distribution and data collection
- Confidentiality Pledge
- Salary and Travelling
- Contracts

- Distribution of Packages

Interviewers also received an instruction manual that provided guidelines for the administration of the survey instrument and anthropometry. All project staff and field interviewers were required to sign a pledge of confidentiality to ensure that they understood the sensitive nature of the interview and issues of privacy and confidentiality.

Field work was conducted between October and December 2005, and in January and February 2006. Interviewers reported that high schools were much more problematic than primary and all age schools. In some cases, school officials were too busy to assist team leaders with arrangements for the data collection (Portland, Clarendon, and St. Andrew - urban schools). Some school officials (St. Catherine) wanted to select the sample, using children that were more intellectually advanced/academically successful. However team leaders insisted on selecting the sample and did not feel that any biases were introduced

Following the data-collection phase of the project, a meeting was convened with interviewers and the research team to identify general and specific concerns relating to the questionnaire administration in addition to interviewers' experiences with school officials and observation of school environs. Interviewers were given questionnaires to guide the discussion through each section of the instrument. The results of the debriefing are incorporated into the findings. It was evident that interviewers encountered a number of children with problems but did not refer all of them for counselling. In some cases, the children were already receiving counselling but there were others who should have been referred.

Interviewers were trained to ensure that the questionnaire was complete before going on to the next child. Team leaders were responsible for checking the questionnaires to ensure completeness. To further ensure quality control, scheduled and ad hoc field visits were made by the project management team to monitor the adherence to procedures for:

- Obtaining informed consent
- Anthropometric measurements
- Sampling
- Interviewing

It was the responsibility of the supervisors to do the anthropometric measurements in order to minimize between observer differences [16]. However it should be noted that no attempt was made to determine technical errors of measurements for the anthropometry.

This study posed no risks to the participants. If the participant felt uncomfortable about answering any of the questions, the interviewer skipped those questions and went on to the next section. Children, who reported that they had been abused,

or had considered or attempted suicide, were referred to Child Guidance Clinics for counselling and therapy at no cost. Child Guidance Clinics which are operated by trained Child Psychologists are located at all major hospitals across the island. Any child who became withdrawn or started crying during the interview because of sad memories that the questions evoked was referred to the nearest Child Guidance Clinic for counselling. Once these behaviours were detected, the child was asked if he/she wanted to continue with the questionnaire. If the child said “No” then the interviewer stopped the interview at that point and prepared a letter of referral for the child to take home to his/her parent with an appointment to see the psychologist. A total of 21 children were referred. Unfortunately only one child was seen by the psychologist retained by the project. Others may have visited guidance clinics elsewhere but this information could not be captured by this study.

## 1.6 Data Management and Analysis

The software used for data entry was *EpiData* version 3. All responses were coded and options for selections were labelled to minimize spelling and case specific data entry errors. The data were double entered by independent data entry clerks and the *VALIDATE* program used to check for errors. Interviewers clarified the interpretation of tests that were incomplete. Those without a comment on the reason for non-completion were to be interpreted as incomplete due to inability of the respondent to do the test. In such cases the missing data would be coded as zero (no marks). Other literacy tests that had comments such as “child had to return to class” were treated as missing data.

The data were analysed using SPSS version 12.0. Main types of analyses included frequencies, cross tabulations, and multivariate analyses to explore associations between the main outcomes of interest. The data was weighted by age, sex, school type and parish to provide normalized weights.

The levels of overweight and obesity were determined using the International Obesity Task Force [17] cut-off points for body mass index<sup>1</sup>.

The literacy and numeracy test evaluated the students’ ability to (a) read at a Grade 3-4 level, (b) comprehend what is read at a Grade 3-4 level (c) answer a question with grammatically correct sentences, and (c) perform arithmetic that is taught by Grade 4-6. Therefore, it would be expected that some of the children aged 10 years could have difficulty completing some of the numeracy questions. In order to make the evaluation appropriate, the grade 6 arithmetic question was excluded in the computation of scores. Five scores were computed namely:

- Reading - maximum 15

---

<sup>1</sup> These international cut-offs do not evaluate undernutrition.

- Comprehension- maximum 14
- Numeracy- maximum 5
- Total literacy (reading and comprehension and ability to write sentences) - maximum 32
- Total score (literacy, numeracy) - maximum 37.

The literacy and numeracy scores were then each regrouped into three categories based on the Adult Literacy survey (1999) [15] as follows:

|                              | Literacy | Numeracy |
|------------------------------|----------|----------|
| <b>Not literate/numerate</b> | 0-13     | 0-1      |
| <b>Basic</b>                 | 14-28    | 2-3      |
| <b>Functional</b>            | 29-32    | 4-5      |

Resiliency was examined using seven variables that could be considered protective factors inside the home. The variables used were:

- Care/interest - interested in your school work
- Care/interest - talks with you about problems
- Attention - never too busy to pay much attention to you
- Listening - listens when you have something to say
- Rules - expects you to follow the rules
- Personal best message - always wants you to do your best
- Believes in child - believes you will be a success

The responses for these questions ranged from ‘never true’ to ‘always true’ with codes 1-5. Subsequent chapters describe the main findings of the study, with emphasis being placed on the indicators required by the Ministry of Healthy Lifestyle Programme and the USAID/Ministry of Health Jamaica Adolescent Healthy Lifestyles (JASTYLE) Project

## CHAPTER 2

### BACKGROUND CHARACTERISTICS OF RESPONDENTS

#### 2.1 Demographic Characteristics

A total of 3003 children were surveyed in the age group 10-15 with similar distribution by sex (Table 2.1). More boys were in primary, all-age and junior high school, when compared with girls. The majority of the children attended schools in urban areas (52%), while less than 10% were attending schools in remote rural<sup>2</sup>. In the absence of information regarding whether the children lived in urban or rural areas, location of school was used as a proxy for location of residence in that it is unlikely that children living in urban areas would attend schools in the rural areas unless at a boarding school. This is a reasonable assumption as most children (94%) attended schools within their parish. Children at the remote rural schools were significantly younger ( $p < 0.01$ ) than those in rural and urban areas.

**Table 2.1**  
Percent distribution of adolescents aged 10-15 by selected background characteristics and sex, Jamaica, 2005

| Background Characteristic |              | Sex   |       |        |       | Total |       |
|---------------------------|--------------|-------|-------|--------|-------|-------|-------|
|                           |              | Male  |       | Female |       | Nos.  | %     |
|                           |              | Nos.  | %     | Nos.   | %     |       |       |
| Age (Years)               | 10           | 232   | 16.3  | 263    | 16.6  | 495   | 16.5  |
|                           | 11           | 246   | 17.3  | 284    | 18.0  | 531   | 17.7  |
|                           | 12           | 244   | 17.2  | 278    | 17.6  | 523   | 17.4  |
|                           | 13           | 238   | 16.7  | 271    | 17.2  | 509   | 17.0  |
|                           | 14           | 227   | 16.0  | 257    | 16.3  | 485   | 16.1  |
|                           | 15           | 234   | 16.5  | 227    | 14.3  | 461   | 15.3  |
| School type               | Primary      | 320   | 22.5  | 362    | 22.9  | 682   | 22.7  |
|                           | All-age      | 398   | 28.0  | 376    | 23.8  | 775   | 25.8  |
|                           | Junior high  | 146   | 10.3  | 86     | 5.4   | 232   | 7.7   |
|                           | High         | 558   | 39.3  | 756    | 47.8  | 1,315 | 43.8  |
| Location of school        | Urban        | 729   | 51.3  | 864    | 54.6  | 1,593 | 53.0  |
|                           | Rural        | 538   | 37.9  | 579    | 36.6  | 1,117 | 37.2  |
|                           | Remote rural | 155   | 10.9  | 138    | 8.7   | 293   | 9.8   |
| Total                     |              | 1,422 | 100.0 | 1,581  | 100.0 | 3,003 | 100.0 |

Data weighted, therefore totals may not add up due to rounding

Some 82% of children lived with at least one biological parent 31% of children lived with their biological parents, 31% with their mother only and 5% with father only

<sup>2</sup> This classification was provided on the MOEYC listing of schools.

(Table 2.2). 10% of children lived with grandparents and 7% with other relatives. As age increased, the proportion of children living with both biological parents decreased suggesting shifting family structures during the child's lifetime. This has also been noted by Samms-Vaughn [14].

**Table 2.2**  
**Percent distribution of adolescents by parental figure in the home and by age and sex of adolescent, Jamaica, 2005**

| Parental Figure(s)   | Sex         |             | Age (years) |            |            |            |            |            |             |
|----------------------|-------------|-------------|-------------|------------|------------|------------|------------|------------|-------------|
|                      | Male        | Female      | 10          | 11         | 12         | 13         | 14         | 15         | Total       |
| Mother & father      | 32.4        | 28.8        | 33.0        | 32.6       | 29.2       | 31.5       | 29.8       | 26.5       | 30.5        |
| Mother & step-father | 11.5        | 12.7        | 11.7        | 11.5       | 13.2       | 13.6       | 14.1       | 8.5        | 12.1        |
| Mother alone         | 30.0        | 32.7        | 30.9        | 30.6       | 33.4       | 30.4       | 29.4       | 33.7       | 31.4        |
| Father & step-mother | 2.6         | 2.7         | 2.8         | 2.3        | 3.1        | 2.1        | 1.0        | 4.7        | 2.7         |
| Father alone         | 6.2         | 4.7         | 6.1         | 6.2        | 5.3        | 4.5        | 4.9        | 5.4        | 5.4         |
| Grand- parent        | 11.3        | 10.4        | 10.3        | 12.2       | 12.1       | 10.6       | 11.3       | 8.1        | 10.8        |
| Other relative       | 5.6         | 7.3         | 4.7         | 4.0        | 2.9        | 6.6        | 8.8        | 12.8       | 6.5         |
| Non- relative        | 0.4         | 0.8         | 0.5         | 0.5        | 0.9        | 0.7        | 0.7        | 0.4        | 0.6         |
| <b>N</b>             | <b>1420</b> | <b>1578</b> | <b>495</b>  | <b>531</b> | <b>523</b> | <b>504</b> | <b>485</b> | <b>461</b> | <b>2998</b> |

The mean household was  $5.85 \pm 2.77$  and mean crowding i.e. number of persons per bedroom was  $2.36 \pm 1.40$  (Table 2.3). There were no significant differences by the sex of student but there were significant differences by type of school that the child attended and the location of the school. Children at high schools had significantly smaller households ( $p < 0.01$ ) and less crowding ( $p < 0.001$ ) than did children attending primary, all-age or junior high schools. The mean household size obtained in this study is higher than the national average but this is expected because the national average includes single person households and those without children.

Children attending urban schools had significantly smaller households ( $p<0.01$ ) than those in rural areas and experienced less crowding than those in remote rural areas ( $p<0.001$ ).

**Table 2.3**  
**Mean household size and mean number of persons per bedroom by selected background characteristics, Jamaica, 2005**

|                           | Household size <sup>a</sup> |           | Crowding <sup>b</sup> |           |
|---------------------------|-----------------------------|-----------|-----------------------|-----------|
|                           | Mean                        | Std. Dev. | Mean                  | Std. Dev. |
| <b>Sex</b>                |                             |           |                       |           |
| Male                      | 5.9                         | 2.93      | 2.38                  | 1.36      |
| Female                    | 5.96                        | 2.86      | 2.41                  | 1.56      |
| <b>School type</b>        |                             |           |                       |           |
| Primary                   | 5.88                        | 2.68      | 2.51                  | 1.4       |
| All-age                   | 6.5                         | 3.51      | 2.69                  | 1.63      |
| Junior high               | 6.34                        | 2.9       | 2.7                   | 1.38      |
| High                      | 5.56                        | 2.51      | 2.11                  | 1.35      |
| <b>Location of school</b> |                             |           |                       |           |
| Urban                     | 5.71                        | 2.77      | 2.3                   | 1.46      |
| Rural                     | 6.14                        | 3.05      | 2.46                  | 1.45      |
| Remote rural              | 6.36                        | 2.82      | 2.65                  | 1.53      |

<sup>a</sup> Sex=Not significant (N.S); School type F-statistic =32.5 ;  $p<0.01$ ; Location F-statistic=11.14, $p<0.01$

<sup>b</sup> Sex=N.S; School type F-statistic =19.0 ;  $p<0.01$ ; Location F-statistic =8.74, $p<0.01$

The overwhelming majority of students (99%) slept at home (Table 2.4). Some 25% of the students slept by themselves but the majority slept with at least one other person. There was no difference by sex but as age increased, the proportion of children who slept by themselves increased. Also, proportionately more children attending high schools and fewer of those in rural areas slept by themselves.

**Table 2.4**  
**Percentage of adolescents who reported that they slept by themselves by**  
**selected background characteristics, Jamaica, 2005**

| Background Characteristics |              | N      | %    |
|----------------------------|--------------|--------|------|
| Sex                        | Male         | 1,422  | 26.6 |
|                            | Female       | 1,580  | 22.2 |
| N.S.                       |              |        |      |
| Age                        | 10           | 494    | 14.6 |
|                            | 11           | 531    | 15.6 |
|                            | 12           | 523    | 20.5 |
|                            | 13           | 509    | 29.4 |
|                            | 14           | 485    | 30.7 |
|                            | 15           | 461    | 36.4 |
| p<0.01                     |              |        |      |
| School type                | Primary      | 681    | 17.4 |
|                            | All-age      | 775    | 15.8 |
|                            | Junior high  | 232    | 17.0 |
|                            | High         | 1,315  | 34.1 |
| p<0.01                     |              |        |      |
| Location of school         | Urban        | 1,592  | 27.5 |
|                            | Rural        | 1,117  | 22.3 |
|                            | Remote rural | 293    | 14.4 |
| Total                      |              | p<0.01 |      |

## CHAPTER 3

### ADOLESCENTS AND SCHOOL

#### 3.1 Employment

Only 163 (5.4%) reported having a job during the school year but this figure probably may not include children who work in informal activities, i.e. “hustling” (Table 3.1). Significantly more males than females worked and more children attending school in the rural areas worked compared with children at urban schools. These findings concur with those of the youth activity survey of 2002 [19], which found that three times as many males as females worked during a reference week and the level of economic activity was higher among rural children.

**Table 3.1**  
**Percentage of adolescents who are employed by selected background characteristics, Jamaica, 2005**

| Background Characteristics    |                     | Percent Employed |     |
|-------------------------------|---------------------|------------------|-----|
|                               |                     | N                | %   |
| <b>Sex</b>                    | <b>Male</b>         | 1422             | 8.6 |
|                               | <b>Female</b>       | 1581             | 2.6 |
| p<0.01                        |                     |                  |     |
| <b>Age of student (years)</b> | <b>10</b>           | 495              | 5.6 |
|                               | <b>11</b>           | 531              | 5.2 |
|                               | <b>12</b>           | 523              | 6.0 |
|                               | <b>13</b>           | 509              | 6.8 |
|                               | <b>14</b>           | 485              | 3.0 |
|                               | <b>15</b>           | 461              | 6.1 |
| NS                            |                     |                  |     |
| <b>School type</b>            | <b>Primary</b>      | 682              | 6.0 |
|                               | <b>All-age</b>      | 775              | 5.5 |
|                               | <b>Junior high</b>  | 232              | 7.3 |
|                               | <b>High</b>         | 1315             | 4.8 |
| NS                            |                     |                  |     |
| <b>Location of school</b>     | <b>Urban</b>        | 1593             | 4.1 |
|                               | <b>Rural</b>        | 1117             | 6.9 |
|                               | <b>Remote rural</b> | 293              | 7.1 |
| <b>Total</b>                  |                     | p<0.01           |     |

### 3.2 Academic Performance

Over ninety percent of the students had positive feelings about school - they liked school, planned to finish and had a teacher who had got to know them well; while 88.7 percent thought that they got along well with their teachers. However, a significant proportion of children were experiencing academic problems with about half of them having problems getting their homework done; one-third having problems reading; and half of them saying that keeping up with schoolwork was hard (Table 3.2). Learning problems were reported by 18 percent while behavioural problems were reported by 11 percent. For each of these factors, significantly more boys reported problems than girls.

**Table 3.2**  
**Academic performance by sex of adolescents, Jamaica, 2005**

|                                               |                  | <b>Male</b><br><b>N=1405</b><br>% | <b>Sex</b><br><b>Female</b><br><b>N=1575</b><br>% | <b>Total</b><br><b>N=2980</b><br>% |
|-----------------------------------------------|------------------|-----------------------------------|---------------------------------------------------|------------------------------------|
| <b>Has trouble getting your homework done</b> | <b>Always</b>    | 5.6                               | 3.1                                               | 4.3                                |
|                                               | <b>Sometimes</b> | 50.9                              | 44.3                                              | 47.4                               |
|                                               | <b>Never</b>     | 43.5                              | 52.6                                              | 48.3                               |
|                                               |                  | p<0.01                            |                                                   |                                    |
| <b>Has trouble reading</b>                    |                  | 45.4                              | 25.1                                              | 34.7                               |
|                                               |                  | p<0.01                            |                                                   |                                    |
| <b>Has learning problems</b>                  |                  | 21.3                              | 13.7                                              | 17.3                               |
|                                               |                  | p<0.01                            |                                                   |                                    |
| <b>Has behaviour problems</b>                 |                  | 12.6                              | 7.4                                               | 9.9                                |
|                                               |                  | p<0.01                            |                                                   |                                    |

Academic performance varies widely by school type (Table 3.3). Fewer children attending high schools reported having any academic problems with primary, all-age and junior high schools having similar levels of academic problems except in terms of reading. The highest prevalence of reading problems occurred at Junior High schools where 69% reporting that they had this problem, followed by all-age schools (47%).

**Table 3.3**  
**Academic performance of adolescents by school type, Jamaica, 2005**

|                                   |           | School Type |         |             |      |       |
|-----------------------------------|-----------|-------------|---------|-------------|------|-------|
|                                   |           | Primary     | All-Age | Junior High | High | Total |
| N                                 |           | 680         | 772     | 232         | 1315 | 2999  |
|                                   |           | %           | %       | %           | %    | %     |
| Has trouble getting homework done | Always    | 5.7         | 5.7     | 8.2         | 2.4  | 4.3   |
|                                   | Sometimes | 50.6        | 49.9    | 48.3        | 44.2 | 47.4  |
|                                   | Never     | 44.4        | 44.4    | 43.5        | 53.4 | 48.3  |
|                                   |           | p<0.01      |         |             |      |       |
| Has trouble reading               |           | 39.9        | 47.0    | 69.0        | 18.8 | 34.7  |
|                                   |           | p<0.01      |         |             |      |       |
| Has learning problems             |           | 21.2        | 23.5    | 24.6        | 10.4 | 17.3  |
|                                   |           | p<0.01      |         |             |      |       |
| Has behaviour problems            |           | 13.6        | 11.9    | 11.7        | 6.4  | 9.9   |
|                                   |           | p<0.01      |         |             |      |       |

### 3.3 Literacy and Numeracy

Table 3.4 presents the mean scores by sex. For all the indices of literacy and numeracy, girls significantly outscored boys ( $p<0.01$ ). As age increased, scores also increased.

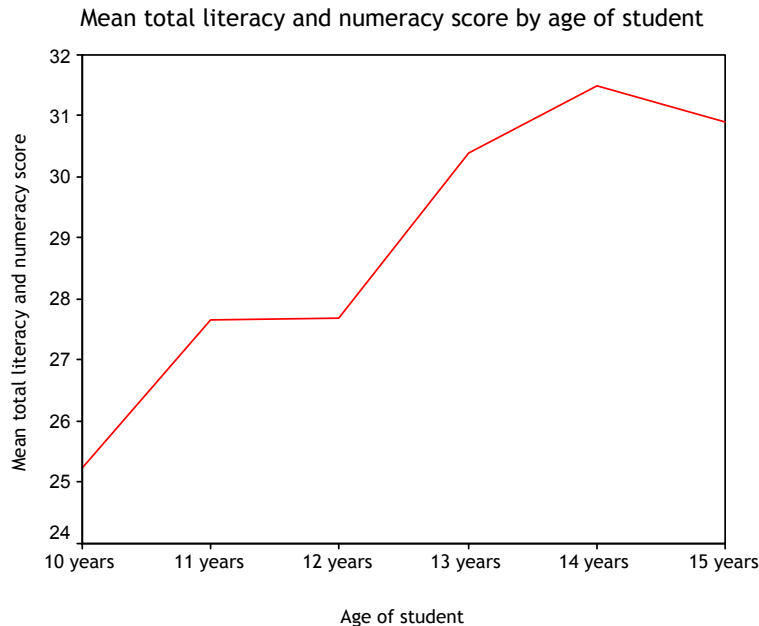
**Table 3.4**  
**Mean numeracy and literacy scores by sex, Jamaica, 2005**

|                                   |        | N    | Mean | Std. Deviation | Range  | Sig.    |
|-----------------------------------|--------|------|------|----------------|--------|---------|
| Reading and comprehension         | Male   | 1356 | 23.8 | 7.7            | 0 - 32 | p<0.001 |
|                                   | Female | 1500 | 27.1 | 5.4            | 0 - 32 |         |
|                                   | Total  | 2855 | 25.5 | 6.8            | 0 - 32 |         |
| Arithmetic questions              | Male   | 1356 | 3.0  | 1.8            | 0 - 5  | p<0.001 |
|                                   | Female | 1502 | 3.6  | 1.5            | 0 - 5  |         |
|                                   | Total  | 2857 | 3.3  | 1.7            | 0 - 5  |         |
| Total literacy and numeracy score | Male   | 1350 | 26.9 | 9.2            | 0 - 37 | p<0.001 |
|                                   | Female | 1494 | 30.7 | 6.5            | 0 - 37 |         |
|                                   | Total  | 2843 | 28.9 | 8.2            | 0 - 37 |         |

Mean total literacy and numeracy score increased with age between ages 10 and 11 years and between 12 and 13 years (Figure 3.1). Adolescents 11 and 12

years had similar mean scores and those 13 to 15 years also had similar mean scores.

**Figure 3.1**



Mean scores obscure the problem of illiteracy and innumeracy. Therefore the scores were grouped into three groups namely illiteracy or innumeracy; basic literate/numerate and functional literacy (Appendix 4). Table 3.5 shows that of 2,855 students, 9.5% were “not literate”, 44.9% had “basic literacy” and 45.6% were functionally literate. There was a significant difference in literacy between males and females, with 15.4% of males and 4.1% of females being “not literate”. In other words, males were nearly four times more likely to be “not literate” compared with females. When literacy levels were compared by the age of the student, the percentage of students who were “not literate” decreased by age from 16.4% at age 10 to 7.1% at age 15 years. The number of children classified as “basic literate” fell incrementally from age 10-15 and ranged from 55% at age 10 to 36% at age 15. As expected, functional literacy also increased with age. However, overall less than 50% of children 10-15 years were functionally literate.

**Table 3.5**  
**Literacy levels by sex and age of adolescents, Jamaica, 2005**

| Background Characteristic |        |     | Literacy Level |                |                       | Total |
|---------------------------|--------|-----|----------------|----------------|-----------------------|-------|
|                           |        |     | Not literate   | Basic Literacy | Functionally literate |       |
| Sex                       | Male   | Nos | 209            | 640            | 507                   | 1,356 |
|                           |        | %   | 15.4           | 47.2           | 37.4                  | 100.0 |
|                           | Female | Nos | 62             | 641            | 797                   | 1,500 |
|                           |        | %   | 4.1            | 42.8           | 53.1                  | 100.0 |
| Age of student (Years)    | 10     | Nos | 76             | 255            | 132                   | 463   |
|                           |        | %   | 16.4           | 55.1           | 28.5                  | 100.0 |
|                           | 11     | Nos | 56             | 258            | 181                   | 495   |
|                           |        | %   | 11.3           | 52.1           | 36.7                  | 100.0 |
|                           | 12     | Nos | 60             | 237            | 197                   | 494   |
|                           |        | %   | 12.2           | 48.0           | 39.8                  | 100.0 |
|                           | 13     | Nos | 31             | 191            | 264                   | 486   |
|                           |        | %   | 6.3            | 39.3           | 54.4                  | 100.0 |
|                           | 14     | Nos | 17             | 180            | 272                   | 469   |
|                           |        | %   | 3.6            | 38.4           | 58.0                  | 100.0 |
|                           | 15     | Nos | 32             | 161            | 257                   | 450   |
|                           |        | %   | 7.1            | 35.7           | 57.2                  | 100.0 |
| Total                     | Nos.   |     | 271            | 1,281          | 1,303                 | 2,855 |
|                           | %      |     | 9.5            | 44.9           | 45.6                  | 100.0 |

A similar pattern emerged for numeracy (Table 3.6). Of the 2,857 students who completed the numeracy test, 17.6% were “not numerate” 22.6% had “basic numeracy” and 59.8% were functionally numerate. Girls were significantly more likely to be functionally numerate than boys ( $p < 0.01$ ) 67% and 52% respectively. One in every four of the boys surveyed was “not numerate”. Functional numeracy increased with age from 38% in 10 year olds to 70.1% in 15 year olds.

**Table 3.6**  
**Numeracy levels by age and sex, Jamaica, 2005**

| Background Characteristics            |               |             | Numeracy Level |                   |                        | Total |
|---------------------------------------|---------------|-------------|----------------|-------------------|------------------------|-------|
|                                       |               |             | Not<br>Nurate  | Basic<br>Numeracy | Functionally<br>Nurate |       |
| <b>Sex</b>                            | <b>Male</b>   | <b>Nos.</b> | 327            | 326               | 703                    | 1,356 |
|                                       |               | <b>%</b>    | 24.1           | 24.1              | 51.8                   | 100.0 |
|                                       | <b>Female</b> | <b>Nos.</b> | 175            | 321               | 1,006                  | 1,502 |
|                                       |               | <b>%</b>    | 11.7           | 21.4              | 67.0                   | 100.0 |
| <b>Age of<br/>student<br/>(Years)</b> | <b>10</b>     | <b>Nos.</b> | 148            | 139               | 176                    | 463   |
|                                       |               | <b>%</b>    | 31.9           | 30.1              | 38.0                   | 100.0 |
|                                       | <b>11</b>     | <b>Nos.</b> | 105            | 116               | 273                    | 495   |
|                                       |               | <b>%</b>    | 21.3           | 23.5              | 55.2                   | 100.0 |
|                                       | <b>12</b>     | <b>Nos.</b> | 113            | 98                | 286                    | 496   |
|                                       |               | <b>%</b>    | 22.7           | 19.7              | 57.6                   | 100.0 |
|                                       | <b>13</b>     | <b>Nos.</b> | 58             | 97                | 331                    | 486   |
|                                       |               | <b>%</b>    | 11.9           | 20.0              | 68.1                   | 100.0 |
|                                       | <b>14</b>     | <b>Nos.</b> | 37             | 104               | 328                    | 469   |
|                                       |               | <b>%</b>    | 7.9            | 22.2              | 70.0                   | 100.0 |
|                                       | <b>15</b>     | <b>Nos.</b> | 42             | 93                | 315                    | 450   |
|                                       |               | <b>%</b>    | 9.3            | 20.7              | 70.1                   | 100.0 |
| <b>Total</b>                          | <b>Nos.</b>   |             | 502            | 647               | 1,709                  | 2,857 |
|                                       |               | <b>%</b>    | 17.6           | 22.6              | 59.8                   | 100.0 |

Literacy and numeracy levels by school type are presented in Table 3.7. As with reported academic problems, literacy and numeracy levels were highest at high schools.

**Table 3.7**  
**Percent distribution of adolescents by literacy and numeracy level and**  
**school type, Jamaica, 2005**

|                       |                              | School Type           |                       |                           |                     |
|-----------------------|------------------------------|-----------------------|-----------------------|---------------------------|---------------------|
|                       |                              | Primary<br>N=636<br>% | All-age<br>N=720<br>% | Junior High<br>N=220<br>% | High<br>N=1281<br>% |
| <b>Literacy level</b> | <b>Not literate</b>          | 14.1                  | 15.2                  | 21.1                      | 2.0                 |
|                       | <b>Basic literacy</b>        | 52.0                  | 56.5                  | 48.6                      | 34.2                |
|                       | <b>Functionally literate</b> | 34.0                  | 28.3                  | 30.3                      | 63.8                |
|                       | <b>Total</b>                 | 100.0                 | 100.0                 | 100.0                     | 100.0               |
|                       |                              | p<0.01                |                       |                           |                     |
| <b>Numeracy level</b> | <b>Not numerate</b>          | 26.2                  | 28.6                  | 26.7                      | 5.5                 |
|                       | <b>Basic numeracy</b>        | 26.7                  | 25.1                  | 36.3                      | 16.9                |
|                       | <b>Functionally numerate</b> | 47.1                  | 46.2                  | 37.0                      | 77.6                |
|                       | <b>Total</b>                 | 100.0                 | 100.0                 | 100.0                     | 100.0               |
|                       |                              | p<0.01                |                       |                           |                     |

A logistic model was used to explain the role of socio-demographic factors in the level of literacy. The independent variables were: sex, age, location of school, school type and grade level at school Table 3.8 shows the odds ratios, confidence intervals and significance levels of factors influencing being functionally literate. Boys were 0.6 times less likely to be functionally literate than girls. Location of school and school type were also significant with adolescents in both rural and remote rural areas being 0.8 and 0.6 times less likely to be functionally literate than those in the urban schools. Adolescents in primary, all-age and junior high schools were less likely to be functionally literate than those attending high school. Neither age nor grade in school was significant.

**Table 3.8**  
**Odds ratios, confidence intervals and significance levels for factors**  
**influencing whether adolescent is functionally literate, Jamaica, 2005**

| Characteristic<br>(N=2603) | Odds Ratio | Confidence<br>Interval | Sig.  |
|----------------------------|------------|------------------------|-------|
| Sex - male                 | 0.6        | 0.5 - 0.7              | 0.000 |
| Age                        | 1.1        | 1.0 - 1.1              | 0.158 |
| Grade                      | 1.0        | 1.0 - 1.0              | 0.168 |
| Location of school         |            |                        | 0.001 |
| - Rural                    | 0.8        | 0.6 - 0.9              | 0.003 |
| - Remote Rural             | 0.6        | 0.4 - 0.8              | 0.001 |
| School Type                |            |                        | 0.000 |
| - Primary                  | 0.4        | 0.3 - 0.5              | 0.000 |
| - All-age                  | 0.3        | 0.2 - 0.4              | 0.000 |
| - Junior High              | 0.3        | 0.2 - 0.4              | 0.000 |

When literacy levels are examined by whether adolescents feel that they have trouble reading or have learning or behavioural problems (Table 3.9), it is shown that some 80% of those who were assessed as illiterate stated that they had problems reading compared with 43% of adolescents with basic literacy, and 16.5% of the functionally literate. Similarly, 42% of the illiterate stated that they had learning problems, compared with only 9% of the functionally literate stating that they had learning problems. Although fewer adolescents reported having behavioural problems, these also appeared to be associated with literacy levels. These findings are important because they demonstrated that the children were able to recognize that they had problems and this recognition is an important step in developing programs to assist these children.

**Table 3.9**  
**Literacy level and self-reported academic and behavioural problems,**  
**Jamaica, 2005**

|                           |     |      | Literacy Level  |                   |                          | Total |
|---------------------------|-----|------|-----------------|-------------------|--------------------------|-------|
|                           |     |      | Not<br>Literate | Basic<br>Literacy | Functionally<br>Literate |       |
| Has trouble<br>reading    | Yes | Nos. | 214             | 548               | 215                      | 977   |
|                           |     | %    | 79.9            | 42.8              | 16.5                     | 34.3  |
|                           | No  | Nos. | 54              | 732               | 1087                     | 1873  |
| Has learning<br>problems  | Yes | Nos. | 112             | 259               | 122                      | 493   |
|                           |     | %    | 41.6            | 20.3              | 9.4                      | 17.3  |
|                           | No  | Nos. | 157             | 1019              | 1175                     | 2351  |
| Has behaviour<br>problems | Yes | Nos. | 58              | 145               | 72                       | 275   |
|                           |     | %    | 21.6            | 11.4              | 5.5                      | 9.7   |
|                           | No  | Nos. | 210             | 1131              | 1227                     | 2568  |
|                           |     |      | 78.4            | 88.6              | 94.5                     | 90.3  |

## CHAPTER 4

### HEALTH OF ADOLESCENTS

While many of the illnesses experienced in childhood may not persist into adolescence, other health issues often emerge as children enter puberty and begin to assert their independence through exploration and experimentation. This section examines the health of adolescents 10-15 years in terms of their health care seeking behaviour; nutritional status, diet and physical exercise and mental health.

#### 4.1 Health Care-Seeking Behaviour

In response to the question “where do you usually go for medical/health care”, 3% of adolescents stated that they go “nowhere”, while 38% used the public health centre, 31% the private doctor and 28% used the hospital (Table 4.1). There were no significant differences in health seeking behaviour between males and females but there were differences by location of school. Students attending schools in rural and remote rural areas were significantly less likely to have had their eyes or hearing checked or to have seen a dentist than those living in urban areas. Significantly more girls in the urban areas had had a vaginal examination.

**Table 4.1**  
**Percent of adolescents seeking health care by type of care and location of school, Jamaica, 2005<sup>a</sup>**

|                                         | Location of School |                             |                | Total %     |
|-----------------------------------------|--------------------|-----------------------------|----------------|-------------|
|                                         | Urban %            | Rural %                     | Remote Rural % |             |
| Have a check-up, visit doctor           | 96.3               | 98.4<br><i>N.S.</i>         | 95.3           | 97.6        |
| See a herbalist                         | 4.6                | 4.5<br><i>N.S.</i>          | 7.5            | 4.9         |
| Have hearing checked                    | 52.1               | 37.9<br>; <i>P&lt;0.001</i> | 36.2           | 44.7        |
| Have eyes checked                       | 60.4               | 45.9<br>; <i>P&lt;0.001</i> | 34.1           | 51.8        |
| See a dentist                           | 75.9               | 66.0<br><i>P&lt;0.001</i>   | 59.5           | 70.5        |
| Get counselling, mental health service  | 16.0               | 19.1<br><i>P&lt;0.001</i>   | 13.2           | 16.0        |
| Have a vaginal examination (girls only) | 21.6               | 17.2<br><i>P&lt;0.001</i>   | 10.2           | 18.9        |
| <b>Number of adolescents</b>            | <b>1446</b>        | <b>1005</b>                 | <b>266</b>     | <b>2717</b> |

The number of female adolescents in urban, rural and remote rural areas is 850, 585, and 143, respectively.

## 4.2 Nutritional Status and Perception of Self

It is recognized that the precision of different nutritional anthropometric measures vary, with weight and height being most precise, while waist and hip circumference show strong between-observer differences. Although waist and hip circumference measurements were taken, this report examines weight, height and body mass index (BMI) only. The mean weights, heights and BMI all increased with age with girls being heavier on average than boys until age thirteen and being taller until age twelve years. Based on the body mass index, boys were leaner than girls (Table 4.2).

**Table 4.2**  
**Mean height, weight and body mass index by age and sex of adolescents,**  
**Jamaica, 2005**

| Age (years) | Sex | Height (cms)<br>Mean $\pm$ SD<br>(N) | Weight (kgs)<br>Mean $\pm$ SD<br>(N) | Body Mass Index (BMI)<br>kg/m <sup>2</sup><br>Mean $\pm$ SD<br>(N) |
|-------------|-----|--------------------------------------|--------------------------------------|--------------------------------------------------------------------|
| 10          | M   | 140.9 $\pm$ 6.4<br>(225)             | 33.2 $\pm$ 5.33<br>(223)             | 16.7 $\pm$ 2.1<br>(216)                                            |
|             | F   | 143.9 $\pm$ 7.0 **<br>(252)          | 34.7 $\pm$ 6.3 **<br>(247)           | 16.8 $\pm$ 2.3<br>(239)                                            |
| 11          | M   | 146.0 $\pm$ 7.0<br>(242)             | 36.6 $\pm$ 6.7<br>(238)              | 17.2 $\pm$ 2.2<br>(238)                                            |
|             | F   | 150.7 $\pm$ 7.3 **<br>(278)          | 40.7 $\pm$ 7.9 **<br>(272)           | 17.9 $\pm$ 2.7 **<br>(223)                                         |
| 12          | M   | 151.3 $\pm$ 8.4<br>(240)             | 41.0 $\pm$ 9.0<br>(228)              | 17.9 $\pm$ 2.8<br>(224)                                            |
|             | F   | 155.7 $\pm$ 8.1 **<br>(264)          | 44.3 $\pm$ 8.8 **<br>(258)           | 18.2 $\pm$ 2.7<br>(245)                                            |
| 13          | M   | 158.6 $\pm$ 7.8<br>(232)             | 46.6 $\pm$ 8.4<br>(234)              | 18.4 $\pm$ 2.6<br>(228)                                            |
|             | F   | 159.5 $\pm$ 6.5<br>(265)             | 52.3 $\pm$ 9.7 **<br>(257)           | 20.6 $\pm$ 3.5 **<br>(251)                                         |
| 14          | M   | 165.5 $\pm$ 8.1**<br>(213)           | 53.8 $\pm$ 10.5<br>(223)             | 19.7 $\pm$ 3.0<br>(209)                                            |
|             | F   | 161.5 $\pm$ 6.5<br>(244)             | 52.6 $\pm$ 9.5<br>(236)              | 20.2 $\pm$ 3.2<br>(225)                                            |
| 15          | M   | 169.1 $\pm$ 8.0**<br>(227)           | 57.4 $\pm$ 9.7<br>(220)              | 20.1 $\pm$ 2.6<br>(213)                                            |
|             | F   | 163.2 $\pm$ 5.6<br>(216)             | 56.0 $\pm$ 7.8<br>(211)              | 21.10 $\pm$ 3.0**<br>(203)                                         |
| Total       | M   | 155.0 $\pm$ 12.6<br>(1379)           | 44.7 $\pm$ 12.1<br>(1366)            | 18.3 $\pm$ 2.8<br>(1326)                                           |
|             | F   | 155.5 $\pm$ 9.5<br>(1520)            | 46.4 $\pm$ 11.2**<br>(1481)          | 19.1 $\pm$ 3.3**<br>(1432)                                         |

\*\* p<0.01

Trends in nutritional status in most developing countries including Jamaica show a decrease in under-nutrition and a concomitant rise in over-nutrition and

the resultant obesity. Obesity in addition to being a risk factor for chronic diseases such as diabetes and hypertension, may also lead to problems of low self esteem. Therefore, it is important to estimate the proportions of this population that were overweight and obese (based on BMI) in the study population. It should be noted that being overweight and obesity among children is not estimated using BMI over 25 but rather it is evaluated using the International Obesity Task Force (IOTF) cut-offs [17]. Table 4.3 presents the percentage of overweight and obese children by age sex and location of school. Notable differences were seen. At all ages, more females than males were obese and the proportion of obesity increased with age for all children whether regardless of location of school. Females attending schools in the urban areas had higher levels of obesity, the most striking being among the 13-15 year olds where obesity was 11% among urban girls but only 3.4% among their rural counterparts. Overall, 6.4% were underweight (BMI <5<sup>th</sup> percentile), with slightly more boys (7.6%) than girls (5.4%) being underweight [17].

**Table 4.3**  
**Prevalence of overweight and obesity by age, sex and location of school, Jamaica, 2005**

| Age (years) | Sex    |   | % overweight | % obese | Sig.    | N   |
|-------------|--------|---|--------------|---------|---------|-----|
| 10 - 12     | Male   | U | 4.6          | 2.6     | N.S     | 302 |
|             |        | R | 3.3          | 1.2     |         | 418 |
|             | Female | U | 7.7          | 2.9     | P<0.05  | 375 |
|             |        | R | 4.0          | 2.0     |         | 449 |
| 13-15       | Male   | U | 7.7          | 4.5     | N.S     | 426 |
|             |        | R | 8.4          | 2.2     |         | 273 |
|             | Female | U | 11.4         | 10.8    | P<0.001 | 473 |
|             |        | R | 12.0         | 3.4     |         | 266 |
| Total       | Male   | U | 6.5          | 3.7     | P<0.05  | 728 |
|             |        | R | 5.2          | 1.7     |         | 691 |
|             | Female | U | 9.8          | 7.2     | P<0.001 | 847 |
|             |        | R | 7.0          | 2.5     |         | 714 |

U = urban; R = Rural; Sig. = Significance

Adolescents were asked whether they thought that their weight was alright or whether should lose or gain weight. About half (53.7%) felt that their weight was about right, while about one-quarter thought that they should gain weight (22.7%) and a similar percentage thought that they should lose weight (23.6%). When their perception is examined in relation to their actual body size (Table 4.4), it is observed that in general, the adolescents had a reasonably accurate perception of self. Less than 5% of those who thought that they were about

right were in fact overweight or obese, whereas 33% of those who stated that they needed to lose weight were either overweight or obese.

**Table 4.4**  
**Percent distribution of adolescents by nutritional status (BMI) and perception of body size, Jamaica, 2005**

| Do you think your weight is...? | N    | Low % | Normal % | Moderately Overweight % | Obese % | Total % |
|---------------------------------|------|-------|----------|-------------------------|---------|---------|
| About right                     | 1572 | 49.9  | 45.4     | 2.8                     | 1.9     | 100.0   |
| I need to gain weight           | 662  | 58.9  | 37.0     | 0.5                     | 3.6     | 100.0   |
| I need to lose weight           | 686  | 17.1  | 49.9     | 24.2                    | 8.9     | 100.0   |

Some 11.9% Of the respondents stated that they were on a reducing diet, with significantly more females (13.7%) than males (9.7%) being on a reducing diet ( $p<0.01$ ). Some adolescents took extreme measures for weight loss with 2.0% taking diet pills and 2.9% throwing up to lose weight. Significantly more males (2.7%) than females (1.2%) were on diet pills ( $p<0.01$ ).

### 4.3 Dietary Patterns

Children were asked about whether they went hungry because there was not enough food at home and about their consumption in a usual week of specific food items namely: fruit, vegetables, pastries, sodas and fast food including local ones. Table 4.5 presents their responses by sex, age and location of school. Approximately one-quarter (24.0%) stated that they went hungry because there was no food in their home. More boys and younger children reported going hungry. Overall, children reported having a reasonably varied diet with the majority i.e. over 80 percent having fruits, vegetables, and pastries in a usual week. However, there was some variation by sex, age and location of school. Boys and girls tended to have similar consumption patterns except that more boys reported going hungry and eating vegetables. More children in the younger ages reported having each of the food items examined, suggesting that their diet may be more varied. This is not surprising because parents have more control over the diet of the younger children. Location of school was also a factor as more children attending rural school reported having fruits and pastries but fewer had fast foods<sup>3</sup>. Unfortunately, consumption of sodas was almost universal with over 95% of each sub-group reporting drinking soda in a usual week. Researchers have found that increased

<sup>3</sup> Fast food places included local franchises such as Tastee, Juici Beef, Island Grill

consumption of sodas and sugar-sweetened beverage promote obesity and that for each additional daily serving of sugar-sweetened soft drink the incidence of obesity increases significantly.

**Table 4.5**  
**Usual weekly dietary consumption by sex, age and location of school, Jamaica, 2005**

| Background Characteristic |              | Usually goes hungry because there was not enough food at home |        | Usually eats any fruit |        | Usually eats any vegetables |        | Usually eats any pastries |        | Usually eats at any fast food places |        | Usually drinks sodas |      |
|---------------------------|--------------|---------------------------------------------------------------|--------|------------------------|--------|-----------------------------|--------|---------------------------|--------|--------------------------------------|--------|----------------------|------|
|                           |              | N                                                             | %      | N                      | %      | N                           | %      | N                         | %      | N                                    | %      | N                    | %    |
| Sex                       | Male         | 1419                                                          | 26.5   | 1417                   | 89.1   | 1419                        | 88.8   | 1420                      | 86.9   | 1418                                 | 60.4   | 1420                 | 97.9 |
|                           | Female       | 1580                                                          | 22.0   | 1576                   | 88.9   | 1579                        | 86.0   | 1577                      | 85.7   | 1575                                 | 62.2   | 1576                 | 97.5 |
|                           |              | 8.6                                                           | p<0.05 | N.S                    |        | 5.3                         | p<0.05 | N.S                       |        | N.S                                  |        | N.S                  |      |
| Age of student (Years)    | 10           | 494                                                           | 27.6   | 493                    | 92.3   | 493                         | 87.9   | 494                       | 90.1   | 492                                  | 62.1   | 492                  | 98.3 |
|                           | 11           | 529                                                           | 25.6   | 528                    | 91.8   | 529                         | 91.2   | 529                       | 87.0   | 527                                  | 60.1   | 529                  | 98.7 |
|                           | 12           | 523                                                           | 28.0   | 523                    | 88.6   | 523                         | 90.1   | 523                       | 85.5   | 523                                  | 60.6   | 523                  | 97.6 |
|                           | 13           | 509                                                           | 22.2   | 508                    | 89.3   | 508                         | 87.3   | 508                       | 85.9   | 508                                  | 58.7   | 508                  | 97.8 |
|                           | 14           | 485                                                           | 19.3   | 481                    | 88.2   | 485                         | 83.9   | 484                       | 84.3   | 485                                  | 63.3   | 484                  | 96.5 |
|                           | 15           | 460                                                           | 21.6   | 459                    | 83.1   | 461                         | 82.7   | 460                       | 84.7   | 459                                  | 64.0   | 461                  | 97.2 |
|                           |              | 16.6                                                          | p<0.01 | 27.1                   | p<0.01 | 24.7                        | p<0.01 | N.S                       |        | N.S                                  |        | N.S                  |      |
| Location of school        | Urban        | 1592                                                          | 23.4   | 1586                   | 86.2   | 1590                        | 87.1   | 1589                      | 82.7   | 1587                                 | 67.1   | 1589                 | 97.4 |
|                           | Rural        | 1114                                                          | 24.1   | 1114                   | 91.2   | 1115                        | 86.7   | 1115                      | 89.9   | 1114                                 | 55.3   | 1115                 | 97.9 |
|                           | Remote Rural | 292                                                           | 28.2   | 293                    | 95.4   | 293                         | 90.8   | 293                       | 91.8   | 292                                  | 53.6   | 293                  | 98.2 |
|                           |              | N.S                                                           |        | p<0.01                 |        | N.S                         |        | 37.6                      | p<0.01 | 47.4                                 | p<0.01 | N.S                  |      |

#### 4.4 Physical Exercise

In addition to the health benefits, physical exercise often provides children with a positive social environment. This study found that the majority of children were involved in physical exercise for at least 30 minutes during the previous week (81.3%), at school or elsewhere but there was significant variation by sex, age and school type (Table 4.6). Significantly more boys reported being physically active in the past week, although a similar proportion of girls and boys stated that they did exercise at school. Fluctuations in the percentage of children involved in physical activity occurred at age 11 years and at ages 14 to 15 years. These ages correspond with: the national education examination<sup>4</sup> at age 11 that determines which secondary school child will attend; and preparation for the Caribbean grade 11 examination<sup>5</sup>. Thus, it appears that exercise is sidelined by schools, parents and students as they prepare for these examinations.

**Table 4.6**  
**Percentage of adolescents who engaged in physical activity last week and who exercised at school by selected background characteristics, Jamaica, 2005**

| Background Characteristic |           | Physically Active Last Week |      | Exercised at School |      |
|---------------------------|-----------|-----------------------------|------|---------------------|------|
|                           |           | N                           | %    | N                   | %    |
| Sex                       | Male      | 1216                        | 86.3 | 1186                | 83.6 |
|                           | Female    | 1168                        | 74.5 | 1302                | 82.4 |
|                           |           | p<0.01                      |      | N.S.                |      |
| Age of student (years)    | 10        | 387                         | 79.0 | 407                 | 82.7 |
|                           | 11        | 407                         | 77.4 | 413                 | 78.1 |
|                           | 12        | 431                         | 83.8 | 454                 | 86.9 |
|                           | 13        | 433                         | 86.1 | 473                 | 92.8 |
|                           | 14        | 385                         | 79.5 | 399                 | 82.3 |
|                           | 15        | 340                         | 74.1 | 342                 | 74.2 |
|                           |           | p<0.01                      |      | p<0.01              |      |
| School type               | Primary   | 531                         | 78.6 | 526                 | 77.2 |
|                           | All-age   | 593                         | 77.6 | 646                 | 83.8 |
|                           | Jnr. high | 200                         | 86.3 | 202                 | 87.2 |
|                           | High      | 1060                        | 81.2 | 1114                | 84.7 |
|                           |           | p<0.05                      |      | p<0.01              |      |

<sup>4</sup> Grade Six Achievement Test (GSAT)

<sup>5</sup> Caribbean Secondary Education Council Examination "CXC"

## 4.5 Emotions and Mental Health

The emotional well-being and mental health of adolescents were evaluated based on whether they felt lonely or sad, were worried, or had suicidal ideation or attempted suicide. The emotions by sex of adolescent are presented in Table 4.7. Overall, 14% of adolescents felt lonely, sad or wanted to cry always or most of the time, while approximately 7% had worry-affected sleep most or all of the time. More females (17%) than males (10%) were sad, lonely or wanted to cry but there was no significant difference between the sexes in terms of worrying.

**Table 4.7**  
**Emotions by sex of adolescent, Jamaica, 2005**

|                                                           | Sex    |      |        |      | Total |      |
|-----------------------------------------------------------|--------|------|--------|------|-------|------|
|                                                           | Male   |      | Female |      | Nos.  | %    |
|                                                           | Nos.   | %    | Nos.   | %    | Nos.  | %    |
| <b>During past year, felt lonely sad or wanted to cry</b> |        |      |        |      |       |      |
| Rarely/never                                              | 667    | 47.4 | 555    | 35.6 | 1222  | 41.2 |
| Sometimes                                                 | 603    | 42.9 | 735    | 47.1 | 1337  | 45.1 |
| Most of the time/always                                   | 136    | 9.7  | 270    | 17.3 | 406   | 13.7 |
|                                                           | p<0.01 |      |        |      |       |      |
| <b>During past year, worrying affected sleep</b>          |        |      |        |      |       |      |
| Rarely/never                                              | 934    | 66.0 | 1002   | 64.2 | 1936  | 65.0 |
| Sometimes                                                 | 369    | 26.1 | 451    | 28.9 | 821   | 27.6 |
| Most of the time/always                                   | 113    | 8.0  | 108    | 6.9  |       | 7.4  |
|                                                           | N.S.   |      |        |      |       |      |

Approximately one in ten adolescents considered suicide during the past year (Table 4.8). More females (12%) than males (7%) had suicidal ideation but similar percentages of males and females had tried to commit suicide and had made plans during the previous year. Having a friend who tried to commit suicide was significantly associated with attempted suicide ( $p<0.05$ ).

**Table 4.8**  
**Suicidal ideation and attempted suicide by sex of adolescent, Jamaica, 2005**

|                                                         | Male<br>N=1418 |     | Female<br>N=1579 |      | Total<br>N=2997 |     |
|---------------------------------------------------------|----------------|-----|------------------|------|-----------------|-----|
|                                                         | Nos.           | %   | Nos.             | %    | Nos.            | %   |
| During the past year, has considered suicide            | 102            | 7.2 | 183              | 11.6 | 285             | 9.5 |
| Has tried to commit suicide                             | 36             | 2.6 | 55               | 3.5  | 91              | 3.1 |
| During the past year, has made a plan to commit suicide | 55             | 3.9 | 82               | 5.2  | 137             | 4.6 |

Looking at the relationship between suicidal ideation and the emotions of the adolescents, there is a significant association between the two (Table 4.9). Nearly one-third of those who considered suicide in the past year felt lonely, sad or wanted to cry, compared with only 11% of adolescents who did not consider suicide. Similarly, significantly more adolescents with suicidal ideation experienced worry-affected sleep.

**Table 4.9**  
**Relationship between suicidal ideation and emotional state of adolescents, Jamaica, 2005**

|                                                    |                         | During the past year, did you ever seriously consider attempting suicide? |      |      |      |
|----------------------------------------------------|-------------------------|---------------------------------------------------------------------------|------|------|------|
|                                                    |                         | Yes                                                                       |      | No   |      |
|                                                    |                         | Nos.                                                                      | %    | Nos. | %    |
| During past year, felt lonely sad or wanted to cry | Rarely/never            | 56                                                                        | 19.8 | 1165 | 43.5 |
|                                                    | Sometimes               | 140                                                                       | 49.3 | 1196 | 44.6 |
|                                                    | Most of the time/always | 88                                                                        | 31.0 | 318  | 11.9 |
|                                                    |                         | p<0.01                                                                    |      |      |      |
| During past year, worrying affected sleep          | Rarely/never            | 121                                                                       | 42.7 | 1814 | 67.4 |
|                                                    | Sometimes               | 120                                                                       | 42.5 | 699  | 26.0 |
|                                                    | Most of the time/always | 42                                                                        | 14.7 | 179  | 6.6  |
|                                                    |                         | p<0.01                                                                    |      |      |      |

## CHAPTER 5

### RESILIENCY AND RISK

This section explores resiliency and risky behaviour namely: sexual behaviour, drug use, including tobacco and alcohol, and physical abuse and violence; and examines the relationship between the two.

#### 5.1 Resiliency

Adolescent resiliency can be defined as a composite of attributes or protective factors that include characteristics of the individual, sources and nature of social support and available resources that enable adolescents to overcome the negative effects of exposure to a variety of health risks. This survey examined a wide range of resiliency. However, this report focuses on only some of these namely: church attendance and involvement in organized activities, protective factors inside and outside the home in terms of support from adults, in order to examine the resiliency of adolescents.

##### 5.1.1 Religion and Religiosity

The main denominations listed were Pentecostal (30%), Seventh-Day Adventist (16.7%), and traditional denominations including Methodist, Anglican, and Roman Catholic (20%). Some 7% stated that they had no religion. However, when asked “How often did you attend church in the past month?” nearly half (46%) stated that they had not attended church. Girls attended church more often than boys ( $p < 0.01$ ) although there was little difference in the percentage who never went to church in the past month (Table 5.1).

**Table 5.1**  
**Frequency of church attendance in past month by sex, Jamaica, 2005**

|                        |             | Sex <sup>a</sup> |        | Total |
|------------------------|-------------|------------------|--------|-------|
|                        |             | Male             | Female |       |
| <b>At least weekly</b> | <b>Nos.</b> | 665              | 916    | 1581  |
|                        | <b>%</b>    | 49.3             | 60.1   | 55.0  |
| <b>At least once</b>   | <b>Nos.</b> | 560              | 494    | 1054  |
|                        | <b>%</b>    | 41.5             | 32.4   | 36.7  |
| <b>Never</b>           | <b>Nos.</b> | 125              | 113    | 238   |
|                        | <b>%</b>    | 9.3              | 7.4    | 8.3   |
| <b>Total</b>           | <b>Nos.</b> | 1350             | 1523   | 2873  |
|                        | <b>%</b>    | 100              | 100    | 100   |

<sup>a</sup>  $p < 0.01$

### 5.1.2 Involvement in extracurricular activities at school

Overall, about 50% of adolescents were involved in organized extra-curricular activities at school. However, there were significant differences by sex, age and school type (Table 5.2). More girls and more children 14 and 15 years old were involved in such activities. More children at high schools also were involved in organized activities. On the other hand, fewer children attending schools in remote areas were in organized activities.

**Table 5.2**  
**Involvement of adolescents in organized extra-curricular activities by sex, age, school type and location of school, Jamaica, 2005**

| Background Characteristic     |                     | Involved in Club, Group or Team at School |       |
|-------------------------------|---------------------|-------------------------------------------|-------|
|                               |                     | %                                         | N     |
| <b>Sex</b>                    | <b>Male</b>         | 49.8                                      | 1,416 |
|                               | <b>Female</b>       | 58.5                                      | 1,578 |
|                               |                     | p<0.01                                    |       |
| <b>Age of student (Years)</b> | <b>10</b>           | 48.7                                      | 493   |
|                               | <b>11</b>           | 53.0                                      | 526   |
|                               | <b>12</b>           | 50.6                                      | 522   |
|                               | <b>13</b>           | 54.4                                      | 507   |
|                               | <b>14</b>           | 60.2                                      | 483   |
|                               | <b>15</b>           | 60.1                                      | 461   |
|                               |                     | p<0.01                                    |       |
| <b>School type</b>            | <b>Primary</b>      | 50.2                                      | 679   |
|                               | <b>All-age</b>      | 53.4                                      | 770   |
|                               | <b>Jnr. high</b>    | 52.2                                      | 232   |
|                               | <b>High</b>         | 57.5                                      | 1,314 |
|                               |                     | p<0.05                                    |       |
| <b>Location of school</b>     | <b>Urban</b>        | 54.5                                      | 1,590 |
|                               | <b>Rural</b>        | 56.4                                      | 1,112 |
|                               | <b>Remote rural</b> | 46.2                                      | 290   |
| <b>Total</b>                  |                     | p<0.05                                    |       |

### 5.1.3 Protective factors inside and outside the home

The protective factors fell into two main groups:

- (1) Caring relationships - supportive connections with others who serve as pro-social models and support healthy development
  - a. Care/interest - In the home, there is an adult who is interested in your school work; who talks with you about your problems; who really cares about you (outside the home)
  - b. Attention - In the home, there is an adult who is [never] too busy to pay much attention to you; and outside the home, notices when you are not there and notices when you are upset about something
  - c. Listening - In the home, there is an adult who listens to you when you have something to say
- (2) High expectations - direct and indirect messages that the adolescent can and will succeed
  - a. Establishes rules - In the home, there is an adult who expects you to follow the rules
  - b. Validation - Outside of your home, there is an adult who tells you when you do a good job
  - c. Personal best message - In the home, there is an adult who always wants you to do your best
  - d. Believes in child - In the home, there is an adult who believes that you will be a success.

Table 5.3 presents the findings by sex of adolescent. In general, the majority of adolescents (over 70%) reported that there was someone in the home who had high expectations of them and therefore cared about their school work. However, a much smaller percentage reported that there was an adult who listened to them (66%), was never too busy to pay attention (58%) and listened to their problems (58%). The old adage “children must be seen but not heard” seems to be alive and well in these children’s households. Thus, while children are expected to do well, the emotional support that they often need in order to do well may be missing. Males fared less well than females as fewer reported experiencing most of these protective factors with significant differences between males and females existing in relation to expectations - being a success and expecting them to do their best. Outside the home, a similar pattern existed but males recorded significantly lower percentages on all the factors, suggesting that outside of the home, girls were more likely to experience these protective factors.

**Table 5.3**  
**Protective Factors Inside and Outside the Home for Adolescents Aged 10-15**  
**years by sex, Jamaica, 2005**

| Protective Factor                                        | % Responding “Always” |         |       |
|----------------------------------------------------------|-----------------------|---------|-------|
|                                                          | Males                 | Females | Total |
| In the home                                              |                       |         |       |
| <i>Caring Relationships</i>                              |                       |         |       |
| Care/interest - interested in your school work           | 72.8                  | 74.3    | 73.6  |
| Care/interest - talks with you about problems            | 44.7                  | 49.0    | 47.0  |
|                                                          | p<0.05                |         |       |
| Attention - never too busy to pay much attention to you  | 56.7                  | 58.2    | 57.5  |
| Listening - listens when you have something to say       | 62.6                  | 66.1    | 64.5  |
| <i>High expectations</i>                                 |                       |         |       |
| Rules - expects you to follow the rules                  | 76.0                  | 78.1    | 79.1  |
| Personal best message - always wants you to do your best | 77.4                  | 83.1    | 80.4  |
|                                                          | p<0.001               |         |       |
| Believes in child - believes you will be a success       | 69.3                  | 74.4    | 73.3  |
|                                                          | p<0.01                |         |       |
| Outside the home                                         |                       |         |       |
| <i>Caring Relationships</i>                              |                       |         |       |
| Care/interest - really cares about you                   | 64.4                  | 74.1    | 69.5  |
|                                                          | p<0.01                |         |       |
| Attention - notices when you are not there               | 42.2                  | 47.8    | 45.5  |
|                                                          | p<0.01                |         |       |
| Attention - notices when you are upset about something   | 46.1                  | 53.7    | 50.1  |
|                                                          | p<0.001               |         |       |
| Listening - listens when you have something to say       | 55.4                  | 62.0    | 58.9  |
|                                                          | p<0.01                |         |       |
| <i>High expectations</i>                                 |                       |         |       |
| Validation - tells you when you do a good job            | 49.8                  | 58.2    | 54.2  |
|                                                          | p<0.001               |         |       |
| Personal best message - always wants you to do your best | 68.1                  | 76.5    | 72.5  |
|                                                          | p<0.001               |         |       |
| Believes in child - believes you will be a success       | 65.8                  | 73.3    | 69.8  |
|                                                          | p<0.001               |         |       |

## 5.2 Risky Behaviour

A number of risky behaviours were examined in this study. Questions posed included “Have you ever....?” and therefore included lifetime misdemeanours while others sought information about more recent behaviours especially those relating to sexual activity, drug use and physical abuse and violence. Table 5.4 presents the findings regarding lifetime risky behaviour.

**Table 5.4**  
**Lifetime risky behaviour of adolescents, Jamaica, 2005**

| Have you ever.....?                                      | N     | Never (%) | 1 or 2 times (%) | 3 or more times (%) |
|----------------------------------------------------------|-------|-----------|------------------|---------------------|
| Cheated on test                                          | 2,978 | 79        | 16               | 5                   |
| Deliberately damaged something that didn't belong to you | 2,971 | 76        | 18               | 6                   |
| Been in a fight with a weapon                            | 2,984 | 90        | 7.5              | 2.5                 |
| Took something from a store                              | 2,986 | 97.3      | 2.3              | 0.3                 |
| Stole Something from someone                             | 2,983 | 90.6      | 7.5              | 1.9                 |
| Went somewhere to steal something                        | 2,989 | 97.4      | 2.1              | 0.5                 |

### 5.2.1 Sexual behaviour

In this survey, adolescents were asked whether they had ever been involved in non-coital activities like kissing and petting, and sexual intercourse. Approximately one-fifth of the girls stated that they had kissed/petted a boy but nearly 50% of boys stated that they had kissed or petted a girl (Table 5.5). A small proportion of adolescents i.e. less than 5 percent reported having been involved in same sex non-coital activities. Overall, 12.8% of the adolescents reported having had sexual intercourse, with four times as many boys as girls having done so ( $p < 0.01$ ). Sexual activity increased with age ( $p < 0.01$ ), the major increase being after 12 years of age. Only one person reported a pregnancy.

**Table 5.5**  
**Sexual activity by sex and age of adolescent, Jamaica, 2005**

| Background characteristic |               | Has kissed or petted/touched a boy/man |      | Has kissed or petted/touched a girl/woman |      | Has had sexual intercourse |        |
|---------------------------|---------------|----------------------------------------|------|-------------------------------------------|------|----------------------------|--------|
|                           |               | N                                      | %    | N                                         | %    | N                          | %      |
| <b>Sex</b>                | <b>Male</b>   | 1377                                   | 3.0  | 1407                                      | 47.7 | 1391                       | 20.9** |
|                           | <b>Female</b> | 1561                                   | 21.7 | 1548                                      | 4.9  | 1557                       | 5.5    |
| <b>Total</b>              |               | 2938                                   | 12.9 | 2954                                      | 25.3 | 2948                       | 12.8   |
| <b>Age of student**</b>   | 10            | 487                                    | 3.3  | 487                                       | 16.3 | 487                        | 3.8    |
|                           | 11            | 524                                    | 3.0  | 525                                       | 15.7 | 523                        | 5.5    |
|                           | 12            | 508                                    | 5.2  | 508                                       | 17.6 | 513                        | 4.9    |
|                           | 13            | 493                                    | 12.9 | 506                                       | 26.1 | 508                        | 13.6   |
|                           | 14            | 479                                    | 24.3 | 482                                       | 33.3 | 482                        | 21.2   |
|                           | 15            | 446                                    | 31.4 | 447                                       | 45.5 | 434                        | 30.6   |
| <b>Total</b>              |               | 2938                                   | 12.9 | 2954                                      | 25.3 | 2948                       | 12.8   |

\*\* p<0.01

Differentials in the percentage of boys aged 10-15 who have ever had sexual intercourse by selected background characteristics are presented in Table 5.6. Frequency of church attendance was associated with sexual experience being much higher among those who never attend church i.e. from 17.8 percent among those who attend more than once a week to 31.7% among those who never attend church. The percentage of boys who have ever had sexual intercourse increased as literacy and numeracy levels. More boys with self-reported behaviour problems had ever had sexual intercourse.

**Table 5.6**  
**Percentage of adolescents aged 10-15 who have ever had sexual intercourse**  
**by sex and background characteristics, Jamaica, 2005**

| Background Characteristic                 | Have Ever Had Sexual Intercourse |      |        |      |
|-------------------------------------------|----------------------------------|------|--------|------|
|                                           | Male                             |      | Female |      |
|                                           | %                                | N    | %      | N    |
| <b>Age (years)</b>                        | **                               |      | **     |      |
| 10                                        | 6.1                              | 228  | 1.6    | 258  |
| 11                                        | 8.7                              | 241  | 2.8    | 282  |
| 12                                        | 10.5                             | 238  | 0      | 276  |
| 13                                        | 24.8                             | 238  | 3.7    | 270  |
| 14                                        | 33.3                             | 225  | 10.5   | 257  |
| 15                                        | 43.6                             | 220  | 16.9   | 213  |
| <b>School type</b>                        | **                               |      | **     |      |
| Primary                                   | 7.3                              | 313  | 2      | 358  |
| All-age                                   | 15.2                             | 395  | 2.8    | 361  |
| Primary/junior high                       | 21.1                             | 133  | 11.6   | 86   |
| High                                      | 32.7                             | 550  | 7.7    | 751  |
| <b>Location of school</b>                 | **                               |      | *      |      |
| Urban                                     | 25.5                             | 722  | 6.7    | 856  |
| Rural                                     | 17.3                             | 515  | 4.6    | 565  |
| Remote rural                              | 12.3                             | 155  | 1.5    | 134  |
| <b>Frequency of church attendance</b>     | *                                |      | *      |      |
| More than once a week                     | 17.8                             | 107  | 7.6    | 144  |
| Weekly or almost weekly                   | 18.7                             | 555  | 3.6    | 756  |
| Once or twice in past month               | 20.1                             | 239  | 6.6    | 242  |
| Occasionally                              | 24.9                             | 305  | 5.2    | 249  |
| Never                                     | 31.7                             | 120  | 9.8    | 112  |
| <b>Residence with biological parents</b>  |                                  |      |        |      |
| Both parents                              | 19.7                             | 457  | 4.6    | 437  |
| Mother only                               | 21.1                             | 564  | 6.3    | 711  |
| Father only                               | 17.7                             | 124  | 4.4    | 116  |
| Neither parent                            | 24.1                             | 245  | 5.1    | 292  |
| <b>Involvement in club/team at school</b> |                                  |      |        |      |
| Yes, often                                | 19.4                             | 504  | 4.1    | 680  |
| Yes, sometimes                            | 22.2                             | 194  | 4.9    | 224  |
| No                                        | 21.8                             | 689  | 6.9    | 650  |
| <b>Literacy</b>                           | *                                |      |        |      |
| Not literate                              | 14.5                             | 193  | 6.6    | 61   |
| Basic literacy                            | 22.4                             | 630  | 4.9    | 627  |
| Functionally literate                     | 22.6                             | 504  | 6.2    | 788  |
| <b>Numeracy</b>                           | **                               |      |        |      |
| Not numerate                              | 14.9                             | 323  | 5.2    | 173  |
| Basic numeracy                            | 23.3                             | 309  | 6.6    | 319  |
| Functionally numerate                     | 23.3                             | 695  | 5.5    | 998  |
| <b>Learning problems</b>                  |                                  |      |        |      |
| Yes                                       | 18.9                             | 296  | 5.1    | 214  |
| No                                        | 21.5                             | 1091 | 5.5    | 1338 |
| <b>Behaviour problems</b>                 | **                               |      |        |      |
| Yes                                       | 29                               | 176  | 7.8    | 115  |
| No                                        | 19.8                             | 1210 | 5.4    | 1436 |

\*\* p < .01      \* p < .05

The presence of protective factors in the home appears to have a greater effect on girls' than on boys' propensity to engage in sexual intercourse (Table 5.7). The biggest differential in the percentage of girls who have engaged in sexual intercourse occurred with the presence/absence in the home of an adult who "always wants you to do your best".

**Table 5.7**  
**Percentage of adolescents aged 10-15 who have ever had sexual intercourse by sex and protective factors inside the home, Jamaica, 2005**

| <i>Presence In Home of Adult Who:</i>           | Male |      | Female |      |
|-------------------------------------------------|------|------|--------|------|
|                                                 | %    | N    | %      | N    |
| <b>Expects you to follow the rules</b>          |      |      |        |      |
| Sometimes or never                              | 17.5 | 332  | 6.1    | 342  |
| Always                                          | 21.9 | 1042 | 5.4    | 1206 |
| <b>Is interested in your school work</b>        |      |      | **     |      |
| Sometimes or never                              | 23.6 | 377  | 9.5    | 398  |
| Always                                          | 19.8 | 996  | 4      | 1140 |
| <b>Talks with you about problems</b>            |      |      |        |      |
| Sometimes or never                              | 23.4 | 755  | 7      | 768  |
| Always                                          | 18.5 | 600  | 3.8    | 745  |
| <b>Is too busy to pay much attention to you</b> |      |      | **     |      |
| Sometimes or never                              | 21.4 | 1109 | 5.4    | 1320 |
| Always                                          | 20.2 | 178  | 8.1    | 148  |
| <b>Listens when you have something to say</b>   |      |      |        |      |
| Sometimes or never                              | 23.4 | 505  | 8.3    | 515  |
| Always                                          | 20.1 | 840  | 3.9    | 998  |
| <b>Always wants you to do your best</b>         |      |      | **     |      |
| Sometimes or never                              | 21   | 310  | 11.9   | 261  |
| Always                                          | 20.7 | 1054 | 4.3    | 1267 |
| <b>Believes you will be a success</b>           | *    |      | **     |      |
| Sometimes or never                              | 24.3 | 411  | 8.9    | 392  |
| Always                                          | 19.7 | 920  | 4.6    | 1118 |

\*\* p< .01      \* p < .05

Among girls, the differentials in sexual initiation by protective factors outside the home were less marked than the differentials by protective factors inside the home (Table 5.8). Factors outside the home did not influence sexual activity among boys.

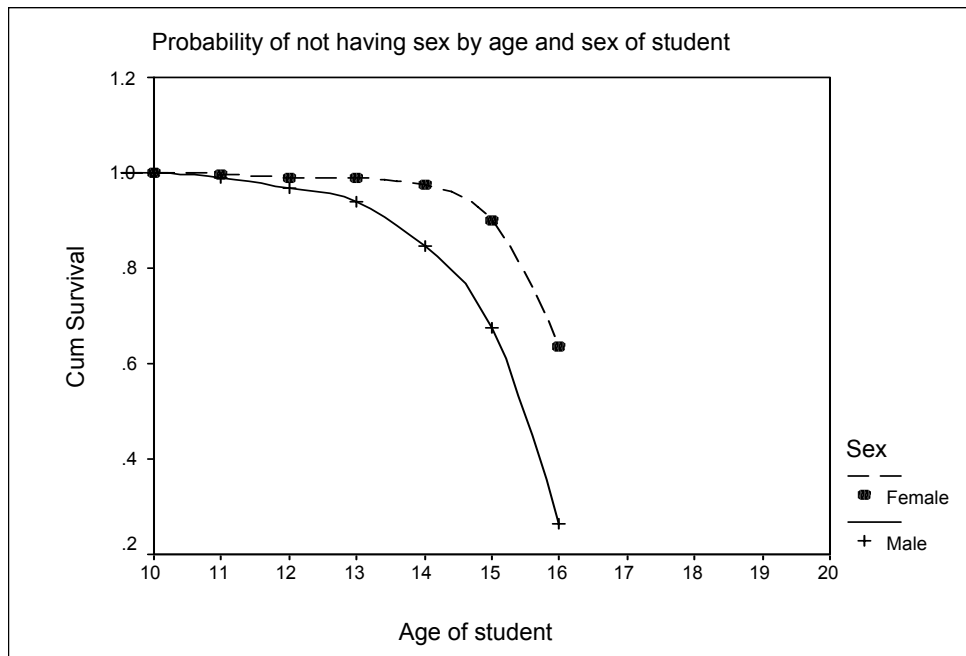
**Table 5.8**  
**Percentage of adolescents aged 10-15 who have ever had sexual intercourse by sex and protective factors outside the home, Jamaica, 2005**

| <i>Presence Outside Home of Adult Who:</i>        | Male |      | Female |      |
|---------------------------------------------------|------|------|--------|------|
|                                                   | %    | N    | %      | N    |
| <b>Really cares about you</b>                     |      |      |        |      |
| Sometimes or never                                | 21.6 | 482  | 5.9    | 393  |
| Always                                            | 20.8 | 853  | 5.4    | 1104 |
| <b>Notices when you are not there</b>             |      |      |        |      |
| Sometimes or never                                | 21.4 | 748  | 6.1    | 771  |
| Always                                            | 20.5 | 531  | 5      | 681  |
| <b>Notices when you are upset about something</b> |      |      |        |      |
| Sometimes or never                                | 20.9 | 1076 | 6.4    | 1175 |
| Always                                            | 26.8 | 157  | 3      | 231  |
| <b>Is mean to you</b>                             |      |      |        |      |
| Sometimes or never                                | 20.9 | 1076 | 6.4    | 1175 |
| Always                                            | 26.8 | 157  | 3      | 231  |
| <b>Listens when you have something to say</b>     |      |      |        |      |
| Sometimes or never                                | 20.5 | 594  | 5.2    | 575  |
| Always                                            | 22.1 | 725  | 5.9    | 916  |
| <b>Tells you when you do a good job</b>           |      |      |        |      |
| Sometimes or never                                | 18.9 | 671  | 6.3    | 636  |
| Always                                            | 22.4 | 656  | 4.9    | 861  |
| <b>Always wants you to do your best</b>           |      |      |        |      |
| Sometimes or never                                | 21.3 | 422  | 6.4    | 357  |
| Always                                            | 20.7 | 895  | 5.2    | 1117 |
| <b>Believes you will be a success</b>             |      |      |        |      |
| Sometimes or never                                | 22.2 | 441  | 6.5    | 402  |
| Always                                            | 20.8 | 830  | 5.5    | 1061 |

\* p < .05

Using life tables to account for the adolescents who are not yet sexually active, the median age of first sex was calculated at 15.43 for boys and over 15 years for girls. The median age for girls could not be estimated precisely because of their later sexual initiation. Figure 5.1 displays the survival functions of first sexual intercourse for boys and girls, 10 to 15 years. This is a plot of the cumulative proportion of cases surviving i.e. not having sex up to the end of each interval of time. At age 15 years, the cumulative proportion of girls who have not had sexual intercourse was 0.64 but for boys this figure was 0.26. In other words, at the end of age fifteen years we expect that 64% of adolescent girls in school would not have had sexual intercourse but only 26% of boys in school would not have done so.

**Figure 5.1**



Most of the adolescents (76%) who had had sex stated that they had agreed to it on the first occasion but significantly more boys (80%) than girls (65%) stated that this was so (Table 5.9). An alarming quarter of all girls stated that they had been forced, while another 12% had allowed the sex to occur without agreeing to it. This is consistent with data from the Reproductive Health Survey which reported that one in every five girls, 15-19 years, is forced to have sex. It suggests a level of passivity and powerlessness in decision making among adolescent girls and point to the need for their empowerment to reduce the risk of sexually transmitted disease including HIV/AIDS, and pregnancy.

When compared with children 10-13 years, adolescents aged 14 -15 years recorded a higher percentage of “I had agreed to sex” on the first occasion and a lower percentage “I was forced”. Evidently, many children who have sex at a younger age do so because the sex is coerced. Studies show that early coercive sex is associated with compromised reproductive and sexual health including increased risk of subsequent unsafe consensual sex, and poor mental and social outcomes[18]. Males had more sex more often than females and as age increased the frequency of sex increased.

**Table 5.9**

**How first sex occurred and number of times had sex by sex and age of sexually active adolescent, Jamaica, 2005**

|                                                                | Sex           |                | Age of Student (Years) |            |            |            |            |             | Total<br>N=368 |
|----------------------------------------------------------------|---------------|----------------|------------------------|------------|------------|------------|------------|-------------|----------------|
|                                                                | Male<br>N=283 | Female<br>N=85 | 10<br>N=19             | 11<br>N=28 | 12<br>N=22 | 13<br>N=68 | 14<br>N=98 | 15<br>N=133 |                |
|                                                                | %             | %              | %                      | %          | %          | %          | %          | %           |                |
| <b>When you had sex for the first time, how did it happen?</b> |               |                |                        |            |            |            |            |             |                |
| I agreed to it                                                 | 79.9          | 64.6           | 66.5                   | 70.3       | 57.9       | 65.8       | 80.0       | 84.9        | 76.4           |
| I didn't agree but didn't say or do anything                   | 8.6           | 11.2           | 2.9                    | 4.1        | 10.5       | 19.9       | 5.8        | 8.1         | 9.2            |
| I was forced                                                   | 9.1           | 24.2           | 25.1                   | 25.6       | 27.2       | 12.8       | 10.5       | 7.1         | 12.6           |
| Other                                                          | 2.4           | -              | 5.5                    | -          | 4.3        | 1.6        | 3.8        | -           | 1.8            |
| Total                                                          | 100           | 100            | 100                    | 100        | 100        | 100        | 100        | 100         | 100            |
|                                                                | p<0.01        |                |                        |            | p<0.01     |            |            |             |                |
| <b>No. of times have had sex</b>                               |               |                |                        |            |            |            |            |             |                |
| 1                                                              | 32.8          | 79.0           | 44.2                   | 60.4       | 32.5       | 40.5       | 42.9       | 43.7        | 43.5           |
| 2                                                              | 10.5          | 17.1           | 21.8                   | 10.2       | 10.6       | 6.1        | 15.3       | 12.0        | 12.1           |
| 3                                                              | 16.7          | -              | 18.1                   | 12.2       | 20.3       | 15.9       | 14.8       | 7.7         | 12.8           |
| 4+                                                             | 40.0          | 3.9            | 15.8                   | 17.2       | 36.6       | 37.5       | 26.9       | 36.6        | 31.6           |
| Total                                                          | 100           | 100            | 100                    | 100        | 100        | 100        | 100        | 100         | 100            |
|                                                                | p<0.05        |                |                        |            | p<0.05     |            |            |             |                |

### 5.2.2 Condom use at last sex

When asked whether they or their partner had used a condom the last time they had sexual intercourse, a little over half of the respondents stated that they had done so. Significantly more girls than boys had used a condom with 68.5% of girls using compared with 46.9% of boys.

The relationship between condom use and selected background variables is presented in Table 5.10. However, the information is only presented for boys because the number of females was too small to be disaggregated. Among boys who have had sex, the prevalence of condom use was almost four times as high among those aged 14-15 as among those aged 10-11. Compared to their counterparts in primary school, four times as many boys in primary/junior high school and almost five times as many boys in high school used a condom at last sexual intercourse. These differentials may be partly due to age differences by type of school. Condom use at last sexual intercourse was more prevalent among urban boys than among their rural counterparts. Sexually-active boys who reported that they have had behaviour problems had a lower prevalence of condom use at last sexual intercourse than those who did not report behaviour problems.

**Table 5.10**  
**Percentage of sexually-active male adolescents aged 10-15 who used a condom at last sexual intercourse by background characteristics, Jamaica, 2005**

| Background Characteristic                 | %    | N   |
|-------------------------------------------|------|-----|
| <b>Age group (years)</b>                  | **   |     |
| 10 - 11                                   | 15.8 | 38  |
| 12 - 13                                   | 29.3 | 82  |
| 14 - 15                                   | 62.2 | 172 |
| <b>School type</b>                        | **   |     |
| Primary                                   | 12   | 25  |
| All-age                                   | 25.9 | 58  |
| Primary/junior high                       | 48.1 | 27  |
| High                                      | 58.6 | 181 |
| <b>Location of school</b>                 | **   |     |
| Urban                                     | 53.5 | 185 |
| Rural/Remote rural                        | 34.9 | 106 |
| <b>Frequency of church attendance</b>     |      |     |
| More than twice per month                 | 41.5 | 123 |
| Once or twice in past month               | 61.2 | 49  |
| Occasionally/Never                        | 46.4 | 112 |
| <b>Residence with biological parents</b>  |      |     |
| Both parents                              | 50   | 92  |
| Mother only                               | 47.9 | 117 |
| Father only                               | -    | 23  |
| Neither parent                            | 42.4 | 59  |
| <b>Involvement in club/team at school</b> |      |     |
| Yes                                       | 43.9 | 148 |
| No                                        | 50   | 142 |
| <b>Literacy</b>                           |      |     |
| Not literate                              | 42.3 | 26  |
| Basic literacy                            | 47.6 | 143 |
| Functionally literate                     | 47.4 | 114 |
| <b>Numeracy</b>                           | **   |     |
| Not numerate                              | 50   | 46  |
| Basic numeracy                            | 32.9 | 73  |
| Functionally numerate                     | 52.1 | 163 |
| <b>Learning problems</b>                  |      |     |
| Yes                                       | 50   | 56  |
| No                                        | 46.4 | 235 |
| <b>Behaviour problems</b>                 |      |     |
| Yes                                       | 34.7 | 49  |
| No                                        | 49.6 | 242 |

\*\* p< .01      \* p < .05

- Less than 25 cases

Tables 5.11 and 5.12 presents condom use at last sexual intercourse by protective factors in and outside the home. Protective factors inside the home

appear to have a stronger association with the prevalence of sexual activity than with the prevalence of condom use at last sexual intercourse (among those who were sexually-active). The only protective factor in the home that was significantly related to the prevalence of condom use was the presence in the home of an adult who was always “too busy to pay much attention to you.” The prevalence of condom use at last sexual intercourse was 31% among boys who report that there was an adult in the home who was always too busy to pay much attention to them, compared to 52% among boys who reported the presence in the home of an adult who was sometimes or never too busy to pay much attention to them. None of the protective factors in the home influenced significantly the prevalence of condom use among sexually-active girls (Table 5.11).

**Table 5.11**  
**Percentage of sexually-active adolescents aged 10-15 who used a condom at last sexual intercourse by sex and protective factors in the home, Jamaica, 2005**

| <i>Presence In Home Of Adult Who:</i>           | Male |     | Female |    |
|-------------------------------------------------|------|-----|--------|----|
|                                                 | %    | N   | %      | N  |
| <b>Expects you to follow the rules</b>          |      |     |        |    |
| Sometimes or never                              | 47.3 | 55  | -      | 21 |
| Always                                          | 47.4 | 230 | 67.2   | 67 |
| <b>Is interested in your school work</b>        |      |     |        |    |
| Sometimes or never                              | 41.4 | 87  | 66.7   | 39 |
| Always                                          | 49.7 | 199 | 70.8   | 48 |
| <b>Talks with you about problems</b>            |      |     |        |    |
| Sometimes or never                              | 46.3 | 175 | 71.4   | 56 |
| Always                                          | 49.6 | 113 | 60     | 30 |
| <b>Is too busy to pay much attention to you</b> | *    |     |        |    |
| Sometimes or never                              | 51.5 | 237 | 70.3   | 74 |
| Always                                          | 30.6 | 36  | -      | 12 |
| <b>Listens when you have something to say</b>   |      |     |        |    |
| Sometimes or never                              | 45.7 | 116 | 63.6   | 44 |
| Always                                          | 47.6 | 170 | 73.2   | 41 |
| <b>Always wants you to do your best</b>         |      |     |        |    |
| Sometimes or never                              | 50   | 66  | 64.5   | 31 |
| Always                                          | 45.6 | 217 | 71.9   | 57 |
| <b>Believes you will be a success</b>           |      |     |        |    |
| Sometimes or never                              | 41.8 | 98  | 60     | 35 |
| Always                                          | 51.4 | 183 | 75.5   | 53 |

\* p < .05

Concerning the influence of protective factors outside the home, the prevalence of condom use among sexually-active adolescent girls was 77% if they reported that outside the home there was an adult who always listens when they have something to say compared to 57% if they do not. Similarly, the prevalence of condom use among sexually-active adolescent girls was 73% if there was an adult outside the home who always believes that the child will be a success compared to 33% if such an adult was absent outside the home. Among boys, the only protective factor outside the home that was significantly related to the prevalence of condom use was the presence of an adult who always “wants you to do your best”: 37% in the absence of an adult outside the home who always conveys a “personal best message” versus 54% if there was an adult outside the home who always does (Table 5.12).

**Table 5.12**  
**Percentage of sexually-active adolescents aged 10-15 who used a condom at**  
**last sexual intercourse by sex and protective factors outside the home,**  
**Jamaica, 2005**

| <i>Presence Outside Home Of Adult Who:</i> | Male |     | Female |    |
|--------------------------------------------|------|-----|--------|----|
|                                            | %    | N   | %      | N  |
| Really cares about you                     |      |     |        |    |
| Sometimes or never                         | 41.2 | 102 | 47.7   | 23 |
| Always                                     | 51.4 | 179 | 56.5   | 63 |
| Notices when you are not there             |      |     |        |    |
| Sometimes or never                         | 48.7 | 158 | 72.3   | 47 |
| Always                                     | 49.5 | 111 | 69.4   | 36 |
| Notices when you are upset about something |      |     |        |    |
| Sometimes or never                         | 44.9 | 147 | 63.3   | 30 |
| Always                                     | 52.9 | 119 | 71.7   | 53 |
| Is mean to you                             |      |     |        |    |
| Sometimes or never                         | 49.8 | 225 | 69.2   | 78 |
| Always                                     | 45.2 | 42  | -      | 7  |
| Listens when you have something to say     |      |     | *      |    |
| Sometimes or never                         | 43.3 | 120 | 56.7   | 30 |
| Always                                     | 51.6 | 161 | 77.2   | 57 |
| Tells you when you do a good job           |      |     |        |    |
| Sometimes or never                         | 47.6 | 126 | 65.9   | 41 |
| Always                                     | 50.7 | 148 | 71.1   | 45 |
| Always wants you to do your best           | **   |     |        |    |
| Sometimes or never                         | 37.1 | 89  | -      | 23 |
| Always                                     | 53.8 | 186 | 73.8   | 61 |
| You trust                                  |      |     |        |    |
| Sometimes or never                         | 42.9 | 105 | 51.6   | 31 |
| Always                                     | 49.7 | 159 | 81.1   | 53 |
| Believes you will be a success             |      |     | **     |    |
| Sometimes or never                         | 47.4 | 95  | 63     | 27 |
| Always                                     | 48.3 | 176 | 73.3   | 60 |

\*\* p< .01      \* p < .05

### *5.2.3 Physical abuse and violence*

Violence among adolescents has become a serious problem in Jamaica with children being both perpetrators and victims. This section examines lifetime and recent experiences of the students regarding violence. Some 13.3% of the respondents reported a lifetime experience of any physical abuse defined as “when someone causes you to have a scar, black and blue marks, welts, bleeding or a broken bone” and there was no difference between males and females. More younger and older children reported a lifetime experience of physical abuse as did more children attending primary school (Table 5.13).

This definition of physical abuse examines the more extreme forms of abuse because it is possible for physical assaults not to result in apparent bodily harm. Also, lifetime experiences may not be accurately estimated because of problems of recall. Therefore information about physical attacks in the past year may more accurately reflect the level of physical abuse among adolescents. Some 32% of adolescents reported being victim of a physical attack with far fewer (13%) reporting being perpetrators. As either victim or perpetrator, boys exceeded girls, but the differences were more marked for perpetrators where proportionately twice as many boys as girls admitted causing a fight or attack.

Again more young children i.e. those 10 and 11 years old, reported being a victim of a physical attack but more adolescents aged 15 years reported being perpetrators. The proportion of physical attacks and perpetrators in the past year was the lowest among adolescents attending high schools and highest among those attending primary and junior high schools.

**Table 5.13**  
Physical abuse and physical attacks among adolescents by sex, age and school type, Jamaica, 2005

| Background Characteristic |                   | Ever been physically abused |      | In past year, been victim of physical attack |      | In past year, caused a fight/attack |      |
|---------------------------|-------------------|-----------------------------|------|----------------------------------------------|------|-------------------------------------|------|
|                           |                   | Nos.                        | %    | Nos.                                         | %    | Nos.                                | %    |
| Sex                       | Male              | 173                         | 12.2 | 511                                          | 36.2 | 248                                 | 17.7 |
|                           | Female            | 225                         | 14.3 | 442                                          | 28.1 | 124                                 | 8.0  |
|                           |                   | N.S                         |      | P<0.01                                       |      | P<0.01                              |      |
| Age of student (Years)    | 10                | 85                          | 17.3 | 191                                          | 38.9 | 61                                  | 12.4 |
|                           | 11                | 69                          | 13.1 | 186                                          | 35.5 | 60                                  | 11.5 |
|                           | 12                | 58                          | 11.2 | 163                                          | 31.4 | 57                                  | 11.2 |
|                           | 13                | 60                          | 11.8 | 142                                          | 28.1 | 62                                  | 12.2 |
|                           | 14                | 67                          | 11.9 | 127                                          | 26.2 | 58                                  | 12.1 |
|                           | 15                | 69                          | 15.0 | 143                                          | 31.0 | 73                                  | 16.3 |
|                           |                   | P<0.05                      |      | P<0.01                                       |      | N.S.                                |      |
| School type               | Primary           | 110                         | 16.3 | 255                                          | 37.8 | 84                                  | 12.5 |
|                           | All-age           | 107                         | 13.9 | 301                                          | 39.0 | 93                                  | 12.1 |
|                           | Primary Jnr. High | 20                          | 8.6  | 96                                           | 41.4 | 43                                  | 18.5 |
|                           | High              | 161                         | 12.3 | 301                                          | 23.0 | 152                                 | 11.8 |
|                           |                   | P<0.05                      |      | P<0.01                                       |      | P<0.05                              |      |
| Total                     |                   | 398                         | 13.3 | 953                                          | 31.9 | 372                                 | 12.8 |

Table 5.14 examines being a victim of physical violence by selected background variables. For every category, more boys than girls were victims of a physical attack or fight in the past year. The only exception are adolescents who attend church more than once a week, with victimization rates being 35% among girls compared to 26% among boys. The rate of physical violence victimization declined with age among girls; age differentials were not significant among boys. For both sexes, significantly lower proportions of high school students reported being the victim of a physical attack or fight in the past year than students in other types of schools. Among girls, for example, physical violence victimization rates were twice as high among primary, all-age, and primary/junior high school students as among high school students. The proportion of girls who were victims of a physical attack or fight was lower in urban areas (25%) than in rural and remote rural areas (32%). There were significant differentials in violence victimization rates among boys by residence with biological parents. For this variable, the lowest victimization rates (30%) were found among boys who lived with both parents or with their father only. The highest rates were found among boys who lived with their mother only (41%).

There was no relationship between physical violence victimization and being involved in a club. However it was related to academic factors. Both boys and girls reporting learning or behaviour problems had a greater tendency than their counterparts without such problems to have been a victim of a physical attack or fight in the past year. The rate of physical violence victimization declined with increasing literacy and numeracy levels. For example, nearly half of illiterate boys had been the victim of a physical attack or fight in the past year compared to 30% of boys who were functionally literate.

**Table 5.14**  
**Percentage of adolescents aged 10-15 who were victims of a physical attack or fight during the past year by sex and background characteristics, Jamaica, 2005**

| Background Characteristic                 | Was Victim of Physical Attack of Fight in Past Year |     |        |      |
|-------------------------------------------|-----------------------------------------------------|-----|--------|------|
|                                           | Male                                                |     | Female |      |
|                                           | %                                                   | N   | %      | N    |
| <b>Age (years)</b>                        |                                                     |     | **     |      |
| 10                                        | 41.3                                                | 230 | 36.8   | 261  |
| 11                                        | 37.3                                                | 241 | 33.9   | 283  |
| 12                                        | 33.9                                                | 242 | 29.2   | 277  |
| 13                                        | 34.9                                                | 238 | 22.5   | 267  |
| 14                                        | 32.2                                                | 227 | 20.9   | 258  |
| 15                                        | 37.6                                                | 234 | 24.2   | 227  |
| <b>School type</b>                        | **                                                  |     | **     |      |
| Primary                                   | 39                                                  | 315 | 36.7   | 360  |
| All-age                                   | 40.8                                                | 395 | 37.2   | 376  |
| Primary/junior high                       | 43.2                                                | 146 | 38.4   | 86   |
| High                                      | 29.3                                                | 556 | 18.2   | 751  |
| <b>Location of school</b>                 |                                                     |     | **     |      |
| Urban                                     | 34.2                                                | 726 | 24.8   | 859  |
| Rural                                     | 38.6                                                | 531 | 32     | 575  |
| Remote rural                              | 37                                                  | 154 | 32.4   | 139  |
| <b>Frequency of church attendance</b>     |                                                     |     |        |      |
| More than once a week                     | 26.4                                                | 106 | 34.8   | 155  |
| Weekly or almost weekly                   | 35.5                                                | 558 | 25.8   | 757  |
| Once or twice in past month               | 34.6                                                | 240 | 31.1   | 244  |
| Occasionally                              | 39.5                                                | 319 | 28.9   | 249  |
| Never                                     | 37.3                                                | 126 | 27.4   | 113  |
| <b>Residence with biological parents</b>  | **                                                  |     |        |      |
| Both parents                              | 30.4                                                | 460 | 26.4   | 451  |
| Mother only                               | 41                                                  | 583 | 28.9   | 713  |
| Father only                               | 30.6                                                | 124 | 33.3   | 117  |
| Neither parent                            | 38.6                                                | 246 | 26.7   | 292  |
| <b>Involvement in club/team at school</b> |                                                     |     |        |      |
| Yes, often                                | 34.4                                                | 509 | 27.5   | 694  |
| Yes, sometimes                            | 41.5                                                | 195 | 32.7   | 223  |
| No                                        | 36.1                                                | 706 | 27.3   | 653  |
| <b>Literacy</b>                           | **                                                  |     | **     |      |
| Not literate                              | 49.5                                                | 206 | 45.9   | 61   |
| Basic literacy                            | 37.1                                                | 636 | 30.9   | 641  |
| Functionally literate                     | 30.4                                                | 506 | 24.1   | 789  |
| <b>Numeracy</b>                           | *                                                   |     | **     |      |
| Not numerate                              | 43                                                  | 323 | 36.5   | 174  |
| Basic numeracy                            | 36.2                                                | 323 | 31.8   | 321  |
| Functionally numerate                     | 33.5                                                | 701 | 25.4   | 999  |
| <b>Learning problems</b>                  | **                                                  |     | **     |      |
| Yes                                       | 47.7                                                | 298 | 36.3   | 212  |
| No                                        | 33                                                  | 140 | 26.8   | 1356 |
|                                           |                                                     | 8   |        |      |
| <b>Behaviour problems</b>                 | *                                                   |     | **     |      |
| Yes                                       | 42.7                                                | 178 | 44     | 116  |
| No                                        | 35.2                                                | 122 | 26.8   | 1450 |
|                                           |                                                     | 9   |        |      |

\*\* p < .01      \* p < .05

The presence of an adult who “talks with you about your problems” was the only protective factor in the home that significantly affected boys’ tendency to have been a victim of a physical attack of fight in the past year (32% if there was an adult in the home who always “talks with you about your problems” versus 39% if this adult was sometimes or never present) (Table 5.15). However, among girls, differentials in rates of physical violence victimization were significant for all but two protective factors in the home: presence of an adult who “expects you to follow the rules” and presence of an adult who was “too busy to pay much attention to you”. For the other factors, the proportion of girls who were victims of a physical attack or fight during the past year was substantially lower (by about 8-10 percentage points) if the protective factor was present in the home than if it was largely absent.

**Table 5.15**  
**Percentage of adolescents aged 10-15 who were victims of a physical attack or fight during the past year by sex and protective factors in the home, Jamaica, 2005**

| PRESENCE IN HOME OF ADULT WHO:           | Male |      | Female |      |
|------------------------------------------|------|------|--------|------|
|                                          | %    | N    | %      | N    |
| Expects you to follow the rules          |      |      |        |      |
| Sometimes or never                       | 38.1 | 333  | 32.1   | 343  |
| Always                                   | 35.3 | 1062 | 27.1   | 1221 |
| Is interested in your school work        |      |      | **     |      |
| Sometimes or never                       | 38.9 | 378  | 33.7   | 401  |
| Always                                   | 35   | 1018 | 25.9   | 1153 |
| Talks with you about your problems       |      |      |        |      |
| Sometimes or never                       | 39.4 | 759  | 32.7   | 782  |
| Always                                   | 32   | 615  | 22.7   | 748  |
| Is too busy to pay much attention to you | **   |      | **     |      |
| Sometimes or never                       | 36.3 | 1129 | 36.6   | 1338 |
| Always                                   | 38.2 | 178  | 28     | 149  |
| Listens when you have something to say   |      |      | **     |      |
| Sometimes or never                       | 39   | 510  | 33.6   | 518  |
| Always                                   | 34.4 | 858  | 25.1   | 1012 |
| Wants you to do your best                |      |      | *      |      |
| Sometimes or never                       | 39.4 | 312  | 34.5   | 264  |
| Always                                   | 34.7 | 1074 | 26.8   | 1280 |
| Believes you will be a success           |      |      | **     |      |
| Sometimes or never                       | 38.7 | 413  | 35.6   | 393  |
| Always                                   | 34.7 | 940  | 25.4   | 1131 |

\*\* p < .01      \* p < .05

The relationship between physical violence victimization and protective factors outside the home is shown in Table 5.16. Among boys only two protective

factors outside the home were significantly related to the percentage who were victims of a physical attack or fight during the past year: the presence outside the home of an adult who “notices when you are not there” and who “notices when you are upset about something.” For example, the percentage of boys who were victims of a physical attack or fight in the past year was 39% if there was an adult outside the home who sometimes or never “notices when you are upset about something” compared to 33% if there was an adult who always “notices when you are upset about something.”

For girls, all protective factors outside the home except one (an adult who listens when you have something to say) were significantly related to the percentage who reported being the victim of a physical attack or fight during the past year. For example, the presence outside the home of an adult who was always mean to the adolescent was associated with a violence victimization of rate of 34% compared to 27% if a mean adult was sometimes or never present. Significant differentials in violence victimization rates for the other protective factors outside the home are in the order of 4-9 percentage points.

**Table 5.16**  
**Percentage of adolescents aged 10-15 who were victims of a physical attack or fight during the past year by sex and protective factors outside the home, Jamaica, 2005**

| <i>Presence Outside Home Of Adult Who:</i> | Male |      | Female |      |
|--------------------------------------------|------|------|--------|------|
|                                            | %    | N    | %      | N    |
| Really cares about you                     |      |      | *      |      |
| Sometimes or never                         | 33.9 | 484  | 32.2   | 397  |
| Always                                     | 37.6 | 873  | 26.7   | 1117 |
| Notices when you are not there             | *    |      | *      |      |
| Sometimes or never                         | 38.1 | 754  | 30.5   | 775  |
| Always                                     | 32.7 | 544  | 25.8   | 693  |
| Notices when you are upset about something | *    |      | **     |      |
| Sometimes or never                         | 38.8 | 708  | 31.3   | 674  |
| Always                                     | 33.4 | 593  | 24.2   | 768  |
| Is mean to you                             |      |      | *      |      |
| Sometimes or never                         | 36.2 | 1096 | 27.2   | 1182 |
| Always                                     | 41.4 | 157  | 34.3   | 239  |
| Listens when you have something to say     |      |      |        |      |
| Sometimes or never                         | 37.6 | 598  | 28.2   | 577  |
| Always                                     | 35.7 | 740  | 28     | 931  |
| Tells you when you do a good job           |      |      | **     |      |
| Sometimes or never                         | 32.7 | 677  | 31.6   | 636  |
| Always                                     | 34.8 | 672  | 25.4   | 878  |
| You trust                                  |      |      | **     |      |
| Sometimes or never                         | 34.9 | 478  | 33.7   | 442  |
| Always                                     | 36.7 | 818  | 26.6   | 1021 |
| Wants you to do your best                  |      |      | **     |      |
| Sometimes or never                         | 36.2 | 428  | 35.4   | 359  |
| Always                                     | 36.5 | 910  | 25.6   | 1130 |
| Believes you will be a success             |      |      | **     |      |
| Sometimes or never                         | 35.9 | 446  | 32.6   | 402  |
| Always                                     | 36.7 | 845  | 25.8   | 1077 |

\*\* p< .01      \* p < .05

Substantially more 15-year old boys (27%) compared to younger boys (12-18%) caused a fight or attacked someone in the past year (Table 5.17). Age differentials were significant among boys but not among girls. The rate of violence perpetration was substantially higher among boys and girls in primary/junior high school than among their counterparts in other types of school. For example, 25% of boys in primary/junior high school reported that they caused a fight or attacked someone during the past year compared to 13% of boys in all-age schools. Rates of violence perpetration are significantly higher among rural and urban boys (20% and 18%, respectively) than among their counterparts in remote rural areas (11%). Differentials in violence perpetration by frequency of church attendance were not significant for boys. Less than 5% of girls who attended church weekly or almost weekly caused a fight or attacked someone during the past year. Corresponding rates range from 13% among girls who attended church more than once a week. For both sexes, there were no differentials in violence perpetration by residence with biological parents or involvement in a club or team at school. However, lower levels of literacy and numeracy were associated with significantly higher percentages of girls reporting that they had caused a fight or attacked someone in the past year. Furthermore, the rate of violence perpetration was twice as high among girls with learning problems and three times as high among those with behaviour problems as among their counterparts who did not report learning or behaviour problems, respectively. Behaviour problems were also associated with significantly higher rates of violence perpetration among boys.

**Table 5.17**  
**Percentage of adolescents aged 10-15 who caused a fight or attacked**  
**someone during the past year by sex and background characteristics,**  
**Jamaica, 2005**

| Background Characteristic                 | Had caused a fight or attacked someone |      |        |      |
|-------------------------------------------|----------------------------------------|------|--------|------|
|                                           | Male                                   |      | Female |      |
|                                           | %                                      | N    | %      | N    |
| <b>Age (years)</b>                        | <b>**</b>                              |      |        |      |
| 10                                        | 17.4                                   | 230  | 8.4    | 261  |
| 11                                        | 12.4                                   | 241  | 10.6   | 283  |
| 12                                        | 14.3                                   | 238  | 8.5    | 272  |
| 13                                        | 17.7                                   | 237  | 7.4    | 270  |
| 14                                        | 16.5                                   | 224  | 8.3    | 254  |
| 15                                        | 27.4                                   | 234  | 3.8    | 213  |
| <b>School type</b>                        | <b>**</b>                              |      |        |      |
| Primary                                   | 16.1                                   | 316  | 9.2    | 358  |
| All-age                                   | 12.9                                   | 394  | 11.2   | 374  |
| Primary/junior high                       | 25.3                                   | 146  | 7      | 86   |
| High                                      | 19.9                                   | 549  | 5.9    | 735  |
| <b>Location of school</b>                 | <b>*</b>                               |      |        |      |
| Urban                                     | 17.5                                   | 722  | 7.4    | 843  |
| Rural                                     | 19.9                                   | 527  | 8.9    | 572  |
| Remote rural                              | 11                                     | 155  | 8      | 138  |
| <b>Frequency of church attendance</b>     | <b>**</b>                              |      |        |      |
| More than once a week                     | 10.4                                   | 106  | 12.8   | 156  |
| Weekly or almost weekly                   | 18.1                                   | 552  | 4.4    | 742  |
| Once or twice in past month               | 15.5                                   | 239  | 11.5   | 244  |
| Occasionally                              | 19.8                                   | 318  | 10.6   | 246  |
| Never                                     | 19.2                                   | 125  | 8      | 113  |
| <b>Residence with biological parents</b>  |                                        |      |        |      |
| Both parents                              | 14.7                                   | 456  | 6.9    | 450  |
| Mother only                               | 20.7                                   | 580  | 9.3    | 709  |
| Father only                               | 18.5                                   | 124  | 7.9    | 114  |
| Neither parent                            | 15.5                                   | 245  | 6.1    | 280  |
| <b>Involvement in club/team at school</b> |                                        |      |        |      |
| Yes, often                                | 15.9                                   | 504  | 7.7    | 694  |
| Yes, sometimes                            | 18                                     | 194  | 7.7    | 222  |
| No                                        | 19.1                                   | 703  | 9      | 637  |
| <b>Literacy</b>                           | <b>**</b>                              |      |        |      |
| Not literate                              | 23.4                                   | 205  | 16.1   | 62   |
| Basic literacy                            | 16.7                                   | 634  | 10.1   | 624  |
| Functionally literate                     | 17.7                                   | 503  | 6.1    | 787  |
| <b>Numeracy</b>                           | <b>**</b>                              |      |        |      |
| Not numerate                              | 16.4                                   | 324  | 13.8   | 174  |
| Basic numeracy                            | 16.5                                   | 322  | 9.4    | 307  |
| Functionally numerate                     | 19.5                                   | 696  | 6.7    | 994  |
| <b>Learning problems</b>                  | <b>**</b>                              |      |        |      |
| Yes                                       | 15.2                                   | 297  | 14     | 214  |
| No                                        | 18.4                                   | 1103 | 7      | 1335 |
| <b>Behaviour problems</b>                 | <b>*</b>                               |      |        |      |
| Yes                                       | 24.4                                   | 176  | 21.6   | 116  |
| No                                        | 16.8                                   | 1223 | 6.9    | 1431 |

\*\* p < .01      \* p < .05

Among boys, significantly lower rates of violence perpetration occurred if there was an adult in the home who (a) always talked with them about their problems; (b) always listened when they had something to say; and (c) always believed they would be a success (Table 5.18). Among girls, significantly lower rates of violence perpetration occurred if there was an adult in the home who (a) was always interested in their school work; (b) always listened when they had something to say; (b) always wanted them to do their best; and (d) always believed they would be a success.

**Table 5.18**  
**Percentage of adolescents aged 10-15 who caused a fight or attacked**  
**someone during the past year by sex and protective factors in the home,**  
**Jamaica, 2005**

| <i>Presence In Home Of Adult Who:</i>    | Male |      | Female |      |
|------------------------------------------|------|------|--------|------|
|                                          | %    | N    | %      | N    |
| Expects you to follow the rules          |      |      |        |      |
| Sometimes or never                       | 17.3 | 329  | 8.2    | 330  |
| Always                                   | 17.7 | 1058 | 8      | 1214 |
| Is interested in your school work        |      |      | **     |      |
| Sometimes or never                       | 18.6 | 377  | 12.3   | 400  |
| Always                                   | 17.4 | 1010 | 6.3    | 1135 |
| Talks with you about your problems       | **   |      |        |      |
| Sometimes or never                       | 20.9 | 756  | 8.8    | 782  |
| Always                                   | 13.7 | 611  | 6.8    | 730  |
| Is too busy to pay much attention to you |      |      |        |      |
| Sometimes or never                       | 18.1 | 1123 | 7.6    | 1319 |
| Always                                   | 15.8 | 177  | 11.5   | 148  |
| Listens when you have something to say   | **   |      | **     |      |
| Sometimes or never                       | 23.2 | 509  | 11     | 519  |
| Always                                   | 15   | 851  | 6.7    | 992  |
| Wants you to do your best                |      |      | **     |      |
| Sometimes or never                       | 18.2 | 308  | 12.5   | 264  |
| Always                                   | 17.6 | 1070 | 7.2    | 1260 |
| Believes you will be a success           | **   |      | **     |      |
| Sometimes or never                       | 22.1 | 411  | 11.5   | 391  |
| Always                                   | 15.4 | 934  | 6.6    | 1113 |

\*\* p< .01

The presence outside the home of an adult who was always mean to the child was associated with significantly lower rates of violence perpetration among

both boys and girls (Table 5.19). Among girls, differentials in violence perpetration were significant for every protective factor outside the home with the exception of the presence of an adult who “believes you will be a success.” For example, among girls who reported having an adult outside the home whom they could always trust, the rate of violence perpetration was 6% compared to 12% if an adult whom they could trust was sometimes or never present outside the home.

**Table 5.19**  
**Percentage of adolescents aged 10-15 who caused a fight or attacked someone during the past year by sex and protective factors outside the home, Jamaica, 2005**

| <i>Presence Outside Home Of Adult Who:</i>        | <b>Male</b> |          | <b>Female</b> |          |
|---------------------------------------------------|-------------|----------|---------------|----------|
|                                                   | <b>%</b>    | <b>N</b> | <b>%</b>      | <b>N</b> |
| <b>Really cares about you</b>                     |             |          | <b>**</b>     |          |
| Sometimes or never                                | 17.5        | 479      | 11.4          | 395      |
| Always                                            | 17.7        | 870      | 6.5           | 1099     |
| <b>Notices when you are not there</b>             |             |          | <b>*</b>      |          |
| Sometimes or never                                | 17.8        | 749      | 9.5           | 771      |
| Always                                            | 17.3        | 543      | 6.6           | 678      |
| <b>Notices when you are upset about something</b> |             |          | <b>**</b>     |          |
| Sometimes or never                                | 18.6        | 706      | 10            | 671      |
| Always                                            | 17.1        | 589      | 6             | 752      |
| <b>Is mean to you</b>                             | <b>*</b>    |          | <b>*</b>      |          |
| Sometimes or never                                | 19          | 1088     | 8.5           | 1176     |
| Always                                            | 12.7        | 157      | 4.4           | 228      |
| <b>Listens when you have something to say</b>     |             |          |               |          |
| Sometimes or never                                | 18.1        | 596      | 8.8           | 577      |
| Always                                            | 18.5        | 737      | 7.6           | 912      |
| <b>Tells you when you do a good job</b>           |             |          | <b>*</b>      |          |
| Sometimes or never                                | 18.9        | 672      | 9.7           | 636      |
| Always                                            | 15.8        | 670      | 6.9           | 260      |
| <b>You trust</b>                                  |             |          | <b>**</b>     |          |
| Sometimes or never                                | 18.7        | 475      | 12.3          | 440      |
| Always                                            | 17.6        | 814      | 5.9           | 1018     |
| <b>Wants you to do your best</b>                  |             |          | <b>**</b>     |          |
| Sometimes or never                                | 17.1        | 427      | 12.6          | 358      |
| Always                                            | 18.7        | 905      | 6.5           | 1112     |
| <b>Believes you will be a success</b>             |             |          |               |          |
| Sometimes or never                                | 17.6        | 443      | 10.1          | 404      |
| Always                                            | 17.3        | 842      | 7.2           | 1057     |

\*\* p< .01      \* p < .05

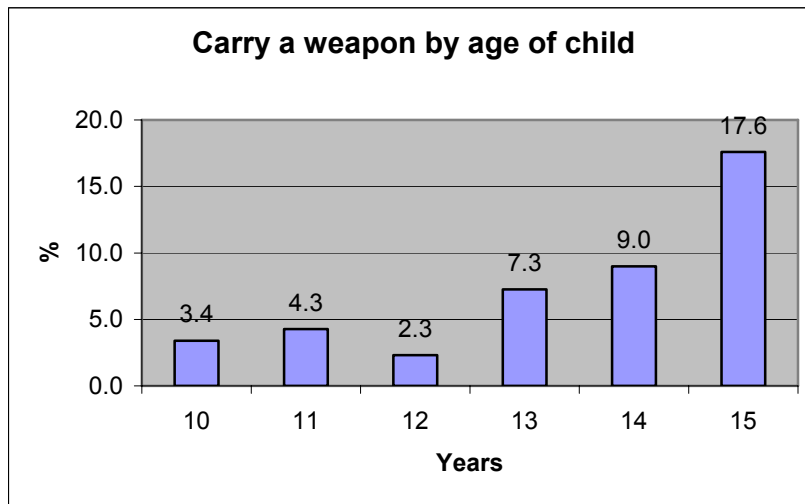
Carrying a weapon and involvement in a gang are potentially risky behaviours. Among the adolescents, 3.5% carried a weapon to school some of the time or almost all the time during the past month (Table 5.20). The weapon most often carried (to school and other than to school) during the past month was a knife (9.2%), approximately 1% carried a gun and 88% did not carry a weapon in the past month. Approximately 2% were currently a member of a gang, 3.6% used to be a gang member and 94.4% have never belonged to a gang. For all these risky behaviours significantly more boys than girls were involved.

**Table 5.20**  
**Carrying of a weapon and involvement in a gang by sex of adolescent,**  
**Jamaica, 2005**

|                                                             | Sex                 |                       | Total<br>N=2985<br>% |
|-------------------------------------------------------------|---------------------|-----------------------|----------------------|
|                                                             | Male<br>N=1412<br>% | Female<br>N=1573<br>% |                      |
| <b>During the past month, carry a weapon to school?</b>     |                     |                       |                      |
| Never                                                       | 94.4                | 98.4                  | 96.5                 |
| A few times                                                 | 5.0                 | 1.5                   | 3.2                  |
| Almost all the time                                         | 0.6                 | 0.1                   | 0.3                  |
|                                                             |                     | p<0.01                |                      |
| <b>Do you carry a weapon at times other than at school?</b> |                     |                       |                      |
| Never                                                       | 88.5                | 95.8                  | 92.4                 |
| A few times                                                 | 10.2                | 3.5                   | 6.7                  |
| Almost all the time                                         | 1.2                 | 0.7                   | 1.0                  |
|                                                             |                     | p<0.01                |                      |
| <b>Have you ever belonged to a gang?</b>                    |                     |                       |                      |
| Never                                                       | 93.3                | 95.5                  | 94.4                 |
| A few times                                                 | 5.0                 | 2.4                   | 3.6                  |
| yes still do                                                | 1.6                 | 2.2                   | 1.9                  |
|                                                             |                     | p<0.01                |                      |
| <b>Total</b>                                                | 100.0               | 100.0                 | 100.0                |

Carrying a weapon whether at school or elsewhere significantly increased with age beginning at age 13 years (Figure 5.2).

**Figure 5.2**



Some 4.7% had been stabbed or shot at least once during their lifetime. Approximately 5 out of every 10 adolescents (47.6% or 1,414) had seen a dead body other than at a funeral. For 39% of those who had seen a dead body other than at a funeral reported the cause of death was reported to be “shot and killed”, while 31% of adolescents, the person was sick and died.

#### **5.2.4 Drug use**

The main type of drug used by adolescents was alcohol with one-third of all adolescents having drunk alcohol in the past year (Table 5.21). Some 10% had ever smoked a cigarette while less than 5% had smoked marijuana in the past year. Only 2 adolescents admitted to using cocaine and 4 to using other drugs. Significantly more boys than girls had used drugs. While these figures may appear low, the high use of alcohol is disturbing as it may lead to other risky behaviours.

**Table 5.21**  
**Drug use by sex of adolescent, Jamaica, 2005**

|                                       | Sex  |      |        |        | Total |      |
|---------------------------------------|------|------|--------|--------|-------|------|
|                                       | Male |      | Female |        | Nos.  | %    |
|                                       | Nos. | %    | Nos.   | %      |       |      |
| In past year has consumed alcohol     | 519  | 37   | 442    | 28.1   | 961   | 32.3 |
|                                       |      | 59.2 |        | p<0.01 |       |      |
| Has ever smoked cigarettes            | 163  | 11.5 | 135    | 8.6    | 298   | 10.0 |
|                                       |      | 6.5  |        | p<0.05 |       |      |
| Has smoked any marijuana in past year | 50   | 3.5  | 32     | 2.0    | 83    | 2.8  |
|                                       |      | 10.2 |        | p<0.01 |       |      |
| Has used cocaine/crack in past year   | 2    | .2   | 0      | .0     | 2     | .1   |
|                                       |      |      | N.S.   |        |       |      |
| Has used other drugs in past year?    | 3    | .2   | 1      | .0     | 4     | .1   |
|                                       |      |      | N.S.   |        |       |      |

Drug use by age of adolescent is presented in Table 5.22. As age increases drug use increases, especially after 12 years. By age 15 years, approximately 50% reported consuming alcohol; nearly 20% had smoked cigarettes and 8.4% had smoked marijuana.

**Table 5.22**  
**Percentage of adolescents who used drugs in the past year by age, Jamaica, 2005**

|                                       |      | Age of student |      |        |      |      |      | Total |
|---------------------------------------|------|----------------|------|--------|------|------|------|-------|
|                                       |      | 10             | 11   | 12     | 13   | 14   | 15   |       |
| In past year has consumed alcohol     | Nos. | 102            | 93   | 182    | 169  | 179  | 173  | 898   |
|                                       | %    | 19.2           | 19.1 | 24.7   | 38.6 | 42.4 | 48.6 | 30.2  |
|                                       |      |                |      | p<0.01 |      |      |      |       |
| Has ever smoked cigarettes            | Nos. | 24             | 28   | 43     | 42   | 74   | 66   | 277   |
|                                       | %    | 4.5            | 5.6  | 5.8    | 9.4  | 17.6 | 18.5 | 9.3   |
|                                       |      |                |      | p<0.01 |      |      |      |       |
| Has smoked any marijuana in past year | Nos. | 5              | 1    | 2      | 10   | 26   | 29   | 74    |
|                                       | %    | 1.0            | .2   | .3     | 2.3  | 6.3  | 8.4  | 2.5   |
|                                       |      |                |      | p<0.01 |      |      |      |       |

Given the high consumption of alcohol, the level of drunkenness as measured by whether adolescent was drunk in the past month is examined by background characteristics and protective factors inside and outside the home in Tables 5.23 - 5.25.

Among boys, in particular, the prevalence of drunkenness increased with age (Table 5.23). A higher proportion of high school girls had ever been really drunk compared to girls who were attending primary, all age, or primary/junior high schools but for boys, only those attending primary school had a lower level of drunkenness. The proportion of boys who had ever been drunk was more than twice as high among those who had never attended church as among those who attended church more than once a week (10% versus 5%, respectively). There is additional evidence that problem behaviours tend to cluster. Among girls, the prevalence of drunkenness was 7% among those who reported behaviour problems compared to 2% among those who did not report behaviour problems. However, literacy and numeracy levels were not associated with drunkenness.

**Table 5.23**  
**Percentage of adolescents aged 10-15 who have ever been really drunk by**  
**sex and background characteristics, Jamaica, 2005**

| Background Characteristic                 | Have ever been drunk |      |        |      |
|-------------------------------------------|----------------------|------|--------|------|
|                                           | Male                 |      | Female |      |
|                                           | %                    | N    | %      | N    |
| <b>Age (years)</b>                        | **                   |      | **     |      |
| 10                                        | 4.3                  | 230  | 1.2    | 260  |
| 11                                        | 2.9                  | 240  | 1.4    | 284  |
| 12                                        | 5.1                  | 237  | 0.4    | 277  |
| 13                                        | 5.1                  | 236  | 1.9    | 269  |
| 14                                        | 8.9                  | 225  | 6.6    | 257  |
| 15                                        | 10.8                 | 232  | 1.9    | 224  |
| <b>School type</b>                        | **                   |      | **     |      |
| Primary                                   | 4.1                  | 314  | 1.1    | 361  |
| All-age                                   | 6.9                  | 393  | 1.3    | 375  |
| Primary/junior high                       | 7                    | 143  | 1.2    | 86   |
| High                                      | 6.5                  | 550  | 4.1    | 749  |
| <b>Location of school</b>                 | **                   |      | *      |      |
| Urban                                     | 6.4                  | 718  | 2.8    | 855  |
| Rural                                     | 5.9                  | 527  | 2.8    | 577  |
| Remote Rural                              | 5.8                  | 155  | 0.7    | 138  |
| <b>Frequency of church attendance</b>     | *                    |      | *      |      |
| More than once a week                     | 4.7                  | 106  | 3.9    | 155  |
| Weekly or almost weekly                   | 4.7                  | 550  | 2      | 757  |
| Once or twice in past month               | 7.1                  | 240  | 2      | 244  |
| Occasionally                              | 7                    | 314  | 0.8    | 249  |
| Never                                     | 10.4                 | 124  | 5.3    | 113  |
| <b>Residence with biological parents</b>  |                      |      |        |      |
| Both parents                              | 5.7                  | 454  | 1.8    | 450  |
| Mother only                               | 7.8                  | 578  | 3.4    | 713  |
| Father only                               | 3.3                  | 123  | 0.9    | 115  |
| Neither parent                            | 4.5                  | 246  | 2.7    | 292  |
| <b>Involvement in club/team at school</b> |                      |      |        |      |
| Yes, often                                | 5.9                  | 506  | 2.9    | 689  |
| Yes, sometimes                            | 6.7                  | 194  | 1.8    | 225  |
| No                                        | 6                    | 696  | 2.3    | 652  |
| <b>Literacy</b>                           |                      |      |        |      |
| Not literate                              | 4.5                  | 202  | 1.6    | 61   |
| Basic literacy                            | 6.5                  | 629  | 2      | 639  |
| Functionally literate                     | 6.9                  | 505  | 3.3    | 789  |
| <b>Numeracy</b>                           |                      |      |        |      |
| Not numerate                              | 6                    | 319  | 2.3    | 175  |
| Basic numeracy                            | 6                    | 319  | 2.5    | 319  |
| Functionally numerate                     | 6.7                  | 699  | 2.8    | 998  |
| <b>Learning problems</b>                  |                      |      |        |      |
| Yes                                       | 5.4                  | 295  | 0.5    | 214  |
| No                                        | 6.3                  | 1099 | 3      | 1351 |
| <b>Behaviour problems</b>                 |                      |      | *      |      |
| Yes                                       | 7.1                  | 170  | 6.9    | 116  |
| No                                        | 6                    | 1224 | 2.3    | 1449 |

\*\* p < .01      \* p < .05

Protective factors in the home that are related to the prevalence of drunkenness are different for boys and girls (Table 5.24). For boys, the presence in the home of an adult who was always "interested in your school work" and the presence in the home of an adult who always "talks to you about

your problems" was associated with a reduced prevalence of drunkenness. For example, the prevalence of drunkenness was 5% if there was an adult in the home who was "always interested in your school work" compared to 10% if that person was sometimes or never present. Among girls, the presence in the home of an adult who was not always "too busy to pay much attention to you" and the presence of an adult who "always listens when you have something to say" was associated with a lower prevalence of drunkenness.

**Table 5.24**  
**Percentage of adolescents aged 10-15 who have ever been really drunk by sex and protective factors in the home, Jamaica, 2005**

| <i>Presence In Home Of Adult Who:</i>           | <b>Male</b> |          | <b>Female</b> |          |
|-------------------------------------------------|-------------|----------|---------------|----------|
|                                                 | <b>%</b>    | <b>N</b> | <b>%</b>      | <b>N</b> |
| <b>Expects you to follow the rules</b>          |             |          |               |          |
| Sometimes or never                              | 7.1         | 325      | 2.9           | 342      |
| Always                                          | 5.9         | 1057     | 2.5           | 1218     |
| <b>Is interested in your school work</b>        | **          |          |               |          |
| Sometimes or never                              | 10.1        | 376      | 2.8           | 400      |
| Always                                          | 4.8         | 1007     | 2.3           | 1152     |
| <b>Talks with you about problems</b>            | *           |          |               |          |
| Sometimes or never                              | 7.3         | 752      | 2.4           | 779      |
| Always                                          | 4.6         | 610      | 2.7           | 748      |
| <b>Is too busy to pay much attention to you</b> |             |          | *             |          |
| Sometimes or never                              | 6           | 1122     | 2.5           | 1334     |
| Always                                          | 9.2         | 173      | 5.3           | 150      |
| <b>Listens when you have something to say</b>   |             |          | *             |          |
| Sometimes or never                              | 5.3         | 506      | 4.1           | 518      |
| Always                                          | 6.7         | 849      | 2             | 1009     |
| <b>Always wants you to do your best</b>         |             |          |               |          |
| Sometimes or never                              | 6.4         | 311      | 3.4           | 264      |
| Always                                          | 6.1         | 1063     | 2.5           | 1277     |
| <b>Believes you will be a success</b>           |             |          |               |          |
| Sometimes or never                              | 6.6         | 407      | 2.6           | 392      |
| Always                                          | 5.8         | 932      | 2.6           | 1130     |

\*\* p< .01    \* p < .05

Influences outside the home may not always be positive. The prevalence of drunkenness was twice as high among girls who report that there was an adult outside the home who always "cares about you" as among girls who report that this adult was sometimes or never present. Other protective factors outside the

home were not significantly related to the prevalence of drunkenness (Table 5.25).

**Table 5.25**  
**Percentage of adolescents aged 10-15 who have ever been really drunk by sex and protective factors outside the home, Jamaica, 2005**

| Presence Outside Home of Adult Who:        | Male |      | Female |      |
|--------------------------------------------|------|------|--------|------|
|                                            | %    | N    | %      | N    |
| Really cares about you                     |      |      | *      |      |
| Sometimes or never                         | 5.2  | 479  | 1.5    | 397  |
| Always                                     | 6.7  | 864  | 3.2    | 1115 |
| Notices when you are not there             |      |      |        |      |
| Sometimes or never                         | 6.7  | 745  | 2.6    | 774  |
| Always                                     | 6.1  | 541  | 3      | 691  |
| Notices when you are upset about something |      |      |        |      |
| Sometimes or never                         | 6.3  | 702  | 2.2    | 672  |
| Always                                     | 6.3  | 587  | 3.1    | 766  |
| Is mean to you                             |      |      |        |      |
| Sometimes or never                         | 6.3  | 1087 | 2.8    | 1180 |
| Always                                     | 9.6  | 157  | 2.5    | 241  |
| Listens when you have something to say     |      |      |        |      |
| Sometimes or never                         | 7.6  | 593  | 1.9    | 578  |
| Always                                     | 5.3  | 734  | 3.3    | 927  |
| Tells you when you do a good job           |      |      |        |      |
| Sometimes or never                         | 6.3  | 670  | 3.3    | 638  |
| Always                                     | 6.5  | 665  | 2.3    | 873  |
| Always wants you to do your best           |      |      |        |      |
| Sometimes or never                         | 6.1  | 426  | 2.2    | 358  |
| Always                                     | 6.5  | 899  | 2.7    | 1129 |
| Believes you will be a success             |      |      |        |      |
| Sometimes or never                         | 7.7  | 443  | 1.7    | 403  |
| Always                                     | 5.4  | 836  | 3.2    | 1073 |

\* p < .05

“Any substance use” (ganja, alcohol, cocaine or cigarettes) in the past year was analysed in greater detail by examining background characteristics and protective factors inside and outside the home in Tables 5.26 - 5.28. For every background characteristic examined, a higher proportion of boys than girls had used substances (Table 5.26). As age increased, a higher proportion of boys and girls used substances. For example, 27% of boys aged 10 years used ganja, alcohol, cocaine or cigarettes in the past year compared to 57% of boys aged 15. Among girls, substance use in the past year was twice as prevalent among those in high school as among those in primary school. Among boys, those in primary junior/high and high school had a higher prevalence of substance use in the past year (40%) than those in primary or all-age schools (24% and 32%,

respectively). Among both boys and girls, the prevalence of substance use decreased with increased frequency of church attendance. For example, 22% of boys who attended church more than once a week used substances in the past year compared to 43% of boys who never attend church. Residence with biological parents does not affect the prevalence of substance use among girls. However, among boys, there was a significant difference in the prevalence of substance use by residence with biological parents. The prevalence of substance use was highest among those who live with their mothers only (38%) or their fathers only (37%).

Involvement in a club/team at school was related to the prevalence of substance use among boys. Forty-three percent of boys who were sometimes involved in a club or team at school used substances in the past year compared to 34% of those who were often involved and 33% of those who were never involved. Among girls both the prevalence of substance use increased with literacy and numeracy levels. Among boys, socioeconomic differentials in the use of substances by level of literacy were not significant. Sex differentials in the prevalence of substance use in the past year are highest by literacy. With regard to numeracy, the higher levels of substance use are found among boys with basic numeracy levels (40%) than among their counterparts who were innumerate (29%) or functionally numerate (45%). Among boys, behaviour problems were not associated with the prevalence of substance use in the past year. However, among girls, those with behaviour problems had higher levels of substance use than those who did not report behaviour problems - 35% versus 21%, respectively.

**Table 5.26**  
**Percentage of adolescents aged 10-15 who used any drugs in the past year**  
**by sex and background characteristics, Jamaica, 2005**

| Background Characteristic                 | Has used any drug in the past year |      |        |      |
|-------------------------------------------|------------------------------------|------|--------|------|
|                                           | Male                               |      | Female |      |
|                                           | %                                  | N    | %      | N    |
| <b>Age (years)</b>                        | **                                 |      | **     |      |
| 10                                        | 27.2                               | 232  | 13.7   | 263  |
| 11                                        | 22.8                               | 246  | 15.8   | 284  |
| 12                                        | 25.4                               | 244  | 17.3   | 278  |
| 13                                        | 33.6                               | 238  | 21.7   | 272  |
| 14                                        | 41.9                               | 227  | 32.9   | 258  |
| 15                                        | 56.8                               | 234  | 33.9   | 227  |
| <b>School type</b>                        | **                                 |      | **     |      |
| Primary                                   | 24.1                               | 320  | 13.5   | 362  |
| All-age                                   | 32.3                               | 399  | 16.5   | 376  |
| Primary/junior high                       | 40.4                               | 146  | 15.1   | 86   |
| High                                      | 40.1                               | 558  | 29.9   | 757  |
| <b>Location of school</b>                 |                                    |      | **     |      |
| Urban                                     | 35.8                               | 729  | 24.3   | 864  |
| Rural                                     | 33.5                               | 538  | 21.6   | 579  |
| Remote rural                              | 31.2                               | 154  | 10.9   | 138  |
| <b>Frequency of church attendance</b>     | **                                 |      | *      |      |
| More than once a week                     | 21.7                               | 106  | 16.7   | 156  |
| Weekly or almost weekly                   | 31.7                               | 558  | 19.2   | 760  |
| Once or twice in past month               | 32                                 | 241  | 23.8   | 244  |
| Occasionally                              | 40.1                               | 319  | 25.7   | 249  |
| Never                                     | 43.2                               | 125  | 29.8   | 114  |
| <b>Residence with biological parents</b>  | *                                  |      |        |      |
| Both parents                              | 30.9                               | 460  | 20.3   | 454  |
| Mother only                               | 38                                 | 589  | 23.8   | 715  |
| Father only                               | 37.1                               | 124  | 21.6   | 116  |
| Neither parent                            | 30.6                               | 248  | 21     | 295  |
| <b>Involvement in club/team at school</b> | *                                  |      |        |      |
| Yes, often                                | 33.8                               | 509  | 21.2   | 697  |
| Yes, sometimes                            | 42.6                               | 195  | 21.9   | 225  |
| No                                        | 32.5                               | 711  | 23.1   | 655  |
| <b>Literacy</b>                           |                                    |      | **     |      |
| Not literate                              | 32.1                               | 209  | 14.5   | 62   |
| Basic literacy                            | 32.8                               | 640  | 17     | 642  |
| Functionally literate                     | 38.1                               | 506  | 27.5   | 796  |
| <b>Numeracy</b>                           | *                                  |      | **     |      |
| Not numerate                              | 29.4                               | 327  | 14.3   | 175  |
| Basic numeracy                            | 39.8                               | 327  | 20.2   | 321  |
| Functionally numerate                     | 34.8                               | 702  | 24.7   | 1007 |
| <b>Learning problems</b>                  |                                    |      |        |      |
| Yes                                       | 31.9                               | 301  | 22.7   | 216  |
| No                                        | 35.2                               | 1113 | 22     | 1361 |
| <b>Behaviour problems</b>                 |                                    |      | **     |      |
| Yes                                       | 31.3                               | 179  | 35.3   | 116  |
| No                                        | 35                                 | 1236 | 21.1   | 1459 |

\*\* p< .01      \* p < .05

The presence in the home of an adult who always “talks with you about problems” and the presence of an adult who always “listens when you have something to say” were associated with a lower prevalence of substance use in the past year for both sexes. For boys, living with an adult who always expected them to follow the rules was associated with a prevalence of substance use of 33% compared to 41% if such an adult was sometimes or never present in the home. Similar differentials were observed by the presence of an adult in the home who always wants them to do their best. For girls, the presence in the home of an adult who was always interested in their school work was associated with a reduced prevalence of substance use - 20% versus 27% if an adult in the home sometimes or never showed interest in their school work (Table 5.27).

**Table 5.27**  
**Percentage of adolescents aged 10-15 who used any drugs in the past year**  
**by sex and protective factors in the home, Jamaica, 2005**

| <i>Presence In Home of Adult Who:</i>           | <b>Male</b> |          | <b>Female</b> |          |
|-------------------------------------------------|-------------|----------|---------------|----------|
|                                                 | <b>%</b>    | <b>N</b> | <b>%</b>      | <b>N</b> |
| <b>Expects you to follow the rules</b>          | <b>**</b>   |          |               |          |
| Sometimes or never                              | 40.8        | 336      | 21.8          | 344      |
| Always                                          | 32.5        | 1062     | 22.2          | 1224     |
| <b>Is interested in your school work</b>        | <b>**</b>   |          |               |          |
| Sometimes or never                              | 36.9        | 379      | 26.9          | 402      |
| Always                                          | 33.5        | 1019     | 20.3          | 1158     |
| <b>Talks with you about problems</b>            | <b>**</b>   |          |               |          |
| Sometimes or never                              | 41.6        | 515      | 26.8          | 519      |
| Always                                          | 31.4        | 858      | 20.1          | 1015     |
| <b>Is too busy to pay much attention to you</b> |             |          |               |          |
| Sometimes or never                              | 34.9        | 1136     | 22.1          | 1339     |
| Always                                          | 34.8        | 178      | 24.7          | 150      |
| <b>Listens when you have something to say</b>   | <b>*</b>    |          |               |          |
| Sometimes or never                              | 36.9        | 765      | 24.6          | 784      |
| Always                                          | 31.2        | 616      | 19            | 751      |
| <b>Wants you to do your best</b>                | <b>*</b>    |          |               |          |
| Sometimes or never                              | 40.4        | 317      | 24            | 263      |
| Always                                          | 32.7        | 1075     | 21.9          | 1284     |
| <b>Believes you will be a success</b>           |             |          |               |          |
| Sometimes or never                              | 36.6        | 418      | 22.6          | 394      |
| Always                                          | 33.1        | 940      | 22            | 1136     |

\*\* p < .01      \* p < .05

Protective factors outside the home appeared to have less of an influence on substance use in the past year than protective factors in the home (Table 5.28). For girls, none of the protective factors outside the home were significantly related to the prevalence of substance use in the past year. For boys, the only protective factor outside the home that significantly affected

the prevalence of substance use in the past year among boys was the presence of an adult who always “tells you when you do a good job”.

**Table 5.28**  
**Percentage of adolescents aged 10-15 who used any drug**  
**in the past year by sex and protective factors outside the home, Jamaica,**  
**2005**

| Presence Outside Home Of Adult Who:               | Male |      | Female |      |
|---------------------------------------------------|------|------|--------|------|
|                                                   | %    | N    | %      | N    |
| <b>Really cares about you</b>                     |      |      |        |      |
| Sometimes or never                                | 35.7 | 488  | 21.2   | 397  |
| Always                                            | 34   | 873  | 22.1   | 1121 |
| <b>Notices when you are not there</b>             |      |      |        |      |
| Sometimes or never                                | 36.4 | 759  | 21.3   | 776  |
| Always                                            | 33.4 | 545  | 23.4   | 693  |
| <b>Notices when you are upset about something</b> |      |      |        |      |
| Sometimes or never                                | 36.7 | 714  | 22     | 674  |
| Always                                            | 32.9 | 593  | 22.3   | 772  |
| <b>Is mean to you</b>                             |      |      |        |      |
| Sometimes or never                                | 34.9 | 1100 | 22     | 1184 |
| Always                                            | 39.9 | 158  | 24.8   | 242  |
| <b>Listens when you have something to say</b>     |      |      |        |      |
| Sometimes or never                                | 38.1 | 604  | 21.4   | 579  |
| Always                                            | 32.4 | 740  | 22.4   | 933  |
| <b>Tells you when you do a good job</b>           | *    |      |        |      |
| Sometimes or never                                | 36.2 | 682  | 24.3   | 641  |
| Always                                            | 33.3 | 672  | 20.3   | 878  |
| <b>You trust</b>                                  |      |      |        |      |
| Sometimes or never                                | 34.6 | 482  | 24.3   | 444  |
| Always                                            | 34.4 | 820  | 20.7   | 1024 |
| <b>Wants you to do your best</b>                  |      |      |        |      |
| Sometimes or never                                | 34.2 | 433  | 21.2   | 358  |
| Always                                            | 35.4 | 910  | 22.2   | 1493 |
| <b>Believes you will be a success</b>             |      |      |        |      |
| Sometimes or never                                | 37.1 | 450  | 21.5   | 404  |
| Always                                            | 34   | 846  | 22.3   | 1078 |

\* p < .05

Adolescents were asked whether they thought that drugs were easy of difficult to obtain. Almost all thought that cocaine/crack was difficult, if not impossible to get. On the other hand, they thought that alcohol and cigarettes were easy to get. Just over 40 % also thought that it would be easy to obtain marijuana (Table 5.29).

**Table 5.29**  
**Percentage of adolescents reporting level of ease or difficulty in accessing drugs**

| Drugs fairly-very easy to get |       |                            | Drugs very difficult/probably impossible to get |       |                                             |
|-------------------------------|-------|----------------------------|-------------------------------------------------|-------|---------------------------------------------|
| Drug                          | N     | Fairly/ very easy to get % | Drug                                            | N     | Very difficult-probably impossible to get % |
| Marijuana                     | 2,641 | 41.8                       | Cocaine                                         | 2,470 | 92.8                                        |
| Alcohol                       | 2,787 | 73.2                       | Crack                                           | 2,452 | 93.6                                        |
| Cigarettes                    | 2,789 | 70.0                       |                                                 |       |                                             |

## CHAPTER 6

### SOURCES OF INFORMATION

#### 6.1 Listening to the Radio

Over 70% of adolescents frequently listened to the radio (Table 6.1). There was no difference by sex or location of school but as age increased, the frequency of listening increased. Fewer adolescents attending primary school reported listening to the radio 2-3 times per week.

**Table 6.1**  
Frequency with which adolescents listen to the radio by sex, age, school type and location of school, Jamaica, 2005

|                           | How often you listen to radio             |                                 |                                 | Total |     |
|---------------------------|-------------------------------------------|---------------------------------|---------------------------------|-------|-----|
|                           | Less than once<br>per<br>month/never<br>% | At least once<br>per month<br>% | At least 2-3<br>times/week<br>% | N     | %   |
| <b>Sex</b>                |                                           |                                 |                                 |       |     |
| Male                      | 12.6                                      | 16.7                            | 70.7                            | 1393  | 100 |
| Female                    | 10.7                                      | 15.7                            | 73.6                            | 1563  | 100 |
| <b>Age of student **</b>  |                                           |                                 |                                 |       |     |
| 10                        | 14.7                                      | 17.2                            | 68.1                            | 483   | 100 |
| 11                        | 14.1                                      | 15.7                            | 70.2                            | 516   | 100 |
| 12                        | 14.1                                      | 16.8                            | 69.1                            | 520   | 100 |
| 13                        | 9.0                                       | 17.4                            | 73.6                            | 503   | 100 |
| 14                        | 9.3                                       | 14.9                            | 75.8                            | 476   | 100 |
| 15                        | 7.7                                       | 15.1                            | 77.3                            | 458   | 100 |
| <b>School Type **</b>     |                                           |                                 |                                 |       |     |
| Primary                   | 16.8                                      | 17.7                            | 65.5                            | 665   | 100 |
| All-age                   | 12.8                                      | 13.2                            | 74.0                            | 759   | 100 |
| Junior High               | 10.2                                      | 21.3                            | 68.5                            | 231   | 100 |
| High                      | 8.4                                       | 16.3                            | 75.3                            | 1301  | 100 |
| <b>Location of school</b> |                                           |                                 |                                 |       |     |
| Urban                     | 12.5                                      | 16.4                            | 71.1                            | 1564  | 100 |
| Rural                     | 10.1                                      | 15.7                            | 74.2                            | 1106  | 100 |
| Remote Rural              | 12.3                                      | 16.7                            | 71.0                            | 286   | 100 |
| <b>Total</b>              | 11.6                                      | 16.2                            | 72.2                            | 2087  | 100 |

\*\* p<0.01

#### 6.2 Sources of Information about Sex and Other Health Issues

The adolescents were asked where they got their information or learnt about sex and which source provided they learnt most information. The majority (87.5%) had received information about sex, the main source being “class at

school” (57.3%). Just over one-third of the respondents also thought that they learnt most from the “class at school”. Table 6.2 presents the sources of information by sex, age, school type and location of school. Respondents could list more than one source of information. “Class at school” was identified as a source of information for 63% of girls compared with only 52% of boys. A higher percentage of girls (43.9%) than boys (23.6%) stated that they learnt about sex from their mother but a similar proportion of both girls and boys reported getting information from their fathers. More boys received their information from their peers i.e. girlfriends/boyfriends and friends. In general, more girls obtained information about sex from a variety of sources than did boys although overall the proportion with information was similar for both boys and girls. This study did not verify the accuracy of the information received by these adolescents but it is likely that information from informal sources would include more inaccuracies and myths.

As age increased, information about sex increased. Unfortunately, one-quarter of ten year olds, who would normally be entering puberty, reported not having received any information about sex. Sex education at school for that age seems to have been quite limited.

Classes at school/school talks, family members and TV were the main important sources of information for health and health issues (Table 6.3). The health worker and the radio each provided health information to about one-fifth of the adolescents. Fewer than 10% stated that they received no health information. Generally, more females received information from all sources except TV and family member, and information sources increase with age.

**Table 6.2**  
**Sources of information about sex by sex age school type and location, Jamaica, 2005**

| Background characteristic     |                     | N    | Mother | Father | Other relative | Boy/girl friend | Friends | Class at School | Books | TV/ video | No information |
|-------------------------------|---------------------|------|--------|--------|----------------|-----------------|---------|-----------------|-------|-----------|----------------|
|                               |                     |      | %      | %      | %              | %               | %       | %               | %     | %         | %              |
| <b>Sex</b>                    | <b>Male</b>         | 1413 | 32.1   | 14.3   | 11.0           | 5.2             | 29.8    | 52.9            | 21.6  | 33.4      | 8.5            |
|                               | <b>Female</b>       | 1561 | 67.9   | 13.5   | 18.5           | 4.4             | 25.6    | 64.2            | 33.9  | 34.0      | 9.9            |
| <b>Age of student (Years)</b> | <b>10</b>           | 491  | 23.1   | 8.3    | 9.8            | 1.4             | 16.5    | 37.2            | 18.8  | 27.3      | 6.5            |
|                               | <b>11</b>           | 526  | 24.5   | 8.4    | 10.3           | 2.2             | 20.3    | 44.2            | 20.5  | 26.8      | 8.4            |
|                               | <b>12</b>           | 514  | 33.8   | 14.4   | 12.5           | 2.4             | 16.9    | 55.0            | 24.1  | 28.1      | 9.7            |
|                               | <b>13</b>           | 508  | 42.3   | 14.1   | 15.7           | 4.2             | 29.1    | 67.6            | 34.7  | 37.8      | 10.9           |
|                               | <b>14</b>           | 484  | 44.4   | 16.1   | 19.3           | 8.5             | 39.5    | 72.4            | 37.2  | 39.9      | 11.5           |
|                               | <b>15</b>           | 451  | 42.8   | 23.2   | 23.3           | 10.8            | 45.9    | 79.2            | 34.2  | 43.8      | 8.1            |
| <b>School Type</b>            | <b>Primary</b>      | 674  | 24.9   | 9.2    | 10.6           | 1.8             | 18.8    | 38.6            | 20.6  | 26.4      | 8.7            |
|                               | <b>All-age</b>      | 759  | 25.0   | 9.8    | 12.0           | 2.2             | 23.9    | 50.8            | 21.2  | 30.5      | 8.4            |
|                               | <b>Jnr. High</b>    | 232  | 26.3   | 14.6   | 13.9           | 4.8             | 25.2    | 67.9            | 22.2  | 43.0      | 7.4            |
|                               | <b>High</b>         | 1309 | 47.4   | 18.5   | 19.1           | 7.8             | 34.7    | 72.3            | 36.9  | 37.7      | 10.3           |
| <b>Location of school</b>     | <b>Urban</b>        | 1584 | 39.8   | 16.4   | 16.0           | 5.5             | 28.9    | 62.1            | 29.1  | 34.0      | 9.7            |
|                               | <b>Rural</b>        | 1098 | 31.6   | 11.3   | 14.7           | 4.4             | 28.2    | 58.8            | 28.5  | 34.9      | 8.3            |
|                               | <b>Remote Rural</b> | 292  | 21.2   | 10.3   | 10.5           | 2.2             | 17.8    | 40.8            | 20.6  | 27.5      | 10.3           |
| <b>Total</b>                  |                     | 2974 | 34.9   | 13.9   | 15.0           | 4.8             | 27.6    | 58.8            | 28.0  | 33.7      | 9.2            |

**Table 6.3**  
**Sources of information about health issues by sex and age group, Jamaica, 2005**

| Background characteristic     |               | N    | School<br>talks/<br>classes | Family<br>member | Health<br>worker | Posters/-<br>magazines/etc | Radio | TV/<br>video | No<br>information |
|-------------------------------|---------------|------|-----------------------------|------------------|------------------|----------------------------|-------|--------------|-------------------|
|                               |               |      | %                           | %                | %                | %                          | %     | %            | %                 |
| <b>Sex</b>                    | <b>Male</b>   | 1413 | 48.7                        | 44.1             | 16.2             | 11                         | 18.2  | 40.1         | 4.7               |
|                               | <b>Female</b> | 1561 | 54.8                        | 43.7             | 23.1             | 18.1                       | 21.1  | 43           | 3.1               |
| <b>Age of student (Years)</b> | <b>10</b>     | 491  | 52                          | 46.3             | 16.9             | 11                         | 20.1  | 39.4         | 6.5               |
|                               | <b>11</b>     | 526  | 52.1                        | 44.9             | 17               | 14.2                       | 20.5  | 40.5         | 8.4               |
|                               | <b>12</b>     | 514  | 47                          | 46.2             | 14.8             | 15.2                       | 16.8  | 40.1         | 9.7               |
|                               | <b>13</b>     | 508  | 45.9                        | 48.4             | 27.4             | 10.4                       | 22.8  | 42.9         | 10.9              |
|                               | <b>14</b>     | 484  | 46.5                        | 45.2             | 20.9             | 19.2                       | 19    | 42           | 11.5              |
|                               | <b>15</b>     | 451  | 44.8                        | 48               | 22.2             | 21.1                       | 25.9  | 45           | 8.1               |
| <b>Total</b>                  |               | 2974 | 48.1                        | 46.5             | 19.8             | 15.1                       | 20.8  | 41.6         | 9.2               |

## CHAPTER 7

### CONCLUSIONS AND RECOMMENDATIONS

This report provides a descriptive overview of the health, risk and resiliency of adolescents 10 - 15 years old attending schools across Jamaica based on a nationally representative survey conducted between November 2005 and February 2006. While the study showed that most adolescents live in a supportive environment, it pointed to some critical areas of concern in the areas of gender, nutritional status and physical activity; emotional well-being; physical abuse & violence, drug use, sexual activity and academic performance.

Boys differed from girls in almost every factor measured in this study, with boys demonstrating more negative behaviour than girls. Furthermore, although both girls and boys experienced protective factors within the home, these tended to favour girls. Similarly, protective factors outside the home also favoured girls. These findings are supported by Evans [20] who found some difference in parental support although the author felt that these differences were insufficient to explain gender differentials in academic performance.

Over ninety percent of the students had positive feelings about school - they liked school, planned to finish and had a teacher who had got to know them well. However, academic performance was generally low with half of them reporting having problems getting their homework done and one-third reporting having problems reading. Less than 50% of adolescents 10-15 years old were functionally literate. Girls were significantly more likely to be functionally literate and numerate than boys. One in every four of the boys surveyed was not numerate at all.

Approximately 1 in every 4 children reported that they went hungry because there was a lack of food in their home. More boys than girls reported going hungry. Boys and girls have similar consumption patterns, but adolescents attending school in remote rural areas had higher consumption of fruit and lower consumption of fast foods. Consumption of sodas was widespread. More girls, especially those in urban areas, were obese and fewer girls were involved in physical activities outside of those organised in school. Also, physical activity decreased at ages when important external academic examinations occur suggesting that the importance of physical exercise is not entirely understood or appreciated.

Overall, 14% of adolescents felt lonely, sad or wanted to cry always or most of the time, while approximately 7% had worry-affected sleep most or all of the time. More females than males were sad, lonely or wanted to cry. Approximately one in ten adolescents considered suicide during the past year with more females than males having suicidal ideation. Nearly one-third of those who considered suicide in the past year felt lonely, sad or wanted to cry, compared with only approximately 10% of adolescents who did not consider suicide. More adolescents with suicidal

ideation experienced worry-affected sleep. Further research is needed to understand factors underlying “unhappiness” among young adolescents. In Jamaica, there are school guidance counsellors in place to deal with mental health issues among youth but the number of students per counsellor ratio is quite high and the effectiveness of these counsellors is not known.

The level of physical abuse, and exposure to and involvement in violence was unacceptably high. Nearly one-third of adolescents reported being victim of a physical attack. Another 13% were perpetrators, while nearly 10% carried a weapon to school and/or at other times. Almost 5 percent had been stabbed or shot at least once during their lifetime. Almost half had seen a dead body other than at a funeral with the majority of these being a result of a violent incident whether, motor vehicle accident or homicide.

The study found a high prevalence of alcohol consumption and cigarette smoking especially among males. Marijuana use was also more prevalent among boys than girls. As age increased drug and alcohol used increased alarmingly especially after age 12 years. Use of other drugs was not observed in this study. Laws and policies exist to protect adolescents from drug abuse. Prohibitions on sale of alcohol to minors exist in Jamaica. Taxes on tobacco are in place as are prohibitions on the sale of cigarettes and tobacco products to minors. There are also warning ads for cigarettes. However, enforcement of these laws is minimal.

Early initiation of sexual activity was reported especially among boys. However, girls appeared vulnerable to coercive sex. Only half of the sexually active used a condom at last sex with boys being less likely to use a condom. Adolescents were fortunate in that information about sex was available from a variety of sources. However, parents were not being the primary source of RH information and this is unfortunate. There are several policies aimed at protecting the reproductive health of adolescents including: (1) the National Youth Policy; (2) the Child Care and Protection Act; and (3) Access to Contraception by Minors Policy. However, the extent to which they are disseminated and implemented is not known.

There were a number of protective factors inside the home that significantly reduced adolescents’ likelihood of being involved in all forms of risky behaviour. However, it is evident that parents/guardians have problems communicating with their children about sensitive issues such as reproductive health and problems that adolescents face. Clearly, programmes aimed at improving parenting skills must include equipping them with the tools to effectively communicate with the children on all matters of concern.

## Recommendations

The following are recommendations, emanating from a workshop held for the dissemination of these findings, aimed improving the well-being of adolescents 10-15 years.

### General recommendations

1. More policy analysis in the area of adolescent health should be undertaken.
2. Data from this survey should be analysed further for specific critical issues and concerns regarding adolescents
3. Emphasis should be placed on positive parenting so that parents are better able to contribute to the welfare of their children.
4. Individuals in the community, who can promote the welfare of children, should be identified and trained.
5. Venues within each community where children and parents can have access to necessary information and services should be identified and equipped.
6. Peer advocates should be identified and trained.
7. Adolescent health programmes should to be properly monitored and some of the healthy lifestyle interventions should be expanded to other areas.
8. Findings of this study should be integrated into edutainment programmes.
9. Better alliance and coordination should be fostered between stakeholders as many programmes are implementing similar activities.
10. There should be a national drive to instil discipline at all levels of the society.
11. There should be proper training/preparation of teachers to deliver the Health and Family Life Education Curriculum.
12. The adolescent friendly clinic programme should be expanded.

### Specific recommendations

#### I. In order to reduce the prevalence of drug use:

1. All vendors, even those on street corners, should have warning signs for alcohol use and cigarette smoking.
2. A hotline should be established so that people can call for help/advice about drug and alcohol use.
3. Organisation such as the Marijuana Commission and RISE need to be more visible and be promoted more.

II. In order to improve emotional and mental well-being:

1. Youth clubs which tend to focus on sports should expand their focus to include counselling.
2. Parent education should be more widely implemented so that parents can be more supportive to their children.
3. School feeding programs should be strengthened in order to address hunger among in-school adolescents.
4. The role of guidance counsellors should be evaluated.
5. Teachers should have continuous re-certification and training in counselling.
6. Health providers in clinics should be better trained to address the emotional health of young people.

III. In order to improve reproductive health:

1. The issue of community silence on sexual abuse must be addressed by all pertinent agencies in a holistic manner.
2. Gender-specific interventions should be developed to meet the needs of adolescents especially those who had been forced to have sex.
3. RH policy should be integrated into teacher training and training for guidance counsellors.
4. School nurses should receive additional training especially in the areas of reproductive health receive.
5. RH policy should be integrated into the mandate of National Youth Information Centres.
6. Ministry of Education should develop guidance, brochures and manuals for schools to deal with RH more effectively.
7. House of Churches should encourage greater coordination of faith-based activities as churches have a role to play in addressing sexual and reproductive health issues.
8. The UNFPA should take lessons learned and best practices from other countries and implement them in a culturally-sensitive manner in Jamaica.
9. The MOH should set up integrated youth friendly reproductive health services.

IV. In order to reduce the prevalence of physical abuse and violence and improve resiliency, literacy and numeracy:

1. There should be a national drive to instil discipline in schools. Implementation of the recommendations of the education task force should be accelerated.
2. There should be greater collaboration between parents and schools.

3. More research should be undertaken on boy's performance in the class room and the extent to which the class environment meets the learning needs of boys.

IV. In order to increase physical activity and reduce the prevalence of obesity:

1. Ministry of Health and the Ministry of Education should spearhead the discussion to increase organised physical activities especially during GSAT and at CSEC examinations.
2. A multi-sectoral committee should be established to review, guide, and monitor the roll-up.
3. Physical activity programs should be encouraged by churches.

## References

1. United Nations Population, *World Population Prospects: The 2004 Revision Population Database*. 2005, United Nations: Geneva.
2. McFarlane, C., *Young Adult's Report, Sexual Behaviour and Contraceptive Use Among Young Adults and their Exposure to Family Life and Sex Education*. 2002, National Family Planning Board, Jamaica: Kingston.
3. National HIV/Sexual Transmitted Disease Prevention and Control Programme, *HIV AIDS Annual Report Jamaica 2005*. 2006, Ministry of Health Jamaica: Kingston.
4. Health Planning Unit, *Hospital Monthly Statistical Reporting System*. 2000, Ministry of Health, Jamaica: Kingston.
5. Irons-Morgan M., *Suicidal Rate in Jamaica in 1998 and the prevalence of mental disorders and stressful life events in suicide victims in Kingston, St. Andrew and St. Catherine*, in *Department of Community Health and Psychiatry*. 1999, University of the West Indies: Kingston.
6. Douglas, K.G., *Patterns of Substance Use & Abuse among Post Primary Students*. 2003, Planning Institute of Jamaica: Kingston.
7. Hope Enterprises Ltd., *What Protects Teenagers from Risk? Report on Clarendon Adolescents for Change Project*. 2001, Hope Enterprises: Kingston.
8. Planning Institute of Jamaica, *Economic and Social Survey of Jamaica*. 2004, Planning Institute of Jamaica: Kingston.
9. Statistical Institute of Jamaica, *Demographic Statistics Jamaica 2003*. 2004, Statistical Institute of Jamaica: Kingston.
10. Centers for Disease Control and Prevention. *The Global Youth Tobacco Survey 13-15 years*. 2005 [cited; Available from: [www.cdc.gov/tobacco/global/gyts.htm](http://www.cdc.gov/tobacco/global/gyts.htm)].
11. Halcon, L., Beuhring, T., Blum, R., *A Portrait of Adolescent Health in the Caribbean*. 2000, WHO Collaborating Centre on Adolescent Health and the University of Minnesota: Minneapolis.
12. World Health Organization. *Global School Health Survey*. 2005 [cited; Available from: [www.who.int/chp/gshs/en](http://www.who.int/chp/gshs/en)].
13. Wilks, R., *Jamaican Healthy Lifestyles Survey (2000)*. 2002, Ministry of Health and University of the West Indies: Kingston.
14. Samms-Vaughan M., *Educational Attainment and Behaviour in a Cohort of Jamaican Children*. 2001, Planning Institute of Jamaica: Kingston.
15. Sterling, L., Morris, R., Bernard, C., *Jamaica Adult Literacy Survey*. 2001, Jamaica Movement for the Advancement of Literacy (JAMAL): Kingston 7.
16. Ulijaszek, S., Kerr, DA., *Anthropometric measurement error and the assessment of nutritional status*. *British Journal of Nutrition*, 1999. 82(3): p. 165-177.
17. Cole, T., Bellizzi, MC, Flegal, KM, Dietz, WH., *Establishing a Standard Definition for Child Overweight and Obesity Worldwide: International Survey*. *British Medical Journal*, 2000. 320: p. 1240-1246.
18. Population Council, *The Adverse Health and Social Outcomes of Sexual Coercion: Experiences of Young Women in Developing Countries*, in *Report of Global Consultative Meeting*. 2004: New Delhi.
19. Fox, K., *Jamaica Youth Activity Survey 2002*. 2004, The Statistical Institute of Jamaica: Kingston.
20. Evans, H., *Gender and Achievement in secondary education in Jamaica*, in *Working Paper No. 2*. 1999, Planning Institute of Jamaica.

## APPENDIX 1. Breakdown of Schools and Student Enrolment by Parish

| Parish        | Number of Schools by category |                |                    |                    | Total Schools | Total enrolment |
|---------------|-------------------------------|----------------|--------------------|--------------------|---------------|-----------------|
|               | <i>All Age</i>                | <i>Primary</i> | <i>Junior High</i> | <i>High School</i> |               |                 |
| Clarendon     | 35                            | 40             | 6                  | 21                 | 102           | 59818           |
| Hanover       | 19                            | 12             | 0                  | 7                  | 38            | 15618           |
| Kingston      | 3                             | 18             | 2                  | 15                 | 38            | 37089           |
| Manchester    | 34                            | 19             | 3                  | 13                 | 69            | 33841           |
| Portland      | 20                            | 19             | 4                  | 7                  | 50            | 16961           |
| St. Andrew    | 26                            | 35             | 12                 | 32                 | 105           | 90752           |
| St. Ann       | 45                            | 17             | 3                  | 11                 | 76            | 36180           |
| St. Catherine | 37                            | 46             | 6                  | 24                 | 113           | 88855           |
| St. Elizabeth | 35                            | 35             | 2                  | 13                 | 85            | 33552           |
| St. James     | 21                            | 13             | 4                  | 11                 | 49            | 39777           |
| St. Mary      | 24                            | 29             | 2                  | 12                 | 67            | 24189           |
| St. Thomas    | 9                             | 30             | 2                  | 7                  | 48            | 19810           |
| Trelawny      | 16                            | 13             | 2                  | 5                  | 36            | 17809           |
| Westmoreland  | 28                            | 23             | 4                  | 8                  | 63            | 31026           |
| <b>TOTAL</b>  | <b>352</b>                    | <b>349</b>     | <b>52</b>          | <b>186</b>         | <b>939</b>    | <b>545277</b>   |

## APPENDIX 2. Definitions of Literacy

*Functionally Literate:* These persons have a clear understanding of the alphabetic system in order to read a wide range of more complex ideas such as words that have vowel or consonant blends, to read and understand more complex prose or documents or write a short paragraph of connected sentences. These persons were also expected to understand alphanumeric formats that were embedded in prose.

*Basic Literate:* These persons have a clear understanding of the alphabetic system sufficiently to recognise simple words, to read and understand simple narrative, or documents and to write a simple sentence.

*Illiterate:* These persons have a very limited knowledge of the alphabetic system, and so may be able to identify (read) a few frequently used words but cannot understand a group of words in a phrase or a sentence. Such persons may write a few letters of the alphabet

*Functionally numerate:* These persons have a very good understanding of the alphanumeric system and can read, understand and use more complex numeric formats such as fractions, decimals and percents, and solve simple mathematical problems.

*Basic numerate:* These persons understand the alphanumeric system sufficiently to read, write and compute with whole numbers.

*Non-numerate:* Persons in this category have a very limited knowledge of the alphanumeric symbols and operations and may not be able to perform written numeric tasks, although they may perform the mental tasks well.

**Source: Jamaica Adult Literacy Survey 1999 [15].**

### APPENDIX 3. Literacy Test

**ADOLESCENT HEALTH SURVEY  
LITERACY QUESTIONNAIRE**

ID [ ][ ][ ][ ]

**LOOK AT THE PICTURE AND CIRCLE THE WORD THAT  
MATCHES THE PICTURE SHOWN**

Example:

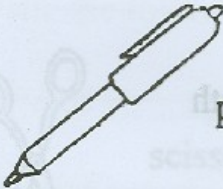
  
egg

plate

ball

pan

  
bet      bed      bell      box

  
pin      fun      pan      pen

  
bus      car      bun      sud

7

seven

nine

six

one



feet

feed

meat

hand



owl

car

cow

call



boat

goat

soup

loop



house

mouse

mouth

horse



sleeping

thinking

talking

drinking.

16

one

four

thirteen

sixteen



clothes

clock

ring

duck



soap

shoe

spade

glue

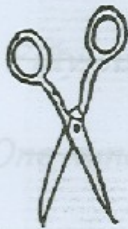


crayon

biscuit

bicycle

tickle



scissors

slice

tailor

scorpion

100

hundred

thousand

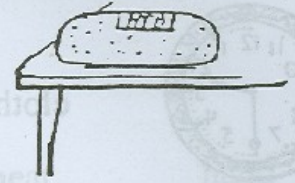
ten

one

Read the sentences and answer the questions which follow.

Peter wants to buy a bun.  
His mother gives him sixty dollars  
Peter buys the bun for thirty dollars.  
Now Peter is happy.

bun for \$30



1. *What does Peter want?* \_\_\_\_\_
2. *How much money does Peter get?* \_\_\_\_\_
3. *Peter buys one bun. How much does he now have ?* \_\_\_\_\_
4. *How much would Peter pay for three buns?* \_\_\_\_\_
5. *How does Peter feel?* \_\_\_\_\_

Mark Jones works at a factory.  
He likes to go to work on time.  
He hates when the bus is late.  
He does not want to lose his job.

6. *Who is the story about?* \_\_\_\_\_
7. *Where does he work?* \_\_\_\_\_
8. *What may happen when the bus is late?* \_\_\_\_\_  
\_\_\_\_\_
9. *What is Mark's surname?* \_\_\_\_\_

Read the sentences and answer the questions which follow.

There are ten persons in Lorna's family.  
Two persons are adults. They work at a hardware store.  
Lorna and her family sometimes go to the Community Centre to have fun.  
This is a caring family.

10. How many persons are in the family? \_\_\_\_\_

11. How many children are in the family? \_\_\_\_\_

12. Where do the adults work? \_\_\_\_\_

13. Name two things that Lorna's family could do together at the Community Centre.

14. Write the following as numerals (example: seventeen 17)

Fifty-six \_\_\_\_\_

One hundred and five \_\_\_\_\_

One-tenth \_\_\_\_\_

15. What is  $67 - 42$ ? \_\_\_\_\_

16. What is  $43 + 69$ ? \_\_\_\_\_

17. A dress costs \$1000.

Add 15% of the cost as GCT.

How much will you pay in all? \_\_\_\_\_



18. Write some sentences that answer the following question.

*What are some things you do on weekends?*

---

---

---

---

---

---

## APPENDIX 4. Questionnaire

IDNUMBER

A. Parish of residence

*Interviewer indicate parish number*

B. Parish of school

*Interviewer indicate parish number*

C. School type:

- 1 Primary school
- 2 All age school
- 3 Primary & Junior high
- 4 High school - Comprehensive
- 5 High school - Technical
- 6 High school - Traditional

### **A. Demographic Information**

A.1. How old are you?

A.2. Sex

- 0 Male  
1 Female

A.3. In what grade are you?

A.4. What is your date of birth?

/  /   
Day/Month/Year

*(Please enter carefully)*

A.5. Who lives at home with you? *(Record no of persons in each category)*

|                                                         | Nos. |
|---------------------------------------------------------|------|
| Father                                                  |      |
| Stepfather                                              |      |
| Mother                                                  |      |
| STEPMOTHER                                              |      |
| Guardian                                                |      |
| Grandfather/Grandmother                                 |      |
| Aunt(s)/Uncle(s)                                        |      |
| Brother(s)                                              |      |
| Sister(s)                                               |      |
| Other Relative(s)                                       |      |
| Other non-relative(s)                                   |      |
| <b>Total no. of persons</b> <i>(exclude respondent)</i> |      |

A.6. How many rooms do you have in your house?  
(Put zero if the home does not have that room)

- a) No. of bedrooms \_\_\_\_\_
- b) No. of bath rooms \_\_\_\_\_
- c) No. of kitchens \_\_\_\_\_
- d) Living room \_\_\_\_\_
- f) Dining room \_\_\_\_\_
- g) Study/family room \_\_\_\_\_

A.7. How many people sleep in the same room with you? |\_|

- 1. I sleep by myself
- 2. 1 other person
- 3. 2 other people
- 4. 3 – 4 others
- 5. 5 – 6 others
- 6. 7 – 8 others
- 7. 9 or more
- 88. Don't know
- 99. No response

A.8. Where do you usually sleep? |\_|

- 1. In my home
- 2. At other people's homes (a friend)
- 3. On the street
- 4. At a hostel
- 8. Don't know
- 9. No response

A.9. Are your parents .....? |\_|

- 1. Living together
- 2. Living separately
- 3. One of my parents is dead
- 4. Both of my parents are dead
- 8. Don't know
- 9. No response

A.10. How often do you listen to the radio? |\_|

- 1. Never
- 2. Less than once per month
- 3. At least once per month
- 4. At least once a week
- 5. 2 - 3 times a week
- 6. Everyday or almost every day
- 8. Don't know
- 9. Non-response

A.11. How tall are you without your shoes on?

\_\_\_\_\_ unit: ft & ins/metres (*cross out one that does not apply*)

88. Respondent does not know

99. Non-response

A.12. How much do you weigh without your shoes on?

\_\_\_\_\_ unit: lbs/kilograms (*cross out one that does not apply*)

88. Respondent does not know

99. Non-response

## **B. ABOUT YOU AND SCHOOL**

This next section asks questions about you and your school. We are trying to understand how you feel about different aspects of your school life.

B.1. During the school year, do you have a job?

1 Yes

2 No (if no, Skip to Q. 3)

B.2. If yes, how many hours per week do you work?

1. 1 – 4 hours per week

2. 5 – 9 hours per week

3. 10 – 20 hours per week

4. Over 20 hours per week

8. Don't know

9. No response

B.3 In general, how hard do you try on your school work?

1. I don't try very hard

2. I try hard enough, but not as hard as I could

3. I try very hard to do my best

8. Don't know

9. No response

B.4. How well do you do in your school work?

1. I get grades below most of the children

2. I get similar grade to most of the children

3. I get grades above most of the children

8. Don't know

9. No response

B.5. Are you in any club, group or team at school?

☐

1. Yes, often
2. Yes, sometimes
3. No
8. Don't know
9. No response

B.6. Do you like school?

☐

1. I like school a lot
2. I like school somewhat
3. I don't like school very much
4. I hate school
8. Don't know
9. No response

B.7. Do you plan to finish high school?

☐

1. Yes
2. No
3. I don't know
8. Don't know
9. No response

B.8. In the past year, has a teacher gotten to know you really well?

☐

1. Yes
2. No
8. Don't know
9. No response

B.9. Do you get along with your teachers?

☐

1. Yes
2. Somewhat
3. No
8. Don't know
9. No response

B.10. Do you have trouble getting your homework done?

☐

1. Always
2. Sometimes
3. Never
8. Don't know
9. No response

B.11. Do you have trouble reading? ☐

1. Yes
2. No (if no, skip to Q. 12)

B.12. If yes, is keeping up with your school work hard? ☐

1. Yes
2. No
3. Sometimes
8. Don't know
9. No response

B.13. Have you ever been in any classes for learning problems? ☐

1. Yes
2. No
8. Don't know
9. No response

B.14. Have you ever been in any classes for behaviour problems? ☐

1. Yes
2. No
8. Don't know
9. No response

### **C. PHYSICAL ACTIVITY MODULE**

This next section asks questions about the type of physical activity you engage in. We are trying to understand how often you participate in activity that makes you sweat or breathe hard while undertaking it. This includes things such as walking, running, biking, playing a sport, etc.

C.1. During the past week, were you physically active for a total of at least 30 minutes? E.g. 15 minutes of PE and 15 minutes of football or 30 minutes of football

☐

1. Yes
2. No (Skip to Q.3)
8. Don't know (Skip to Q.3)
9. Non-response (Skip to Q.3)

C.2. During the past week, on how many days were you physically active (include walking/riding to school) for a total of at least 30 minutes per day? e.g. 15 minutes of PE and 15 minutes of football or 30 minutes of football

Record the number of days; put 0 if not physically active

88. Don't know
99. Non-response

- C.3. During a **typical or usual week**, on how many days are you physically active for a total of at least 30 minutes per day?

Record the number of days; put 0 if not physically active

- 88. Don't know
- 99. Non-response

- C.4. On school days how much time do you usually spend sitting and watching television, playing computer games, talking with friends, or doing other sitting activities?

- 1. More than 8 hours per day
- 2. 7 to 8 hours per day
- 3. 5 to 6 hours per day
- 4. 3 to 4 hours per day
- 5. 1 to 2 hours per day
- 6. Less than 1 hour per day
- 8. Don't know
- 9. Non-response

- C.5. On Saturday and Sunday, how much time do you usually spend sitting and watching television, playing computer games, talking with friends, or doing other sitting activities?

- 1. More than 8 hours per day
- 2. 7 to 8 hours per day
- 3. 5 to 6 hours per day
- 4. 3 to 4 hours per day
- 5. 1 to 2 hours per day
- 6. Less than 1 hour per day
- 8. Don't know
- 9. Non-response

- C.6. Do you do exercise at your school (for example do you have a PE class)?

- 1. Yes
- 2. No (Skip to next section D)
- 8. Don't know (Skip to the section D)
- 9. Non-response (Skip to section D)

- C.7. How often do you exercise at school?

- 1. Once per week
- 2. Twice per week
- 3. Three times for the week
- 4. Four times or more per week
- 8. Don't know
- 9. Non-response

#### **D. DIETARY BEHAVIOURS MODULE**

The next section asks questions about the things you eat. Please try to remember back to what you eat during a usual week, that is, a week when there are not many special occasions.

D.1. During a usual week, do you go hungry because there was not enough food in your home?

☐

1. Yes
2. No (Skip to Q.3)
8. Don't know (Skip to Q.3)
9. Non-response (Skip to Q.3)

D.2. During a usual week, how often do you go hungry because there was not enough food in your home?

☐

1. Always
2. Most of the time
3. Sometimes
4. Rarely
8. Don't know
9. Non-response

D.3. During a usual week, do you eat any fruit such as mango, orange, pawpaw?

☐

1. Yes
2. No (Skip to Q. 5)
8. Don't know (Skip to Q.5)
9. Non-response (Skip to Q.5)

D.4. During a usual week, how many times per week do you usually eat fruit, such as mango, orange, pawpaw?

☐

1. 1 time per week
2. 2 times per week
3. 3 times per week
4. 4 times per week
5. 5 or more times per week
8. Don't know
9. Non-response

D.5. During a usual week, do you eat any vegetables such as callaloo, carrot, cabbage, tomato?

☐

1. Yes
2. No (Skip to Q. 7)
8. Don't know (Skip to Q.7)
9. Non-response (Skip to Q.7)

D.6. During a usual week, how many times per week do you usually eat vegetables, such as callaloo, carrot, cabbage, tomato?

- |                                |                             |
|--------------------------------|-----------------------------|
| 1. Less than one time per week | 6. 5 or more times per week |
| 2. 1 time per week             | 8. Don't know               |
| 3. 2 times per week            | 9. No response              |
| 4. 3 times per week            |                             |
| 5. 4 times per week            |                             |

D.7. During a usual week, do you eat pastries such as cake, bulla, and bun?

1. Yes
2. No (Skip to Q. 9)
8. Don't know (Skip to Q.9)
9. Non-response (Skip to Q.9)

D.8. During a usual week, how many times do you usually eat pastries such as cake, bulla, and bun?

- |                                |                             |
|--------------------------------|-----------------------------|
| 1. Less than one time per week | 5. 4 times per week         |
| 2. 1 time per week             | 6. 5 or more times per week |
| 3. 2 times per week            | 8. Don't know               |
| 4. 3 times per week            | 9. No response              |

D.9. During a usual week, do you eat food at fast food places such as McDonalds, Burger King, Juici Beef, Tastee, Pizza Palace, Kentucky Fried Chicken?

1. Yes
2. No (Skip to Q. 11)
8. Don't know (Skip to Q.11)
9. No response (Skip to Q.11)

D.10. During a usual week, how many times do you eat food at fast food places such as Burger King, Juici Beef, Tastee, Pizza Palace, Kentucky fried chicken?

- |                                |                             |
|--------------------------------|-----------------------------|
| 1. Less than one time per week | 5. 4 times per week         |
| 2. 1 time per week             | 6. 5 or more times per week |
| 3. 2 times per week            | 8. Don't know               |
| 4. 3 times per week            | 9. No response              |

D.11. During a usual week, do you drink sodas, lemonade, Kool aid, box drinks or other sweet drinks?

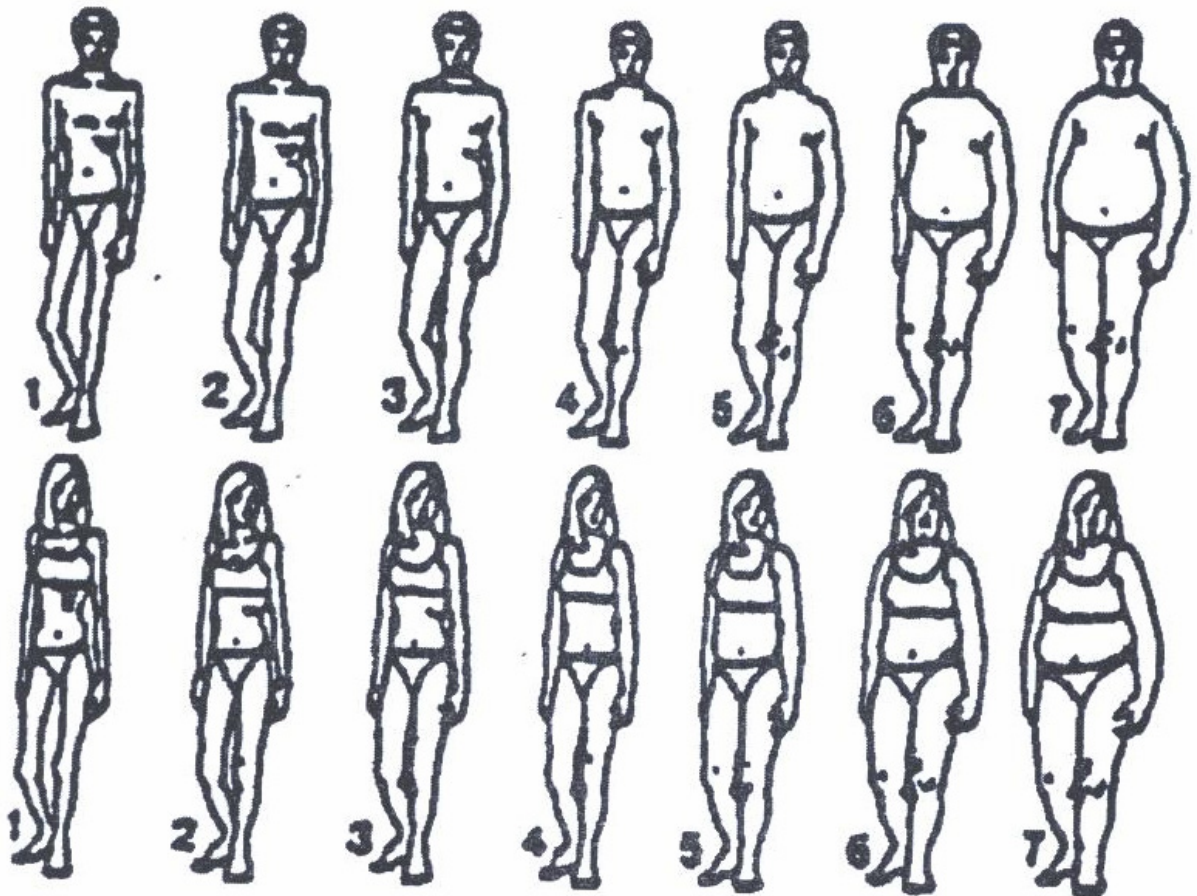
1. Yes
2. No (Skip to section E)
8. Don't know (Skip to section E)
9. Non-response (skip to section E)

D.12. During a usual week, how many times do you drink sodas, lemonade, Kool Aid, box drinks or other sweet drinks?

- |                                        |                                       |
|----------------------------------------|---------------------------------------|
| 1. Less than one bottle/glass per week | 5. More than one bottle/glass per day |
| 2. 1 bottles/glasses per week          | 8. Don't know                         |
| 3. 2-6 bottles/glasses per week        | 9. Non-response                       |
| 4. 1 bottle/glass per day              |                                       |

### E. MEDICAL CARE & PERCEPTION OF SELF

These are drawings of boys and girls your age and older



E.1. Which of the above body types is closest to your body type now?

E.2. Which of the above would you most like to resemble?

E.3. Tell me all the numbers you think are attractive Male   
Female

*Interviewer, record all numbers for both sexes*

E.4. Which one do you think is most healthy? Male   
Female

*Interviewer, record a number for each sex*

E.5. Do you think your weight is...?

□

1. About right
2. I need to gain weight
3. I need to lose weight
88. Don't know
99. No response

E.6. Do you do any of the following to lose weight or keep from gaining weight?

*Note to interviewer, Circle the number of the response indicated*

|                                                                  | Yes | No | Don't know | No response |
|------------------------------------------------------------------|-----|----|------------|-------------|
| 6a. Exercise                                                     | 1   | 2  | 8          | 9           |
| 6b. Go on a reducing diet                                        | 1   | 2  | 8          | 9           |
| 6c. Take things that make you have a bowel movement or diarrhoea | 1   | 2  | 8          | 9           |
| 6d. Make yourself vomit or throw up                              | 1   | 2  | 8          | 9           |
| 6e. Take pills that make you pee a lot                           | 1   | 2  | 8          | 9           |
| 6f. Take diet pills to lose weight                               | 1   | 2  | 8          | 9           |

E.7. Where do you usually go for medical/health care?

□

1. Nowhere
2. Public clinic (health centre, health post, dispensary, polyclinic)
3. Hospital
4. Private doctor
5. Traditional healer, herbalist, bush doctor, Obeah man
8. Don't know
9. No response

E.8. When did you last.....?

*Note to interviewer, Circle the number of the response indicated*

|                                           | Never | Over 2 yrs ago | 1 – 2 yrs ago | Less than 1 yr | Don't Know | No Response |
|-------------------------------------------|-------|----------------|---------------|----------------|------------|-------------|
| Have a check up or go to the doctor       |       |                |               |                |            |             |
| See a herbalist                           |       |                |               |                |            |             |
| Have your hearing checked                 |       |                |               |                |            |             |
| Have your eyes checked                    |       |                |               |                |            |             |
| Seen a dentist                            |       |                |               |                |            |             |
| Get counselling or mental health services |       |                |               |                |            |             |
|                                           |       |                |               |                |            |             |
| <b>Girls :</b> Have a vaginal exam        |       |                |               |                |            |             |

E.9. Do you think the following things are true?  
*Note to interviewer, Circle the number of the response indicated*

|     |                                                                                                        | Yes | No | Don't Know | No Response |
|-----|--------------------------------------------------------------------------------------------------------|-----|----|------------|-------------|
| 9a. | If you tell a doctor something personal, your parents will find out                                    |     |    |            |             |
| 9b. | If you discuss opinions about sex with a teacher, others in school will find out                       |     |    |            |             |
| 9c. | If you tell a nurse something personal, others at the clinic will find out                             |     |    |            |             |
| 9d. | If you tell a peer counsellor something personal, other people in school will find out                 |     |    |            |             |
| 9e. | If you tell a guidance counsellor about a problem you are having, other people in school will find out |     |    |            |             |
| 9f. | If you tell your parents something personal, others in the neighbourhood will find out                 |     |    |            |             |

## **F. EMOTIONS & MENTAL HEALTH MODULE**

This next section asks you questions about how you feel at certain times. Remember that everything you tell us will be kept private and your name will not be associated with your responses.

F.1. During the past year, how often have you felt lonely/sad/ or wanted to cry?

1. Never
2. Rarely
3. Sometimes
4. Most of the time
5. Always
8. Don't know
9. Non-response

F.2. During the past year, how often have you been so worried about something that you could not sleep properly at night?

1. Never
2. Rarely
3. Sometimes
4. Most of the time
5. Always
8. Don't know
9. Non-response

F.3. During the past year, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing your usual activities?

☐

- 1. Yes
- 2. No
- 8. Don't know
- 9. Non-response

F.4. During the past year, did you ever seriously consider attempting suicide?

☐

- 1. Yes
- 2. No
- 8. Don't know
- 9. Non-response

F.5. Have you ever tried to commit suicide?

☐

- 1. Yes
- 2. No *(Skip to Q. 7)*
- 8. Don't know *(Skip to Q. 7)*
- 9. Non-response *(Skip to Q. 7)*

F.6. When was the last time you tried to commit suicide?

☐

- 1. I have never tried to commit suicide
- 2. I tried within the last 6 months
- 3. I tried within the last year
- 4. I tried more than year ago
- 8. Don't know
- 9. No response

F.7. During the past year, did you make a plan about how you would attempt suicide?

☐

- 1. Yes
- 2. No
- 8. Don't know
- 9. Non-response

F.8. Has anyone in your family ever tried to commit suicide? *(if respondent says response 2 and 3, mark both responses)*

☐

- 1. No
- 2. Yes, and they lived
- 3. Yes, and they died
- 8. Don't know
- 9. No response

F.9. Have any of your friends ever tried to kill themselves? *(if respondent says response 2 and 3, mark both responses)*

☐  
☐

1. No
2. Yes, and they lived
3. Yes, and they died
8. Don't know
9. No response

F.10. How many close friends do you have?

☐

1. None
2. One
3. Two
4. Three or more
88. Don't know
99. Non-response

F.11. Do you feel that your friends influence you in any way?

☐

1. Yes, they have a strong influence
2. Yes, they influence me somewhat
3. Yes, they have a slight influence
4. No, they don't have an influence at all (skip to F. 13 )
88. Don't know
99. Non-response

F.12. What kind of influence do your close friends have on you?

☐

1. A good influence
2. Neither a good nor bad influence
3. A bad influence

F.13. During the past year how often.. ?

*Note to interviewer, Circle the number of the response indicated*

|      |                                            | Never | Rarely | Some<br>of the<br>time | Most<br>of the<br>time | Always | Don't<br>Know | No<br>response |
|------|--------------------------------------------|-------|--------|------------------------|------------------------|--------|---------------|----------------|
| 13a. | Have you felt irritable<br>(easily upset)? | 1     | 2      | 3                      | 4                      | 5      | 8             | 9              |
| 13b. | Have you felt angry?                       | 1     | 2      | 3                      | 4                      | 5      | 8             | 9              |
| 13c. | Have you felt happy                        | 1     | 2      | 3                      | 4                      | 5      | 8             | 9              |

F.14. During the last year did you worry about.....

*Note to interviewer, Circle the number of the response indicated*

|                                                              | Not<br>at all | Some-<br>times | A<br>lot | Not<br>applicable | Don't<br>know | No<br>response |
|--------------------------------------------------------------|---------------|----------------|----------|-------------------|---------------|----------------|
| 14a. Your own drinking and drug abuse                        | 1             | 2              | 3        | 7                 | 8             | 9              |
| 14b. Your mother's or father's drinking or using drugs       | 1             | 2              | 3        | 7                 | 8             | 9              |
| 14c. Being physically abused                                 | 1             | 2              | 3        | 7                 | 8             | 9              |
| 14d. Being sexually abused                                   | 1             | 2              | 3        | 7                 | 8             | 9              |
| 14e. All the violence you see in your home                   | 1             | 2              | 3        | 7                 | 8             | 9              |
| 14f. The violence in your community                          | 1             | 2              | 3        | 7                 | 8             | 9              |
| 14g. The drinking and drug use in your neighbourhood         | 1             | 2              | 3        | 7                 | 8             | 9              |
| 14h. Getting or making someone pregnant                      | 1             | 2              | 3        |                   | 8             | 9              |
| 14i. Getting AIDS                                            | 1             | 2              | 3        |                   | 8             | 9              |
| 14j. Being treated unfairly because of your race or religion | 1             | 2              | 3        |                   | 8             | 9              |
| 14k. Your parents leaving you                                | 1             | 2              | 3        |                   | 8             | 9              |
| 14l. Getting a job when you are older                        | 1             | 2              | 3        |                   | 8             | 9              |
| 14m. Passing exams                                           | 1             | 2              | 3        |                   | 8             | 9              |

F.15. Do you ever think about hurting or killing someone?

☐

1. Never
2. Sometimes
3. All the time
8. Don't know
9. No response

F.16. Do you think you'll live to be at least 25 years old?

☐

1. Yes
2. No
8. Don't know
9. No response

F.17. If you had to move into some other neighbourhood how happy or unhappy would you be?

- |                           |                |
|---------------------------|----------------|
| 1. Very unhappy           | 5. Very happy  |
| 2. Unhappy                | 8. Don't know  |
| 3. It makes no difference | 9. No response |
| 4. Happy                  |                |

## **G. RESILIENCY MODULE**

The following questions ask you about things that happen at school, in your community or at home. Please think back to the last month and try to answer the questions honestly.

G.1. During the past month, on how many days did you miss classes or school without parent's/guardian's knowledge or permission?

- |                |                    |
|----------------|--------------------|
| 1. 0 days      | 5. 10 or more days |
| 2. 1 or 2 days | 8. Don't know      |
| 3. 3 to 5 days | 9. No response     |
| 4. 6 to 9 days |                    |

G.2. During the past month, how often did your parents or guardians check to see if your homework was done?

- |                                                                 |                     |
|-----------------------------------------------------------------|---------------------|
| 1. Never, my parent/<br>guardian knows that I do my<br>homework | 4. Sometimes        |
| 2. Never                                                        | 5. Most of the time |
| 3. Rarely                                                       | 6. Always           |
|                                                                 | 8. Don't know       |
|                                                                 | 9. No response      |

G.3. During the past month, how often did your parents or guardians understand your problems and worries?

- |                                                     |                     |
|-----------------------------------------------------|---------------------|
| 1. Never discussed my<br>problems/worries with them | 5. Most of the time |
| 2. Never                                            | 6. Always           |
| 3. Rarely                                           | 8. Don't know       |
| 4. Sometimes                                        | 9. No response      |

G.4. During the past month, did your parents/guardians always know what you were doing with your free time?

- |                   |
|-------------------|
| 1. No             |
| 2. Yes, sometimes |
| 3. Yes, always    |
| 8. Don't know     |
| 9. No response    |

G.5. How often do your parents/guardians know where you are?

- |                     |                    |
|---------------------|--------------------|
| 1. Never            | 5. All of the time |
| 2. Rarely           |                    |
| 3. Sometimes        | 8. Don't know      |
| 4. Most of the time | 9. No response     |

G.6. In a typical month, how often do you participate in fun/recreation in the evenings?

- |                   |                 |
|-------------------|-----------------|
| 1. None at all    | 6. Five or more |
| 2. One evening    |                 |
| 3. Two evenings   | 8. Don't know   |
| 4. Three evenings | 9. No response  |
| 5. Four evenings  |                 |

G.7. How many evenings a week do you go out for fun/recreation with your parents/guardians (for example to the movies)?

- |                   |                 |
|-------------------|-----------------|
| 1. None at all    | 6. Five or more |
| 2. One evening    | 8. Don't know   |
| 3. Two evenings   | 9. No response  |
| 4. Three evenings |                 |
| 5. Four evenings  |                 |

G.8. What type of church do you go to?

- |                                |                           |
|--------------------------------|---------------------------|
| 1. None                        | 8. Evangelicals           |
| 2. Anglican                    | 9. Revivalist             |
| 3. Roman Catholic              | 10. Seventh Day Adventist |
| 4. Baptist                     | 11. Other (specify) _____ |
| 5. Methodist                   | 88. Don't know            |
| 6. United                      | 99. No response           |
| 7. Pentecostal (church of God) |                           |

G.9. How often have you attended church in the past month?

- |                                    |
|------------------------------------|
| 1. More than once a week           |
| 2. Weekly or almost weekly         |
| 3. Once or twice in the past month |
| 4. Occasionally                    |
| 5. Never                           |
| 8. Don't know                      |
| 9. Non-response                    |

For the following questions, please think about how true the following questions are. The response options are: never true, rarely true, sometimes true, often true, and always true  
*(Refer to response card that can be shown to participant)*

G.10. In your home, there is an adult who ...

*Note to interviewer: Circle the number representing the response*

|                                                    | Never True | Rarely true | Some-times True | Often True | Always True | This adult is <i>(see codes below)</i> | Don't Know | No response |
|----------------------------------------------------|------------|-------------|-----------------|------------|-------------|----------------------------------------|------------|-------------|
| 10a. Expects you to follow the rules               | 1          | 2           | 3               | 4          | 5           |                                        | 8          | 9           |
| 10b. Is interested in your school work             | 1          | 2           | 3               | 4          | 5           |                                        | 8          | 9           |
| 10c. Believes that you will be a success           | 1          | 2           | 3               | 4          | 5           |                                        | 8          | 9           |
| 10d. Is too busy to pay much attention to you      | 1          | 2           | 3               | 4          | 5           |                                        | 8          | 9           |
| 10e. Talks with you about your problems            | 1          | 2           | 3               | 4          | 5           |                                        | 8          | 9           |
| 10f. Always wants you to do your best              | 1          | 2           | 3               | 4          | 5           |                                        | 8          | 9           |
| 10g. Listens to you when you have something to say | 1          | 2           | 3               | 4          | 5           |                                        | 8          | 9           |

CODES for adult inside the home:

|            |           |                  |
|------------|-----------|------------------|
| 2. Mother  | 5. Uncle  | 8. Grandfather   |
| 3. Brother | 6. Aunt   | 9. Grandmother   |
| 4. Sister  | 7. Cousin | 10. Other        |
|            |           | <i>(specify)</i> |

G.11. Outside of your home, there is an adult who ...

*Note to interviewer: Circle the number representing the response*

|                                                         | Never<br>True | Rarely<br>true | Sometimes<br>True | Often<br>True | Always<br>True | This adult<br>is ( <i>see<br/>codes<br/>below</i> ) | Don't<br>Know | No<br>response |
|---------------------------------------------------------|---------------|----------------|-------------------|---------------|----------------|-----------------------------------------------------|---------------|----------------|
| 11a. Who really cares about you?                        | 1             | 2              | 3                 | 4             | 5              |                                                     | 8             | 9              |
| 11b. Who tells you when you do a good job?              | 1             | 2              | 3                 | 4             | 5              |                                                     | 8             | 9              |
| 11c. Who notices when you're not there                  | 1             | 2              | 3                 | 4             | 5              |                                                     | 8             | 9              |
| 11d. Who is mean to you?                                | 1             | 2              | 3                 | 4             | 5              |                                                     | 8             | 9              |
| 11e. Who always wants you to do your best?              | 1             | 2              | 3                 | 4             | 5              |                                                     | 8             | 9              |
| 11f. Who listens to you when you have something to say? | 1             | 2              | 3                 | 4             | 5              |                                                     | 8             | 9              |
| 11g. Who believes that you will be a success?           | 1             | 2              | 3                 | 4             | 5              |                                                     | 8             | 9              |
| 11h. Who notices when you're upset about something?     | 1             | 2              | 3                 | 4             | 5              |                                                     | 8             | 9              |
| 11i. Who you trust?                                     | 1             | 2              | 3                 | 4             | 5              |                                                     | 8             | 9              |

CODES for adult outside the home:

|            |                                |                            |
|------------|--------------------------------|----------------------------|
| 1. Father  | 7. Cousin                      | 13. Friend                 |
| 2. Mother  | 8. Grandfather                 | 14. Family Friend          |
| 3. Brother | 9. Grandmother                 | 15. Guidance<br>Counsellor |
| 4. Sister  | 10. Someone in<br>my community | 16. Teacher                |
| 5. Uncle   | 11. Pastor                     | 17. Nurse                  |
| 6. Aunt    | 12. Doctor                     | 18. OTHER                  |
|            |                                | _____<br>(SPECIFY)         |

G.12. Which of the following is usually present in your community?

*Note to interviewer, Circle the number of the response indicated*

|      |                                       | Yes | No | Don't Know | No Response |
|------|---------------------------------------|-----|----|------------|-------------|
| 12a. | Garbage on the street or the sidewalk | 1   | 2  | 8          | 9           |
| 12b. | Writings painted on the walls         | 1   | 2  | 8          | 9           |
| 12c. | Abandoned cars                        | 1   | 2  | 8          | 9           |
| 12d. | Unemployed youth on the street        | 1   | 2  | 8          | 9           |
| 12e. | Gangs on the street                   | 1   | 2  | 8          | 9           |
| 12f. | Prostitutes or sex workers            | 1   | 2  | 8          | 9           |
| 12g. | Gunmen                                | 1   | 2  | 8          | 9           |
| 12h. | People selling drugs                  | 1   | 2  | 8          | 9           |
| 12i. | People using drugs                    | 1   | 2  | 8          | 9           |

## **H. VIOLENCE AND UNINTENTIONAL INJURIES MODULE**

The following questions ask about your involvement in violence and accidents. Remember that the information you provide to us is confidential and your name will not be associated with your answers. This information is very important, so please try to answer honestly.

H.1. Have you ever been physically abused or mistreated by anyone in your family or anyone else? Physical abuse is when someone causes you to have a scar, black and blue marks, welts, bleeding or a broken bone.

☐

1. Yes
2. I have NOT been physically abused (Skip to Q.3)
8. Don't know
9. No response

H.2. Who was the person(s). *(Tick all that apply)*

|    |                                                                       |  |
|----|-----------------------------------------------------------------------|--|
| 1. | An adult who lives with me                                            |  |
| 2. | Another adult who does not live with me                               |  |
| 3. | A brother, sister or another teenager who lives with me               |  |
| 4. | A boyfriend, girlfriend or another teenager who does NOT live with me |  |
| 8. | Don't know                                                            |  |
| 9. | No response                                                           |  |

H.3. During the past year, have you been the victim of a physical attack or fight?

☐

1. Yes
2. No (Skip to Q. 5)
8. Don't know (Skip to Q.5)
9. No response (Skip to Q.5)

H.4. If yes, how many times in the past year?

- |    |              |    |                  |
|----|--------------|----|------------------|
| 1. | 1 time       | 6. | 10 or 11 times   |
| 2. | 2 or 3 times | 7. | 12 or more times |
| 3. | 4 or 5 times | 8. | Don't know       |
| 4. | 6 or 7 times | 9. | No response      |
| 5. | 8 or 9 times |    |                  |

H.5. During the past year, have you been the one to cause the fight or attack someone)?

1. Yes
2. No (Skip to Q. 7)
8. Don't know (Skip to Q.7)
9. No response (Skip to Q.7)

H.6. If yes, how many times in the past year?

- |    |              |    |                  |
|----|--------------|----|------------------|
| 1. | 1 time       | 6. | 10 or 11 times   |
| 2. | 2 or 3 times | 7. | 12 or more times |
| 3. | 4 or 5 times |    |                  |
| 4. | 6 or 7 times | 8. | Don't know       |
| 5. | 8 or 9 times | 9. | No response      |

The next 4 questions ask about the most serious injury that may have happened to you during the past year. **An injury is serious when it makes you miss at least one full day of usual activities (such as school, sports, or a job) or requires treatment by a doctor or nurse.**

H.7. During the past year, have you had any serious injury?

1. Yes
2. No (skip to Q. 12)
8. Don't know (Skip to Q.12)
9. Non-response (Skip to Q.12)

H.8. During the past year, what were you doing when the most serious injury happened to you?  
(Interviewer, do not read responses)

1. Playing or training for a sport
2. Walking or running, but not as part of playing or training for a sport
3. Riding a bicycle, scooter, or skating
4. Riding or driving in a car or other motor vehicle
5. Doing any paid or unpaid work, including housework, yard work, or cooking
6. Nothing
7. Something else \_\_\_\_\_ (specify)
8. Don't know
9. No response

H.9. During the past year, what was the major cause of the most serious injury that happened to you? *(Interviewer, do not read responses)*

☐

1. I was attacked, assaulted, or abused by someone
2. I was fighting with someone
3. I was in a fire or too near a flame or something hot
4. I was in a motor vehicle accident or hit by a motor vehicle
5. I fell
6. Something fell on me or hit me
7. Something else caused my injury \_\_\_\_\_ *(specify)*
8. Don't know
9. No response

H.10. During the past year, how did the most serious injury happen to you? *(Interviewer, do not read responses)*

☐

1. Someone else hurt me on purpose
2. I hurt myself on purpose
3. Someone else hurt me by accident
4. I hurt myself by accident
8. Don't know
9. No response

H.11. During the past year, what was the most serious injury that happened to you? *(Interviewer, do not read responses)*

☐

1. I had a concussion or other head or neck injury, was knocked out, or could not breathe
2. I lost all or part of a foot, leg, hand, or arm
3. I had a gunshot wound
4. I had a bad burn
5. I had a cut, puncture, or stab wound
6. I had a broken bone or a dislocated joint
7. Something else happened to me \_\_\_\_\_ *(specify)*
8. Don't know
9. No response

H.12. During the past month have you been teased/bullied?

☐

1. Yes
2. No (Skip to Q. 14)
8. Don't know ((Skip to Q.14)
9. Non-response (Skip to Q.14)

H.13. During the past month, how were you bullied most often?

(Interviewer, do not read responses)

- ☐
1. I was hit, kicked, pushed, shoved around, or locked indoors
  2. I was made fun of because of my race or colour or religion
  3. I was made fun of with sexual jokes, comments, or gestures
  4. I was left out of activities on purpose or completely ignored
  5. I was made fun of because of how my body or face looks
  6. I was bullied in some other way (specify \_\_\_\_\_)

H.14. Have you ever been threatened with a knife, a gun, or some other weapon that made afraid to leave your house?

- ☐
1. Yes
  2. No (Skip to Q16)
  8. Don't know (Skip to Q16)
  9. Non-response (Skip to Q16)

H.15. Where did these threats happen? (Tick all that apply)

- ☐
1. At school
  2. In your neighbourhood
  3. At a store
  4. At a health facility
  5. In a public area where kids spend time
  6. Other \_\_\_\_\_ (specify)
  8. Don't know
  9. Non-response

H.16. How often have you done any of the following during the past year?

Note to interviewer, Circle the number of the response indicated

|                                                               | Never | 1 or 2 times | 3 or more times | Don't know | No response |
|---------------------------------------------------------------|-------|--------------|-----------------|------------|-------------|
| 16a. Cheated on a test                                        | 1     | 2            | 3               | 8          | 9           |
| 16b. Deliberately damaged something that didn't belong to you | 1     | 2            | 3               | 8          | 9           |
| 16c. Been in a fight where weapons were used                  | 1     | 2            | 3               | 8          | 9           |
| 16d. Took something from a store without paying for it        | 1     | 2            | 3               | 8          | 9           |
| 16e. Stole something from someone                             | 1     | 2            | 3               | 8          | 9           |
| 16f. Went somewhere to steal something                        | 1     | 2            | 3               | 8          | 9           |
| 16g. Ran away from home                                       | 1     | 2            | 3               | 8          | 9           |

H.17. During the past month, did you carry a weapon such as a gun, knife, club, stick or bat to school?

☐

1. Never
2. A few times
3. Almost all of the time
8. Don't know
9. No response

H.18. Do you carry a weapon at times other than at school?

☐

1. Never
2. A few times
3. Almost all of the time
8. Don't know
9. No response

H.19. During the past month, what kind of weapon did you carry most often?

☐

1. A handgun
2. Other guns such as a rifle or shot gun
3. A knife or razor
4. A club, stick, bat or pipe
5. I did not carry a weapon in the past month
8. Don't know
9. No response

H.20. Have you ever belonged to a gang?

☐

1. No
2. Yes, but not anymore
3. Yes, still do
8. Don't know
9. No response

H.21. Have you ever been stabbed or shot?

☐

1. Yes
2. No (Skip to Q. 23)
8. Don't know (Skip to Q. 23)
9. No response (Skip to Q. 23)

H.22. How many times have you been stabbed or shot?

☐

1. Never
2. Once
3. Twice
8. Don't know
9. No response

H.23. Have you ever seen a dead body (other than at a funeral)?

☐

1. Yes
2. No (Skip to section I)
88. Don't know (Skip to section I)
99. No response (Skip to section I)

H.24. How many times have you seen a dead body, not at a funeral?

\_\_\_\_\_ times

88. Don't know
99. No response

H.25. What caused the person's death? (*Tick all that apply*)

|                        |  |
|------------------------|--|
| was sick and died      |  |
| motor vehicle accident |  |
| beaten to death        |  |
| stabbed and killed     |  |
| shot and killed        |  |
| other                  |  |
| Don't know             |  |
| No response            |  |

## **I. ALCOHOL, TOBACCO & DRUG USE MODULE**

This next section asks about alcohol and drug use. For these questions, when we refer to a drink, we mean a drink that contains alcohol such as beer, Smirnoff ice, stout, and wine. If you are unsure of whether a drink contains alcohol, feel free to ask me.

I.1. During the past month have you consumed drinks containing alcohol?

☐

1. Yes
2. No (Skip to Q. 5)
8. Don't know (Skip to Q.5)
9. No response (Skip to Q.5)

I.2. During the past month, on how many days did you have at least one drink containing alcohol?

☐

1. 0 days
2. 1 or 2 days
3. 3 to 5 days
4. 6 to 9 days
5. 10 to 19 days
6. 20 to 29 days
7. All month
8. Don't know
9. No response

I.3. During the past month, on the days you drank alcohol, how many drinks did you usually drink per day?

- |                        |                     |
|------------------------|---------------------|
| 1. Less than one drink | 5. 4 drinks         |
| 2. 1 drink             | 6. 5 or more drinks |
| 3. 2 drinks            | 8. Don't know       |
| 4. 3 drinks            | 9. No response      |

I.4. During the past month, how did you usually get the alcohol you drank?  
*Select only one response.*

- |                                                          |                            |
|----------------------------------------------------------|----------------------------|
| 1. I bought it in a store, shop, or from a street vendor | 5. I stole it              |
| 2. I gave someone else money to buy it for me            | 6. I got it some other way |
| 3. I got it from my friends                              | 8. Don't know              |
| 4. I got it from home                                    | 9. No response             |

I.5. During the past year have you consumed drinks containing alcohol?

1. Yes
2. No (Skip to Q. 8)
8. Don't know (Skip to Q.8)
9. Non response (Skip to Q.8)

I.6. During the past year did you drink so much alcohol that you were really drunk?

1. Yes
2. No (Skip to Q. 8)
8. Don't know (Skip to Q.8)
9. Non-response (Skip to Q.8)

I.7. During the past year, how many times have you ever ...

*Note to interviewer: Circle the number representing the response*

|                                             | 0<br>times | 1-2<br>times | 3-9<br>times | 10 or more<br>times | Don't<br>know | No<br>resp. |
|---------------------------------------------|------------|--------------|--------------|---------------------|---------------|-------------|
| 7a.Had a hang over?                         | 1          | 2            | 3            | 4                   | 8             | 9           |
| 7b.Felt sick?                               | 1          | 2            | 3            | 4                   | 8             | 9           |
| 7c.Got into trouble with family?            | 1          | 2            | 3            | 4                   | 8             | 9           |
| 7d.Got into trouble with friends?           | 1          | 2            | 3            | 4                   | 8             | 9           |
| 7e. Missed school?                          | 1          | 2            | 3            | 4                   | 8             | 9           |
| 7f.Got into fights as a result of drinking? | 1          | 2            | 3            | 4                   | 8             | 9           |

I.8. Have you ever smoked a cigarette even just a puff?

☐

1. Yes
2. No (Skip to Q. 13)
8. Don't know (Skip to Q.13)
9. No response (Skip to Q.13)

I.9. How old were you when you first tried a cigarette?

☐

- |                           |                          |
|---------------------------|--------------------------|
| 1. 7 years old or younger | 5. 14 or 15 years old    |
| 2. 8 or 9 years old       | 6. 16 years old or older |
| 3. 10 or 11 years old     | 8. Don't know            |
| 4. 12 or 13 years old     | 9. No response           |

I.10. During the past month have you smoked any cigarettes?

☐

1. Yes
2. No (Skip to Q. 12)
8. Don't know (Skip to Q. 12)
9. No response (Skip to Q. 12)

I.11. During the past month, on how many days did you smoke cigarettes?

☐

- |                  |                  |
|------------------|------------------|
| 1. 0 days        | 6. 20 to 29 days |
| 2. 1 or 2 days   | 7. All month     |
| 3. 3 to 5 days   | 8. Don't know    |
| 4. 6 to 9 days   | 9. No response   |
| 5. 10 to 19 days |                  |

I.12. During the past year, have you ever tried to stop smoking cigarettes?

☐

- |                                                    |                                             |
|----------------------------------------------------|---------------------------------------------|
| 1. No                                              | 4. I have never smoked cigarettes regularly |
| 2. Yes                                             | 8. Don't know                               |
| 3. I did not smoke cigarettes during the past year | 9. No response                              |

I.13. During the past week, on how many days have people smoked in your presence?

☐

1. 0 days
2. 1 or 2 days
3. 3 or 4 days
4. 5 or 6 days
5. All week
8. Don't know
9. No response

I.14. Do any of your parents/guardians use any form of tobacco?

☐

1. Yes
2. No (Skip to Q. 16)
8. Don't know (Skip to Q.16)
9. No response (Skip to Q.16)

I.15. Which of your parents/guardians use any form of tobacco?

☐

1. Neither
2. My father or male guardian only
3. My mother or female guardian only
4. Both smoke
8. Don't know
9. No response

I.16. Have you ever had ganja in any form?

☐

1. Yes
2. No (Skip to Q. 24)
8. Don't know (Skip to Q.24)
9. No response (Skip to Q. 24)

I.17. Have you ever taken ganja tea?

☐

1. Yes
2. No (Skip to Q. 19)
8. Don't know (Skip to Q. 19)
9. No response (Skip to Q. 19)

I.18. How many times have you taken ganja tea in the last month?

☐

1. None at all
2. Less than once per week
3. Once or twice per week
4. Three or four times per week
5. Five times or more per week
8. Don't know
9. No response

I.19. Have you ever tried **smoking** ganja?

☐

1. Yes
2. Not sure
3. No (Skip to Q. 24)
8. Don't know (Skip to Q. 24)
9. No response (Skip to Q. 24)

I.20. What was the reason you started smoking ganja? (*Tick all that apply*)

|                                                    |  |
|----------------------------------------------------|--|
| 1. My friends were smoking ganja                   |  |
| 2. I wanted to try                                 |  |
| 3. I heard that you feel good when you smoke ganja |  |
| 4. Other<br>(Specify)                              |  |
| 88. Don't know                                     |  |
| 99. No response                                    |  |

I.21. Have you smoked any ganja in the past year?

☐

1. Yes
2. Not sure
3. No (Skip to Q. 24)
8. Don't know (Skip to Q. 24)
9. No response (Skip to Q. 24)

I.22. Have you smoked any ganja in the past month?

☐

1. Yes
2. Not sure
3. No (Skip to Q. 24)
8. Don't know (Skip to Q. 24)
9. No response (Skip to Q. 24)

I.23. How many times in the last month have you smoked ganja?

☐

- |                                 |                                |
|---------------------------------|--------------------------------|
| 1. None at all                  | 5. Five times or more per week |
| 2. Less than once per week      | 8. Don't know                  |
| 3. Once or twice per week       | 9. No response                 |
| 4. Three or four times per week |                                |

I.24. Have you used cocaine/crack in the past year?

☐

1. Yes
2. Not sure
3. No (Skip to Q. 27)
8. Don't know (Skip to Q. 27)
9. No response/too personal (Skip to Q. 27)

I.25. How often have you used cocaine in the past year?

☐

- |                        |                |
|------------------------|----------------|
| 1. Never               | 5. Daily       |
| 2. Once or a few times | 8. Don't know  |
| 3. Monthly             | 9. No response |
| 4. Weekly              |                |

I.26. How often have you used crack in the past year?

☐

1. Never
2. Once or a few times
3. Monthly
4. Weekly
5. Daily
8. Don't know
9. No response

I.27. Have you used other drugs in the past year?

☐

1. Yes
2. Not sure
3. No (Skip to Q. 29)
8. Don't know (Skip to Q. 29)
9. Non-response/too personal (Skip to Q. 29)

I.28. During the past year how often have you used...

*Note to interviewer: Circle the number representing the response*

|                                      | Once or<br>a few<br>times | Monthly | Weekly | Daily | Don't<br>know | No<br>resp. |
|--------------------------------------|---------------------------|---------|--------|-------|---------------|-------------|
| 28a. Ecstasy                         | 1                         | 2       | 3      | 4     | 8             | 9           |
| 28b. Inhalants (glue, gas, paint)    | 1                         | 2       | 3      | 4     | 8             | 9           |
| 28c. Sedatives (downers, sleep aids) | 1                         | 2       | 3      | 4     | 8             | 9           |
| 28d. Heroin (morphine)               | 1                         | 2       | 3      | 4     | 8             | 9           |
| 28e. Hallucinogens (acid, dust)      | 1                         | 2       | 3      | 4     | 8             | 9           |
| 28f. Steroids (juice)                | 1                         | 2       | 3      | 4     | 8             | 9           |
| 28g. Amphetamines (speed, ice)       | 1                         | 2       | 3      | 4     | 8             | 9           |

I.29. How difficult do you think it would be for you to get each of the following types of drugs, if you wanted it?

*Note to interviewer: Circle the number representing the response*

|                                | Very<br>easy | Fairly<br>easy | Fairly<br>diff. | Very<br>diff. | Probably<br>Impossible | Don't<br>know | No<br>resp. |
|--------------------------------|--------------|----------------|-----------------|---------------|------------------------|---------------|-------------|
| 29a. Ganja                     | 1            | 2              | 3               | 4             | 5                      | 8             | 9           |
| 29b. Cocaine                   | 1            | 2              | 3               | 4             | 5                      | 8             | 9           |
| 29c. Crack                     | 1            | 2              | 3               | 4             | 5                      | 8             | 9           |
| 29d. Alcohol                   | 1            | 2              | 3               | 4             | 5                      | 8             | 9           |
| 29e. Cigarettes                | 1            | 2              | 3               | 4             | 5                      | 8             | 9           |
| 29f. Steroids (juice)          | 1            | 2              | 3               | 4             | 5                      | 8             | 9           |
| 29g. Amphetamines (speed, ice) | 1            | 2              | 3               | 4             | 5                      | 8             | 9           |

I.30. How many of your friends do the following?

*Note to interviewer: Circle the number representing the response*

|                           | None | A few | Some of them | Most of them | All of them | Don't know | No response |
|---------------------------|------|-------|--------------|--------------|-------------|------------|-------------|
| 30a) Smoke cigarettes     | 1    | 2     | 3            | 4            | 5           | 8          | 9           |
| 30b) Drink alcohol        | 1    | 2     | 3            | 4            | 5           | 8          | 9           |
| 30c) Use ganja            | 1    | 2     | 3            | 4            | 5           | 8          | 9           |
| 30d) Use cocaine or crack | 1    | 2     | 3            | 4            | 5           | 8          | 9           |
| 30e) Use other drugs      | 1    | 2     | 3            | 4            | 5           | 8          | 9           |

## **J. SEXUAL BEHAVIOUR MODULE**

Sex is often an important part of people's lives. Though it is very private, we hope that you will share some information with us so we can better understand the concerns and questions of people your age. Remember that your answers will be kept private.

Sex used here refers to vaginal intercourse (when a man puts his penis into a woman's vagina) and anal intercourse (when a man puts his penis into his partner's anus)

J.1. Where do you get information or learn about sex? *(Tick all that apply)*

|                                          |  |
|------------------------------------------|--|
| 1. Mother                                |  |
| 2. Father                                |  |
| 3. Other relative _____ <i>(specify)</i> |  |
| 4. Boyfriend/Girlfriend                  |  |
| 5. Friends                               |  |
| 6. Class at School                       |  |
| 7. Books                                 |  |
| 8. Television or video                   |  |
| 9. Other way, please specify _____       |  |
| 10. No information                       |  |
| 88. Don't know                           |  |
| 99. Non-response                         |  |

J.2. Which of these did you learn the most from?   
*(Record code above)*

J.3. Have you ever been involved in kissing or petting/touching with a boy/man?

1. Yes
2. No
8. Don't know
9. Non-response

J.4. Have you ever been involved in kissing or petting/touching with a girl/woman?

1. Yes
2. No
8. Don't know
9. Non-response

J.5. Have you ever had sexual intercourse?

☐

1. Yes
2. No (Skip to section K)
8. Don't know (Skip to section K)
9. Non-response (Skip to section K)

J.6. How old were you when you had sexual intercourse for the first time?

\_\_\_\_\_ (age)

88. Don't know
99. Non-response

J.7. When you had sex for the first time, how did it happen?

☐

1. I agreed to it
2. I didn't agree but I didn't do or say anything
3. I was forced
4. Other (specify) \_\_\_\_\_
8. Don't know
9. Non-response

J.8. In your whole life, how many people have you had sex with?

☐

- |             |                     |
|-------------|---------------------|
| 1. 1 person | 5. 5 people         |
| 2. 2 people | 6. 6 or more people |
| 3. 3 people | 8. Don't know       |
| 4. 4 people | 9. Non-response     |

J.9. In your whole life how many times have you had sex?

☐

1. Once
2. 2 - 5 times
3. 6 - 10 times
4. More than 10 times
8. Don't know
9. Non-response

J.10. The last time you had sexual intercourse did you or your partner use a condom?

☐

1. Yes
2. No
8. Don't know
9. Non-response

- J.11. The last time you had sex, which of the following birth control methods did you use? *(Tick all that apply)*

|     |                                          |  |
|-----|------------------------------------------|--|
| 1.  | None                                     |  |
| 2.  | Withdrawal                               |  |
| 3.  | Condom                                   |  |
| 4.  | Injection (Depo Provera)                 |  |
| 5.  | Regular birth control pill               |  |
| 6.  | Morning after pill                       |  |
| 7.  | Sponge, cream or diaphragm               |  |
| 8.  | Douche                                   |  |
| 9.  | Some other method _____ <i>(specify)</i> |  |
| 88. | Don't know                               |  |
| 99. | Non-response                             |  |

- J.12. When you don't use birth control, what is the reason?  
*(Interviewer – do NOT read the responses, just tick all responses given)*

|     |                                                    |  |
|-----|----------------------------------------------------|--|
| 1.  | I didn't think of it                               |  |
| 2.  | I didn't want to use it                            |  |
| 3.  | My partner didn't want to use it                   |  |
| 4.  | It is wrong to use birth control                   |  |
| 5.  | I didn't have time to prepare                      |  |
| 6.  | Sex isn't as nice when you use it                  |  |
| 7.  | It's too much hassle to use any                    |  |
| 8.  | I didn't know where to get any                     |  |
| 9.  | It is too expensive                                |  |
| 10. | I was high on drugs or alcohol                     |  |
| 11. | I didn't want my partner to think I have sex often |  |
| 12. | I always use birth control                         |  |
| 13. | Other reason _____ <i>(specify)</i>                |  |
| 88. | Don't know                                         |  |
| 99. | Non-response                                       |  |

- J.13. Where do you get your contraception (birth control)?  
*(Tick all that are mentioned)*

|    |                                           |  |
|----|-------------------------------------------|--|
| 1. | Local clinic                              |  |
| 2. | Buy it at a shop                          |  |
| 3. | From my private doctor                    |  |
| 4. | From my partner                           |  |
| 5. | From a friend                             |  |
| 6. | Other _____                               |  |
| 7. | Not applicable, I don't use birth control |  |
| 8. | Don't know                                |  |
| 9. | Non-response                              |  |

J.14. During the past 3 months have you had sex?

☐

1. Yes
2. No
8. Don't know
9. Non-response

J.15. Have you ever been pregnant/gotten a girl pregnant?

☐

1. Yes
2. No (Skip to the next section)
8. Don't know (Skip to the next section)
9. Non-response (Skip to the next section)

J.16 How many times have you ever been pregnant/gotten a girl pregnant?

\_\_\_\_\_ ( # of times)

88. Don't know
99. Non-response

J.17. What happened with the pregnancy? *(If more than one pregnancy, refer to the most recent pregnancy)*

☐

1. One of us kept the baby
2. We are raising the baby together
3. One of our families is raising the baby
4. The baby was placed for adoption (Skip to section K)
5. The baby was placed for foster care (Skip to section K)
6. The pregnancy was terminated (abortion) (Skip to section K)
7. Miscarriage (The baby died) (Skip to section K)
8. Pregnant and not sure what to do (Skip to section K)
88. I don't know what happened (Skip to section K)
99. No response (Skip to section K)

J.18. Who looks after the child when you are in school, busy or just can't do it  
(Tick all that apply)

|     |                                    |  |
|-----|------------------------------------|--|
| 1.  | I don't have a child               |  |
| 2.  | I'm not raising the child          |  |
| 3.  | Changes from day to day            |  |
| 4.  | One of our families                |  |
| 5.  | Friends or neighbours              |  |
| 6.  | Day care centre                    |  |
| 7.  | I take the child with me           |  |
| 8.  | I leave the child alone for awhile |  |
| 88. | Don't know                         |  |
| 99. | No response                        |  |

J.19. How often do you spend time with your child?

☐

1. I don't have a child
2. Everyday
3. A few times a week
4. Once a week
5. A few times a month
6. Once a month
7. Less than once a month
8. Never
- 88 Don't know
99. No response

### **K. SOURCES OF INFORMATION**

This next section asks you about where you typically get information on health. This information is important for developing programs that meet youth needs. We appreciate your input up to now and we are almost finished!

K.1. What are the main sources from which/whom you obtain information on health and health issues? (*Tick all that apply*)

☐

1. No sources of information (no information)
2. Health Worker
3. School talks/classes
4. TV
5. Radio
6. Posters/Magazines/Newspapers
7. Parent/Family Member
8. Other \_\_\_\_\_
88. Don't Know
99. No response

K.2. What are the main sources from which/whom you **would like to** obtain information on health and health issues? (*Tick all that apply*)

☐

1. Health Worker
2. School talks/classes
3. TV
4. Radio
5. Posters/Magazines/Newspapers
6. Parent/Family Member
7. Other \_\_\_\_\_
88. Don't Know
99. No response

## **L. ANTHROPOMETERIC MEASUREMENTS**

Interviewer – obtain the actual height and weight of the respondent

- L.1.            Height    \_\_\_\_\_ Metres  
                                 999                   Respondent refused
- L.2.            Weight   \_\_\_\_\_ Kilograms  
                                 999                   Respondent refused
- L.3.            Waist circumference \_\_\_\_\_ Centimetres  
                                 999                   Respondent refused
- L.4.            Hip circumference \_\_\_\_\_ Centimetres  
                                 999                   Respondent refused

Thank you for taking the time to participate in this survey that will help us to better understand young people in Jamaica and find ways to keep them safe. I appreciate your being open and honest with me during this survey which I know was long and personal