

# **JAMAICA**

## **2011-2012 Health Promotion in Schools**

### **HEALTH PROMOTING SCHOOL SURVEY 2011**

### **FINAL REPORT**

**February 2013**

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## **FOREWORD**

This report was prepared as the main document for dissemination of the island-wide findings from the 2011 Health Promoting Schools survey.

It is intended to be used by intra and inter ministries / agencies with interest in the topic.

Epidemiological Research & Data Analysis Unit (ERDAU)

Ministry of Health

February 2013

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## **INTRODUCTION**

### **Background<sup>1</sup>**

The Ministry of Health (MOH), in seeking to promote healthy lifestyles to the Jamaican population, targets special settings as a means to achieving this goal. One of these special settings is the school. The MOH has had an on-going working relationship with the Ministry of Education (MOE) where targeted health interventions have been conducted in schools across the island. However, there has never been a sustained collaborative approach which is comprehensive in nature. It is for this reason that the MOH and the MOE have begun working together to implement a plan through which all schools will strive to be established as Health Promoting Schools.

A Health Promoting School has been defined by the World Health Organization (WHO) as one that constantly strengthens its capacity as a healthy setting for living, learning and working. As such, it becomes a place where all members of the school community work together to provide students with integrated and positive experiences and structure which promote and protect their health. Research has shown that a child who is healthy and surrounded by a healthy environment will produce better educational outcomes. The elements of a Health Promoting School (HPS) are:

- 1) A Healthy School policy
- 2) The school's physical environment
- 3) The school's social environment
- 4) Individual health skills and competencies
- 5) Links with the community
- 6) Health Services

The timeliness of the movement towards establishing Health Promoting Schools is evident in the

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<sup>1</sup> Health Promoting Schools Initiative Progress Report – February 2012

work currently being done by the MOE and the United Nations Children’s Fund (UNICEF) to ensure that all schools become Child Friendly Schools. It implicitly and explicitly states in the Child Friendly Schools Manual that in order for a school to achieve a Child Friendly School status it has to satisfy the factors that make it a Health Promoting School. The current development of the School Improvement Plan by all schools also makes the timing ideal, as the schools are being asked to align their plan with both the Health Promoting School and Child Friendly School approach.

In January 2009, the MOH initiated a meeting with the MOE to discuss the growing health concerns impacting adolescents and pre-adolescents. Meeting participants discussed gaps within the school system related to concerns raised in the context of the MOH’s “Healthy Lifestyle Promotion Programme” – a programme which emphasizes an intersectoral approach to health promotion with a framework based on principles of the Ottawa and Caribbean Charters for Health Promotion. As a result of this meeting, the Chief Education Officer of the MOE and the Chief Medical Officer of the MOH established a committee to be co-chaired by the Director of Health Promotion and Education (MOH) and the Senior Education Officer of the Guidance and Counselling Unit (MOE). This committee is now known as the School Health Enhancement Committee (SHEC) and its main purpose is to facilitate the development and implementation of a Health Promoting School Framework inclusive of a monitoring and evaluation mechanism (MOH, 2012).

The committee’s first priority was to establish key health topics and create a draft plan of potential national solutions for gaps affecting schools island-wide. The key topics identified were:

- 1) Nutrition
- 2) Physical Activity
- 3) Environmental Health
- 4) Mental Health
- 5) Reproductive Health
- 6) School Health Services
- 7) Violence and Injury Prevention
- 8) Substance Abuse

In addition, four key themes were identified across these health topics: capacity building, an effective referral system, a comprehensive public education programme, and staffing to address physical activity and nutrition concerns particularly at the primary level with an interest at the secondary level as well.

It is also important to note that there are existing vehicles within the school system which provide a stimulus for the school community towards promoting and protecting health. These vehicles include the joint committee of the MOE and MOH, the Health and Family Life Education (HFLE) curriculum being taught in the schools, the Healthy Lifestyle Club (an initiative of the MOH which is established in some schools) and the Health Advisory Committee (a committee mandated by the HFLE Policy which brings together the key local stakeholders).

## **OBJECTIVES**

The decision was made to conduct a pilot prior to an all-island introduction to the Health Promoting Schools programme. The 2011 Health Promoting Schools Survey was therefore designed with three key objectives; to:

- 1) Gather baseline data on key health indicators for future surveys.
- 2) Develop priorities and establish policies and programmes for school health.
- 3) Advocate for resources for school health.

## **METHODOLOGY**

In determining a method of selection, it was decided to include schools in which MOH Health Educators had already started some work and where MOE Health Promotion Officers had some input. It was further decided that four (4) schools would be selected from each of the fourteen (14) parishes along with one (1) special education school from each of the four (4) MOH health regions, resulting in a total of sixty (60) schools being selected for the pilot survey. The participating schools are listed in Appendix C.

### **Target Population**

The survey targeted over five thousand eight hundred (5,800) students aged 10-17 years old and administrators in the sixty (60) selected schools.

## **Survey Instruments**

Two survey instruments (questionnaires) were developed; one for the students and one for the administrators. The questionnaires were designed to collect information on the key health topics (Nutrition, Physical Activity, Environmental Health, Mental Health, Reproductive Health, School Health Services, Violence and Injury Prevention and Substance Abuse) established by the SHEC.

In addition to data collected by the questionnaires, information on some of the environmental aspects of the school was garnered from the public health inspectors' reports.

## **Sample Design**

Schools were selected in urban and rural areas and represented both primary and high schools. The sample was selected using a multi-stage cluster sampling technique with the individual as the unit of analysis.

The sampling plan was determined using administrative data from each of the participating schools and was based on the total number of students, the number of boys and girls, the number of students by grade, and the number of classes within each grade. Sample size for each school was based on the total student population with a 10% sample for schools with 500+ students and a 15% sample for those with <500 students. The register for each class was used as the sampling frame for selection of student participants. The sample was selected as follows:

- The percentage of students from each grade to be included in the survey was calculated by dividing the total number of students in a grade by the total number of students in the school, multiplied by 100. These percentages were then used to determine the number of students from each grade that were required to satisfy the sample size for the school.
- The required sample size for each grade was then divided by the number of classes within the grade in order to determine the number of students required from each class (Table 1).
- The total number of students listed on the register for each class, present on the day of the data collection, was divided by the number of students required for the sample from that class in order to obtain the sampling interval for selection of students.



- With the sampling interval established, a random starting point was chosen within the interval beginning at the front right in each classroom and students were then selected at regular intervals using a linear pattern from right to left. In the event that the final student in the class was reached before the required number was obtained, counting continued until the required number of participants was reached.
- The selected students were assigned to a room allocated for the completion of the questionnaire. Communication between the students was not allowed while the questionnaires were being completed.

**Table 1. Example of Sampling Plan for School with 1,000 Student Population (10% sample)**

<b>Grade Level</b>	<b>Total # of Students</b>	<b>Proportion of School Population</b>	<b># of Students Required for Sample</b>	<b># of Classes</b>	<b># of Students per Class Required for Sample</b>
Grade 7	250	25%	25	5	5
Grade 8	350	35%	35	5	7
Grade 9	200	20%	20	4	5
Grade 10	100	10%	10	2	5
Grade 11	100	10%	10	2	5
<b>TOTAL</b>	<b>1,000</b>	<b>100%</b>	<b>100</b>		

Steps were taken to ensure the gender representation in the sample at each grade matched the gender ratio in the student population. Teachers in the classrooms were not allowed to participate in the selection of students for the survey.

### **Analysis**

The analysis was done using the software Statistical Package for the Social Sciences (SPSS) version 16.0.

## SUMMARY OF FINDINGS – National Level

Of the 60 schools sampled, completed student questionnaires were collected from 53 (response rate was 88%) schools while 43 school administrators (response rate was 72%) provided responses to the survey. Additionally, 4,091 of the targeted 5,800 students responded to the survey (response rate = 71%).

Thirty-eight (38) of the 4,091 students who responded to the survey did not state their sex. A ratio of 0.76 male: 1 female was obtained based on those students who stated their sex.

### 1) Environmental Health

The single indicator of whether schools satisfied the environmental criteria to be a “Health Promoting School” is a pass/fail assessment from the Public Health Inspector’s report. These reports were however not available at the time of reporting. The aspects of environmental health examined in this survey are presented below.

#### *Garbage Disposal*

As represented in table 2 below, approximately two-thirds (65%) of school administrators reported that their school had bins to store garbage, followed by 19% where skips were used. One administrator indicated an “other” means of storing garbage but did not specify what that was.

**Table 2. Garbage Storage Facility as Reported by Administrators**

<b>Garbage Storage Facility</b>	<b>% of Administrators</b>
Bins	65
Skips	19
Drums	14
Other	2
<b>Total</b>	<b>100</b>

Students were also asked about the methods of garbage disposal they used while at school. As shown in table 3, use of garbage bins was by far the most commonly reported method of disposal

at approximately 95%, followed by “put in my pocket” or “take home” reported by 22%. At 6%, the third most common means of disposing of garbage noted by students was to throw it on the floor/ground. A few responses were given for burning it and putting it in other people’s bags/clothes.

**Table 3. Methods of Garbage Disposal among Students**

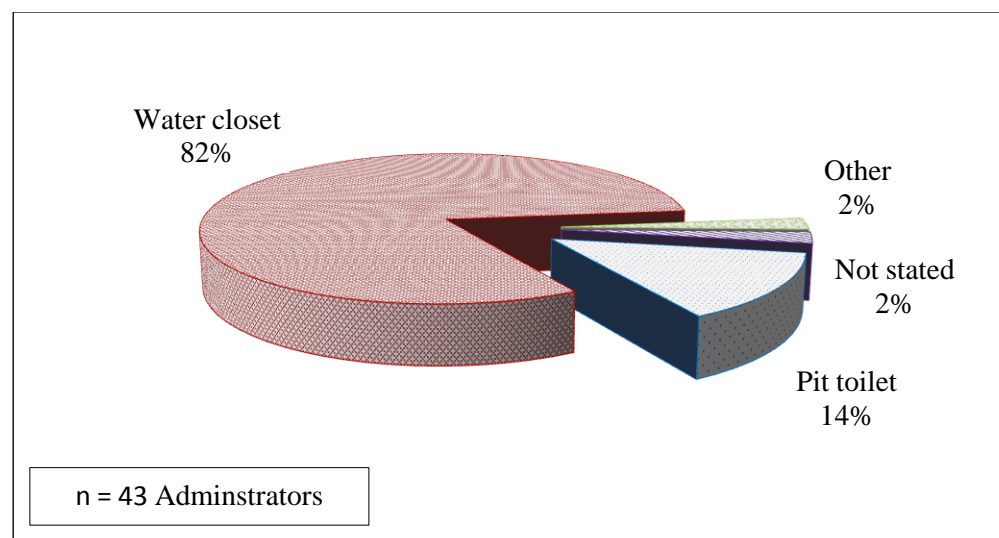
Students’ Garbage Disposal Methods*	% of Students (n = 4,091)
Put it in bins	95
Put it in my pocket / Take home	22
Throw it on the floor / ground	6
Put it in my desk / Leave on the table	3
Garbage disposal method not stated	2
Other garbage disposal method without details	1

\*Multiple responses accepted from each student.

*Bathroom Facilities* (emphasis on availability of toiletries for hand washing),

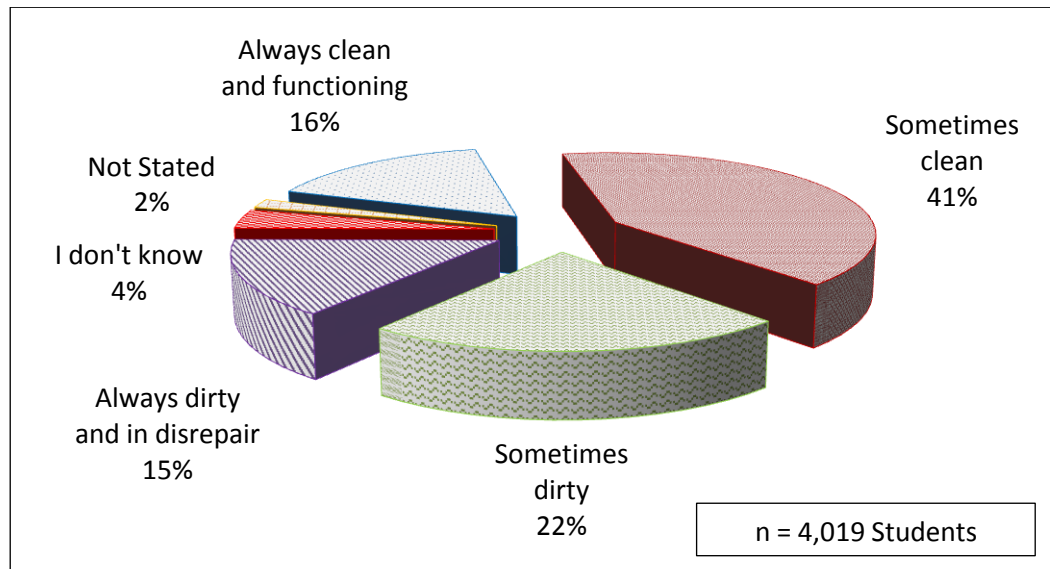
As presented in figure 1 below, approximately four out of five (82%) administrators indicated that their school had water closet facilities while 14% reported having pit toilets. One administrator did not specify the type of facility while one did not respond to this question.

**Figure 1. Type of Toilet Facilities as Reported by Administrators**



When asked about the cleanliness of their schools' bathrooms, approximately one in six students (16%) reported that they were always clean and functioning, while 15% said they were always dirty and in disrepair.

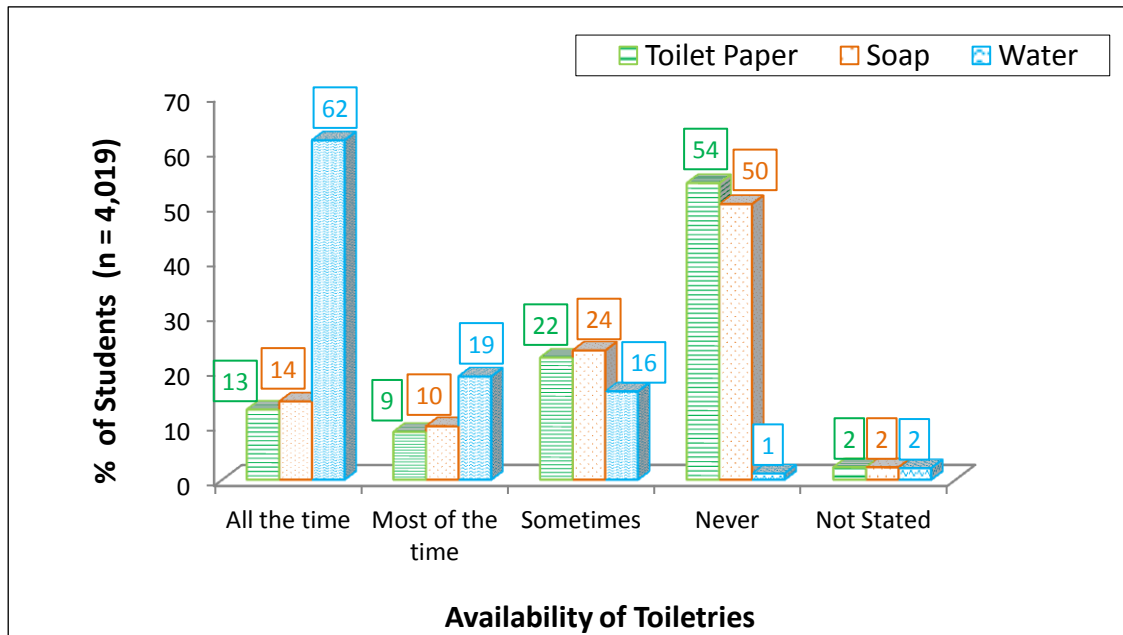
**Figure 2. Bathroom Status as Reported by Students**



Just under two-thirds (63%) of administrators said that their bathroom facility had soap for students to wash their hands. Where soap was not provided in the bathroom, most administrators stated that soap was either available on request from school staff (teachers, nurse or auxiliary staff) or students were asked to bring their own soap and/or sanitizer from home.

Figure 3 shows that over a half of the students said that the bathroom at their school never has toilet paper (54%); similarly, a half of the students said their school's bathroom never has soap; making this the most common response for both of these toiletries. Close to two-thirds (62%) of students reported that the bathroom at their school had water all of the time while 1% said that their school bathroom never has water.

**Figure 3. Availability of Bathroom Toiletries as Reported by Students**



The proportion of students who said toilet paper was available all the time in their schools' bathrooms varied greatly from 10% (secondary high school) to 39% (Special school) based on the type of school attended. A half or more of the students at primary, junior high, secondary high and technical high schools said toilet paper was never available in their schools' bathroom (Table 4). Similar patterns were observed for the availability of soap in school bathrooms.

With p values of 0.000, statistical significant relationships were indicated between the availability of toilet paper and soap in school bathrooms and type of school. However, this was rendered invalid since the minimum expected cell count in this sub table is less than one (table 4).

**Table 4. Selected Environmental Variables from Students' Perspectives by Type of School**

Environmental Variables and Categories		School Type														p value
		Primary School		All Age School		Primary & Junior High		Special School		Secondary High School		Technical High School		Total		
Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	
Availability of toilet paper	All the time	118	23	51	28	61	21	9	39	258	10	25	5	522	13	.000 <sup>a,b</sup>
	Most of the time	46	9	24	13	27	9	1	4	217	8	41	9	356	9	
	Sometimes	108	21	53	29	46	16	5	22	536	20	162	34	910	22	
	Never	217	43	55	30	152	53	5	22	1,549	59	233	50	2,211	54	
	Not stated	16	3	2	1	1	0	3	13	61	2	9	2	92	2	
	Total	505	100	185	100	287	100	23	100	2,621	100	470	100	4,091	100	
Availability of soap	All the time	180	36	56	30	66	23	10	43	229	9	42	9	583	14	.000 <sup>a,b</sup>
	Most of the time	66	13	18	10	43	15	2	9	217	8	52	11	398	10	
	Sometimes	136	27	43	23	81	28	4	17	589	22	110	23	963	24	
	Never	106	21	64	35	95	33	2	9	1,531	58	257	55	2,055	50	
	Not stated	17	3	4	2	2	1	5	22	55	2	9	2	92	2	
	Total	505	100	185	100	287	100	23	100	2,621	100	470	100	4,091	100	

<sup>b</sup> The minimum expected cell count in this sub table is less than one. Chi-square results may be invalid.

As shown in table 5 below, with the exception of all age schools and technical high schools, at least three in five students from all type of schools, led by primary and junior high schools with 70% of students, said their schools' bathroom had water all the time. However, up to 4% of students at primary and junior high schools reported that water was never in their schools' bathrooms. A statistical significant relationship between type of school and availability of water was rendered invalid since the minimum expected cell count in this sub table is less than one.

As regards to the general status of schools' bathrooms, students' opinions varied greatly resulting in a p value of 0.0 indicating a relationship between type of school and students' opinion about their schools' bathroom status, however, this result may be invalid since the minimum expected cell count in this sub table is less than one.

Additionally, the proportion of students who said their schools' bathrooms were always clean and functioning ranged from 13% (technical high schools) to 43% (special schools). Seventeen percent (17%) of students from primary, special and technical high institutions said their schools' bathrooms were always dirty and in disrepair compared to 5% of students at all age schools.

### *Safe Drinking Water*

All 43 administrators who responded to the survey said their school had safe drinking water from fountains/taps for students. The vast majority (93%) also reported that the fountains/taps were accessible to physically challenged students.

**Table 5. Selected Environmental Variables from Students' Perspectives by Type of School, cont'd**

Environmental Variables and Categories		School Type														
		Primary School		All Age School		Primary & Junior High		Special School		Secondary High School		Technical High School		Total		
Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	p value
Availability of water in schools' bathrooms	All the time	311	62	89	48	200	70	15	65	1,682	64	234	50	2,531	62	.000 <sup>a,b,c</sup>
	Most of the time	103	20	34	18	38	13	2	9	522	20	71	15	770	19	
	Sometimes	65	13	54	29	36	13	3	13	349	13	151	32	658	16	
	Never	6	1	3	2	12	4	0	0	21	1	4	1	46	1	
	Not stated	20	4	5	3	1	0	3	13	47	2	10	2	86	2	
	Total	505	100	185	100	287	100	23	100	2,621	100	470	100	4,091	100	
Bathroom Status	Always clean and functioning	86	17	54	29	78	27	10	43	374	14	60	13	662	16	.000 <sup>a,b</sup>
	Sometimes clean	193	38	75	41	111	39	6	26	1095	42	204	43	1,684	41	
	Sometimes dirty	114	23	34	18	57	20	2	9	605	23	108	23	920	22	
	Always dirty and in disrepair	88	17	9	5	31	11	4	17	391	15	82	17	605	15	
	I don't know	11	2	9	5	8	3	0	0	108	4	14	3	150	4	
	Not stated	13	3	4	2	2	1	1	4	48	2	2	0	70	2	
	Total	505	100	185	100	287	100	23	100	2,621	100	470	100	4,091	100	

<sup>b</sup>. The minimum expected cell count in this sub table is less than one. Chi-square results may be invalid.

<sup>c</sup>. More than 20% of cells in this sub table have expected cell counts less than 5. Chi-square results may be invalid.



## 2) Nutrition

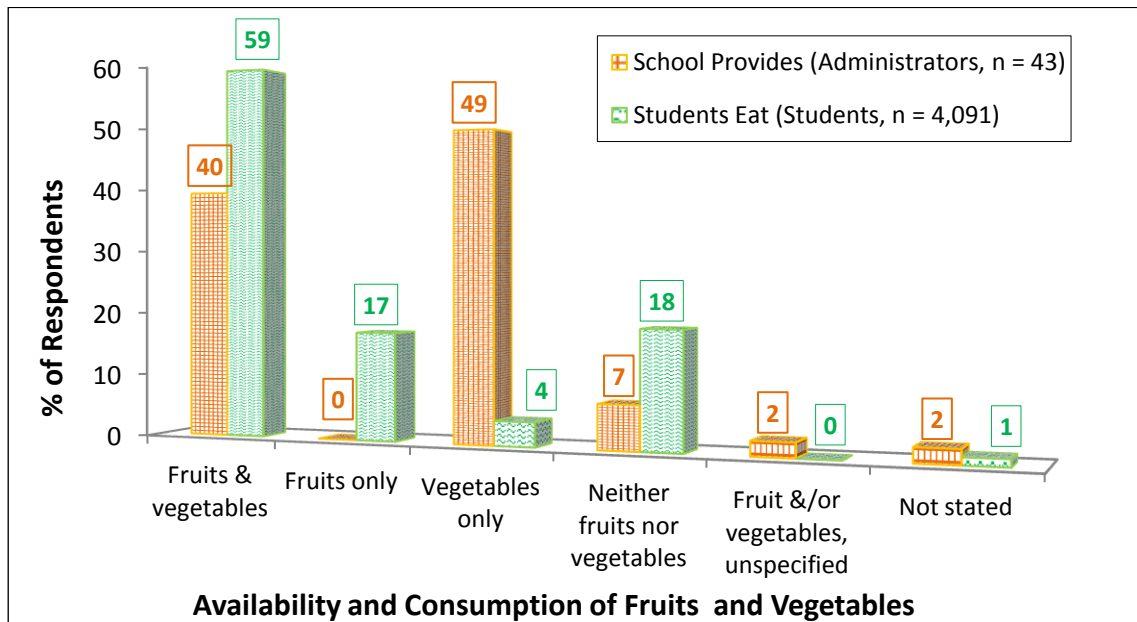
The survey assessed school health in terms of nutrition by examining both the availability and actual consumption of healthy food items from the students' and administrators' perspectives. Both variety and regularity of consumption of these items were taken into consideration.

### *Access to and Consumption of Fruits and Vegetables*

Forty percent (40%) of responding administrators reported that both fruits and vegetables were available at their school while 7% said their school did not provide fruits or vegetables for students.

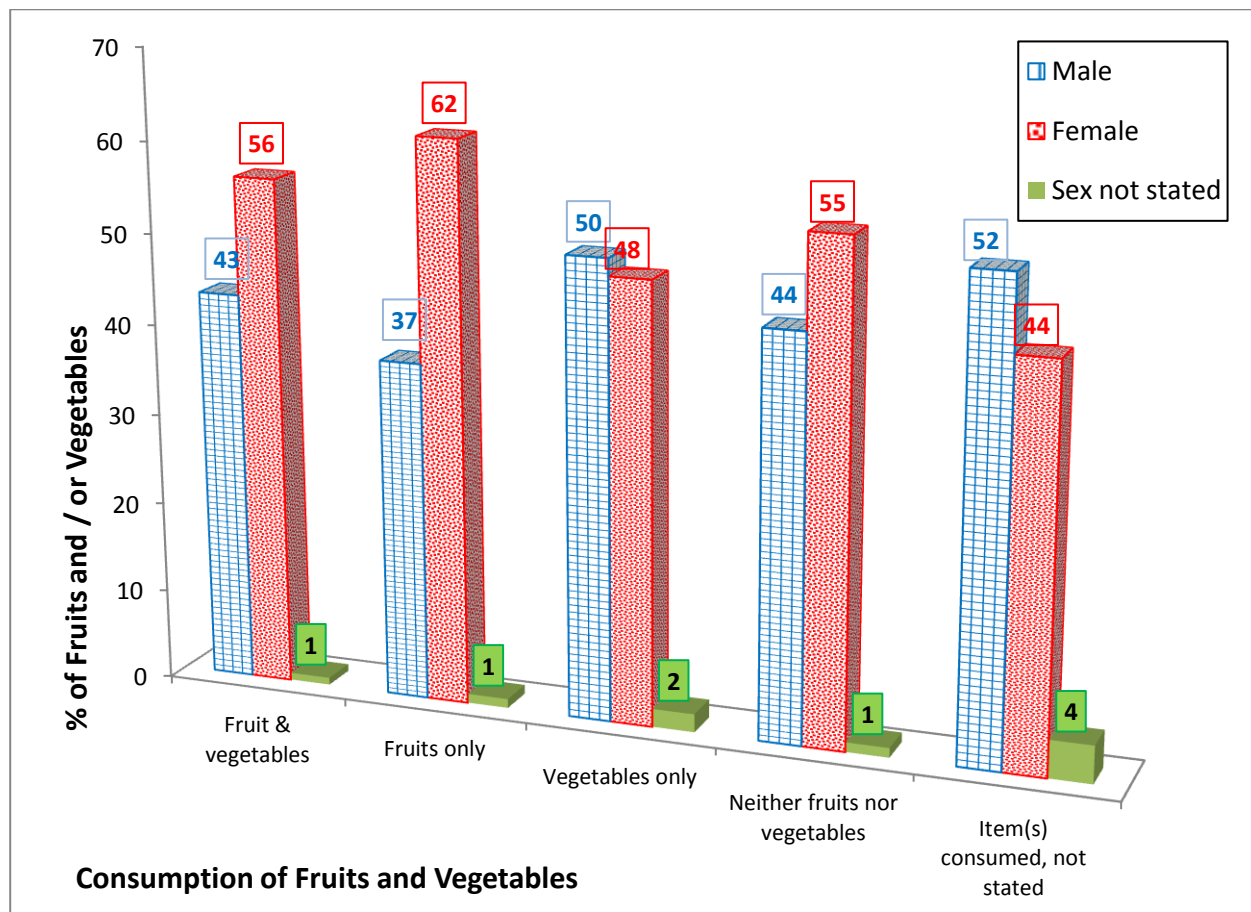
When asked about what they usually eat in general (not specific to consumption at school), 59% of the responding students said that they regularly ate fruits and vegetables while 18% indicated that they did not regularly eat fruits or vegetables (figure. 4).

**Figure 4. Availability and Consumption of Fruits and Vegetables**



As shown in figure 5 below, girls outranked their male counterparts regarding consumption of fruits and vegetables and fruits only. Slightly more males than females stated that they ate vegetables only while there were more females than males who said they ate neither fruits nor vegetables.

**Figure 5. Consumption of Fruits and Vegetables by Sex**



When student consumption of fruits and vegetables was analysed by school type, it was found that 7 out of every 10 students surveyed from primary, all age and junior high schools said they normally ate both fruits and vegetables. This response was also received from almost a half of students from special schools, secondary and technical high schools.

With p values of 0.00, statistical significant relationships were indicated between consumption of

fruits and vegetables and type of school. However, this was rendered invalid since the minimum expected cell count in this sub table is less than one (table 6).

**Table 6. Fruits and Vegetable Consumption of Students by School Type**

Consumption of Fruits & Vegetables	School Type														p value
	Primary School		All Age School		Primary & Junior High		Special School		Secondary High School		Technical High School		Total		
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	
Fruit & vegetables	361	71	139	75	201	70.0	11	48	1,443	55	279	59	2,434	59	.000 <sup>a,b,c</sup>
Fruits only	85	17	23	12	45	15.7	3	13	463	18	80	17	699	17	
Vegetables only	13	3	7	4	17	5.9	3	13	103	4	14	3	157	4	
Neither fruits nor vegetables	42	8	13	7	23	8.0	4	17	581	22	90	19	753	18	
Not stated	4	1	3	2	1	0.3	2	9	31	1	7	1	48	1	
Total	505	100	185	100	287	100	23	100	2,621	100	470	100	4,091	100	

<sup>b</sup>. The minimum expected cell count in this sub table is less than one. Chi-square results may be invalid.

<sup>c</sup>. More than 20% of cells in this sub table have expected cell counts less than 5. Chi-square results may be invalid.

An investigation of the frequency of consumption of fruits and vegetables by students is displayed in table 7 below. It was found that close to a half (44%) of the students reported that they ate fruit once per day, while approximately 51% said that they ate vegetables once per day. Approximately one out of seven students (14%) reported that they did not eat fruits while 23% said they did not eat vegetables. Note however, that there were some students who reported eating fruits (7%) and/or vegetables (4%) six or more times per day (in general and not exclusively at school).

**Table 7. Students' Self-reported Frequency of Consumption of Fruits and Vegetables**

	Fruits		Vegetables	
	# of Students	% of Students	# of Students	% of Students
<b>None</b>	574	<b>14</b>	951	<b>23</b>
<b>1 time per day</b>	1,802	<b>44</b>	2,065	<b>51</b>
2-3 times per day	1,204	29	717	18
4-5 times per day	198	5	160	4
<b>6 or more times per day</b>	272	<b>7</b>	172	<b>4</b>
Not Stated	41	1	26	1
<b>Total</b>	<b>4,091</b>	<b>100</b>	<b>4,091</b>	<b>100</b>

The percentages based on univariate analysis reveals inconsistencies with students' response with regards to frequency of consumption of fruits and/or vegetables. These inconsistencies were confirmed when cross tabulation (bivariate analysis) of items usually eaten was ran against variables for regularity of fruits and vegetables consumption. This was evident since only 8% of students who reported not usually consuming either fruits or vegetables *also* reported "none" when asked about frequency, in terms of times per day, of consumption of fruits and vegetables.

#### *Variety of Fruits and Vegetables*

While 65% of administrators did not respond or provided invalid responses in regards to variety of fruits, those who responded stated nine (9) different varieties of fruit as being available to students at their schools. Approximately one-quarter (23%) reported that ripe bananas were available, followed by citrus and June plums at approximately 19% each. Guavas, papayas and pineapples were least commonly reported at 2% each (table 8).

**Table 8. Variety of Fruits available to Students**

<b>Fruits</b>	<b>% of Administrators (n = 43)</b>
Ripe bananas	23
Citrus	19
June plums	19
Apples	14
Melon	9
Fruit plate / In season fruits	5
Guavas	2
Papaya	2
Pineapple	2
Not stated / Invalid response	65

\*Multiple responses accepted from each administrator.

As shown in table 9, ten (10) different varieties of vegetables were reported by administrators as being available to students daily. The most common type of vegetables reported were cabbage and carrots (over 70% each), while callaloo was the least commonly reported at 5%.

**Table 9. Variety of Vegetables available to Students**

<b>Vegetables</b>	<b>Percent of Respondents (n=43)</b>
Cabbage	74
Carrots	77
Tomatoes	42
Cucumber	35
Lettuce	21
Pak choi	9
Mixed vegetable / Tossed vegetable	9
Peas & beans	9
Sweet pepper	9
<b>Callaloo</b>	<b>5</b>
Vegetable not stated	21

\*Multiple responses accepted from each administrator.

### *Source and Variety of Lunch and Snacks*

Students were asked where they obtained their lunches and snacks, with one or more responses accepted from each student. As shown in table 10 below, the primary sources reported were school canteens at 76%, followed by school tuck shops at 66%. Approximately two out of five students (39%) noted school vendors as a source of food while 16% indicated that they brought their lunches and snacks from home. Approximately one in eight students (13%) indicated the School Feeding Programme as their source while a few students (less than 1%) provided a written “other” response noting that the Programme of Advancement Through Health and Education (PATH) was a source of their lunches and snacks.

While a relatively low percentage (13%) of students reported the School Feeding Programme as a source of their lunches and snacks, the vast majority of the responding administrators, 91%, reported that the School Feeding Programme was present at their school.

**Table 10. Sources of Lunches and Snacks reported by Students**

	<b>% of Students (n = 4,091)</b>
Canteen	76
Tuck shop	66
School vendors	39
From home	16
School feeding programme	13
Outside restaurant	1
Not specified	1
Source not stated / Invalid response	1

\*Multiple responses accepted from each student.

Students were also asked to indicate what food items were generally available at the tuck shop using a pre-determined list of items with space provided for additional responses. Over 80% of students reported that sodas, bag/box drinks, patties and fruit juices respectively, were available at their school’s tuck shop. Sweets were listed by over 60% of the students as being available at the tuck shop, while approximately a half indicated that fried chicken, cooked meals and pastries were also available. The least commonly reported items were burgers, box milk and individual packets of cheese, each cited by just one or two students. Although bottled water and vegetables

were not items in the pre-determined list, a few students (0.3% and 0.1% respectively) cited them as available items at their school's tuck shop.

### 3) Physical Activity

With respect to physical activity, the survey sought to ascertain whether there was access to play areas and the availability of structured physical education sessions for students among other things.

#### *Access to Play Area*

As displayed in table 11 below, the vast majority (93%) of administrators said students at their school had access to an area for playing, while 79% of students surveyed reported that they had access to a play area.

**Table 11. Access to Play Area**

	<b>Administrators</b>		<b>Students</b>	
	<b># of Administrators</b>	<b>% of Administrators</b>	<b># of Students</b>	<b>% of Students</b>
No	2	5	771	19
Yes	40	93	3,233	79
Not stated	1	2	87	2
<b>Total</b>	<b>43</b>	<b>100</b>	<b>4,091</b>	<b>100</b>

#### *Physical Education (PE) Sessions*

Just over three-quarters (77%) of administrators reported that their school offered one PE session per week, whereas approximately 41% of the students surveyed said they had one PE session per week. None of the administrators reported that their school offered no PE sessions at all, while approximately one in five (22%) of students said they do not have any weekly PE sessions at their school (table 12).

Six (6) of the forty three (43) administrators said that their school did not have a teacher assigned exclusively to teach PE.



**Table 12. Number of Physical Education Sessions per Week**

	Administrators (n = 43)		Students (n = 4,091)	
	# of Administrators	% of Administrators	# of Students	% of Students
<b>None</b>	0	<b>0.0</b>	910	<b>22</b>
One session	33	77	1,670	41
Two sessions	4	9	1,188	29
Three sessions	3	7	86	2
Four sessions			82	2
More than four sessions			106	3
Not stated	3	7	49	1
<b>Total</b>	<b>43</b>	<b>100</b>	<b>4,091</b>	<b>100</b>

Nineteen percent (19%) of students reported that they did not participate in PE sessions weekly, while 62% said they participated regularly and 16% said they participated sometimes (figure. 6).

**Figure 6. Participation in Physical Education Sessions as Reported by Students**

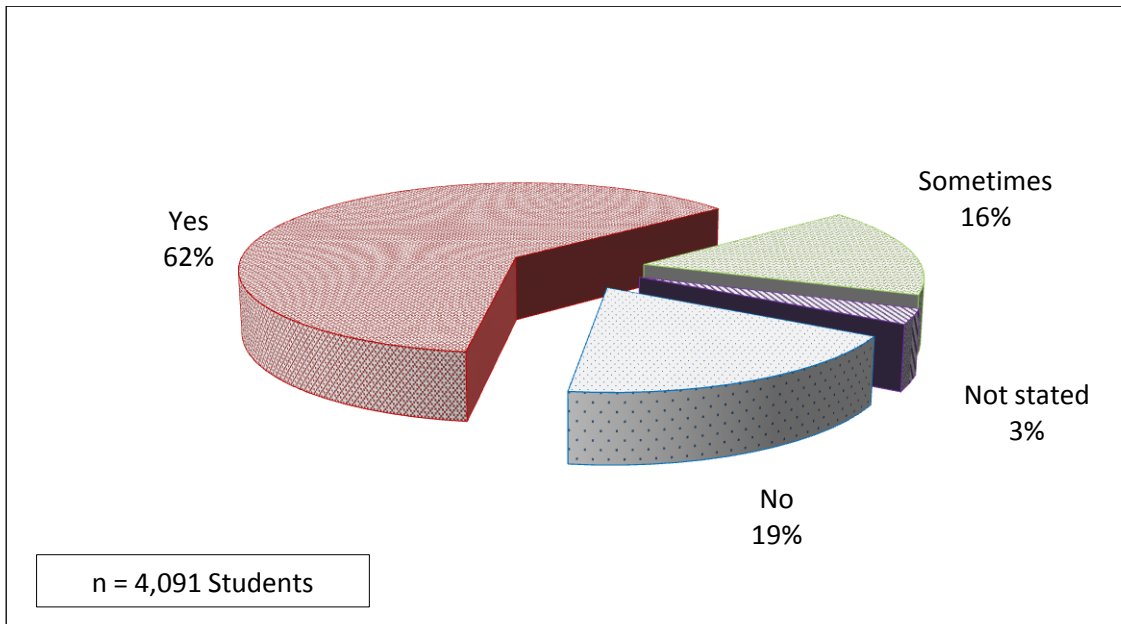
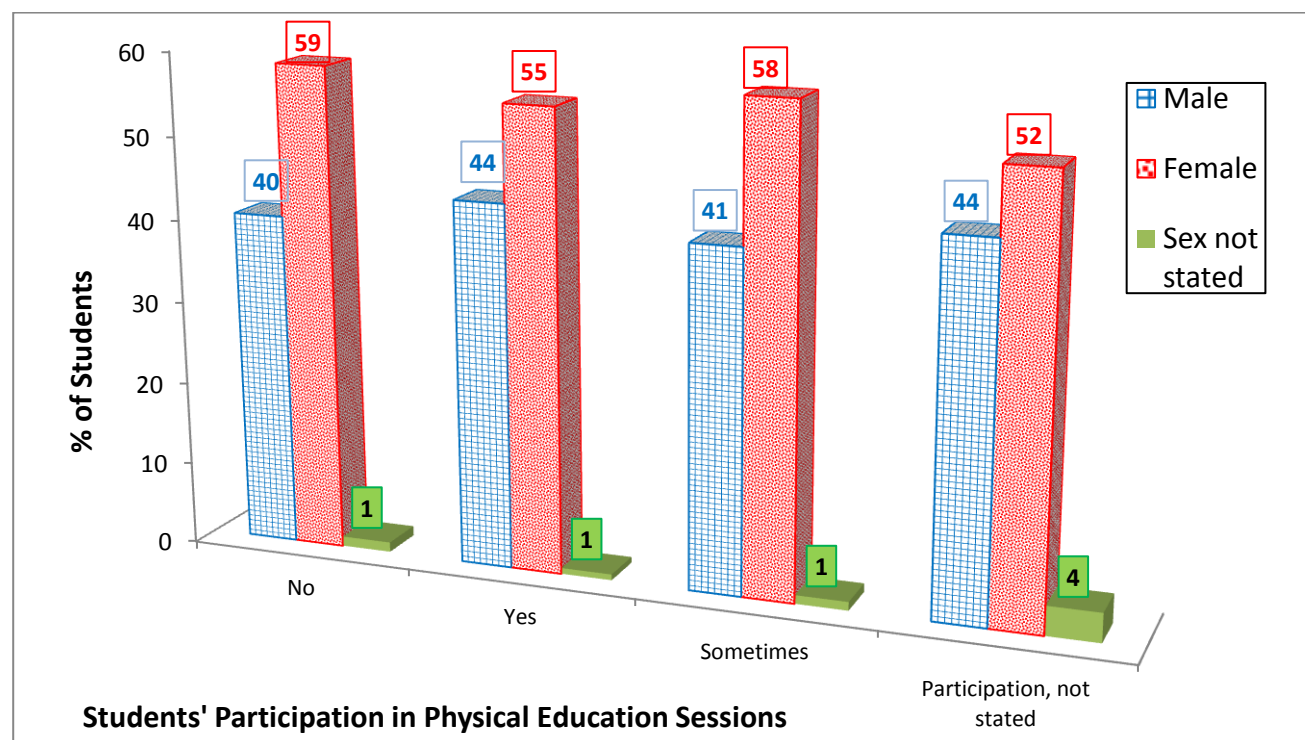


Figure 7 shows students' reported participation in PE sessions. The ratio of male to female students who said they participated in PE sessions reflects the overall sex ratio with more females than males saying yes they participated and that they participated sometimes. However, sex ratios for students who said no (0.68 male: female) or sometimes (0.71) were less than the overall sex ratio.

A p value of 0.027 indicates a statistically significant relationship between sex and the students' self-reported participation in PE sessions.

**Figure 7. Students Participation in PE Sessions by Sex**



Students reported PE sessions as ranging from 20 minutes to 60 minutes or more in duration. The majority reported participating in PE sessions for 60 minutes or more (38%) followed by 45 minutes (19%).

As shown in table 13 below, 44% of full day and three quarters of shift based secondary schools

surveyed did not offer PE at all grades. Only one primary and junior high full day high school reported not offering PE at all grades.

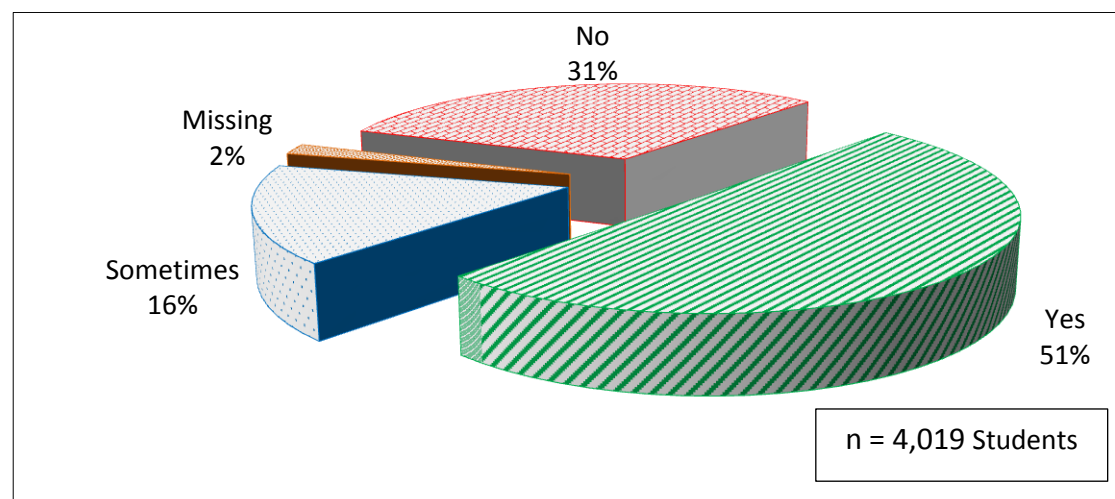
**Table 13. Physical Education Sessions offered at ALL Grades by School Type according to Administrators**

PE offered at ALL Grades	Type of School						Total
	Primary - Full day	Primary & Jr. High - Shift	Primary & Jr. High - Full day	Secondary - Shift	Secondary - Full Day	Type of School - Not stated	
No	0	0	1	3	8	0	12
Yes	8	1	6	1	10	4	30
Not Stated	1	0	0	0	0	0	1
<b>Total</b>	9	1	7	4	18	4	43

*Students' Participation in Physical Activities Other than School PE Sessions*

Figure 8 shows students' reported participation in physical activities other than school PE sessions. Over half the students definitively reported that they participate in physical activity other than PE sessions while over 3 in 10 said they did not.

**Figure 8. Students Participation in Physical Activity Other than PE Sessions**



#### 4) Mental Health

##### *Guidance Counsellor*

Almost all administrators (39/43; 91%) reported that their school had a Guidance Counsellor. Among those who reported not having a Guidance Counsellor, two (2) stated that guidance and counselling was handled by the principal and two (2) stated that issues were addressed by referrals to external agencies such as the Child Development Agency (CDA) and private counsellors. All 4 of these schools are primary full day schools.

##### *Emotional Problems and Source of Support*

Students were asked whether they had experienced specific types of feelings in the previous month. As shown in table 14 below, the most common emotion acknowledged was sadness at 52%, followed by loss of interest in activities usually enjoyed (36%). It must be noted that more than one in eight (13%) students expressed that they had felt “like hurting myself” during the previous month.

**Table 14. Emotions Experienced by Students in Past Month**

<b>Emotion</b>	<b>% of Students (n=4,091)</b>
Sad	52
Loss of interest in activities that you usually enjoy	36
Hopeless	21
Crying for no reason	18
<b>Feel like hurting yourself</b>	<b>13</b>
Not stated	11

\*Multiple responses accepted from each student.

Figure 9 below shows that a greater proportion of female students reported that they experienced the different emotions noted than their male counter parts, with the greatest disparity (55%) between sexes was for students who reported feel like crying for no reason in the past month.

Based on p values, a statistically significant relationship was found between sex and students' reported experiences with feeling sad, hopelessness and crying for no reason. The result for feel

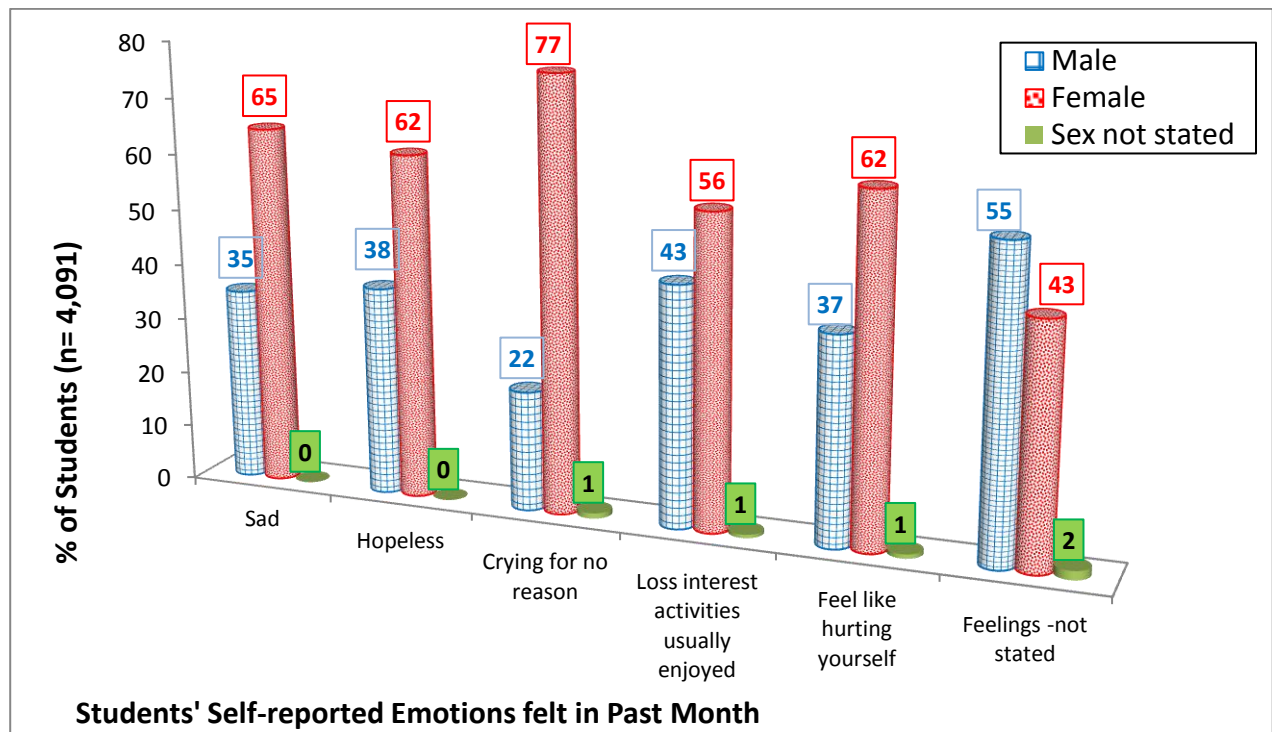
like hurting your-self was rendered invalid.

When emotions experienced were analysed by school type as displayed in table 15, it was found that that approximately half of the students from all type of schools, other than special schools (35%), said they felt sad during the month prior to the survey. Furthermore, 4% of students at special schools to 26% of students at technical high schools said they felt hopeless in the past month. One in five students at technical high schools said they cried for no reason during the month prior to the survey.

Regarding loss interest in activities they normally enjoyed, the majority of students who responded positively to this were from secondary and technical high schools (39%) and the least from special schools (9%). At least 9% of students from all type of schools said they felt like hurting themselves with the greatest proportion being from primary and technical high schools each accounting for 15%.

All types of emotions were found to have statistical significant relationships with type of school.

**Figure 9. Emotions Reported by Students, by Sex**



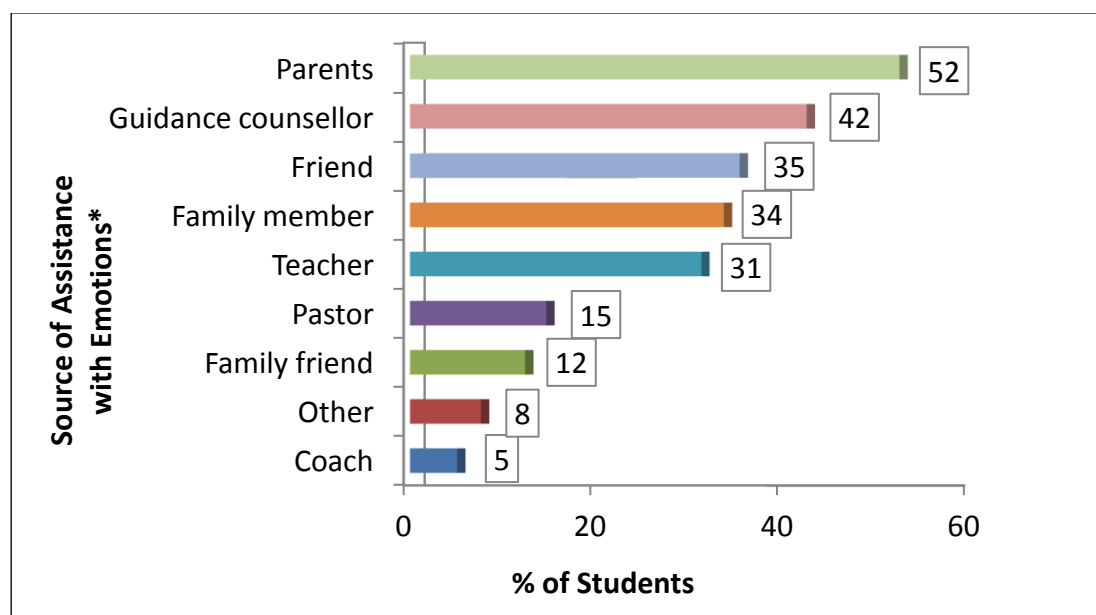
**Table 15. Self- Reported Emotions from Students by Type of School**

		School Type															
		Primary School		All Age School		Primary & Junior High		Special School		Secondary High School		Technical High School		Total			
		Count	%	Count	%	Count	%	Coun t	%	Count	%	Count	%	Count	%	p value	
Sad	No	211	42	89	48	96	33	7	30	930	35	183	39	1,516	37	.000*	
	Yes	250	50	89	48	160	56	8	35	1,405	54	229	49	2,141	52		
	Not stated	44	9	7	4	31	11	8	35	286	11	58	12	434	11		
	Total	505	100	185	100	287	100	23	100	2,621	100	470	100	4,091	100		
Hopeless	No	361	71	145	78	229	80	14	61	1,771	68	292	62	2,812	69	.000*	
	Yes	100	20	33	18	27	9	1	4	563	21	120	26	844	21		
	Not stated	44	9	7	4	31	11	8	35	287	11	58	12	435	11		
	Total	505	100	185	100	287	100	23	100	2,621	100	470	100	4,091	100		
Cry for no reason	No	379	75	146	79	210	73	12	52	1,866	71	317	67	2,930	72	.000*	
	Yes	82	16	32	17	46	16	3	13	467	18	94	20	724	18		
	Not stated	44	9	7	4	31	11	8	35	288	11	59	13	437	11		
	Total	505	100	185	100	287	100	23	100	2,621	100	470	100	4,091	100		
Loss interest in activities normally enjoyed	No	308	61	126	68	205	71	13	57	1,321	50	230	49	2,203	54	.000*	
	Yes	153	30	52	28	51	18	2	9	1,013	39	182	39	1,453	36		
	Not stated	44	9	7	4	31	11	8	35	287	11	58	12	435	11		
	Total	505	100	185	100	287	100	23	100	2,621	100	470	100	4,091	100		
Feel like hurting self	No	385	76	159	86	229	80	13	57	1,999	76	343	73	3,128	76	.000*	
	Yes	76	15	19	10	27	9	2	9	335	13	69	15	528	13		
	Not stated	44	9	7	4	31	11	8	35	287	11	58	12	435	11		
	Total	505	100	185	100	287	100	23	100	2,621	100	470	100	4,091	100		

\*. The Chi-square statistic is significant at the .05 level.

Students were also asked who they go to for assistance when experiencing the negative emotions referred to above. As shown in figure 10 below, students stated that they most frequently turned to their parents for assistance with negative emotions (52%), followed by school guidance counsellors (42%). Friend(s) (35%), family member (34%) and teacher (31%) were also reported as common sources of assistance with managing emotions.

**Figure 10. Students' Sources of Assistance with Emotions (n=4,091)**



#### *Behavioural Problems and Method of Resolution*

Students were asked whether people have complained that they exhibited certain identified behavioural problems listed in table 16 below. More than half (about 55%) of the students reported that no one had complained about them demonstrating any of the behaviours listed. For those who had heard complaints, the complaints people most commonly expressed were that they “tell lies” (38%), “do not pay attention” (24%), and “have too much energy” (19%).

**Table 17. Students' Self-reported Behavioural Problems**

<b>Student Self-reported Behavioural Problems*</b>	<b>Count</b>	<b>% of Respondents (n=4,091)</b>	<b>% of Complaints (n=2,739)</b>
<b>Tell Lies</b>	1,034	25	38
Do not pay attention	661	16	24
Have too much energy	523	13	19
<b>Steal</b>	381	9	14
Hide from school	140	3	5
None of the above	2,238	55	
Behavioural Problem - Not stated	84	2	
<b>Total</b>	<b>5,061</b>		

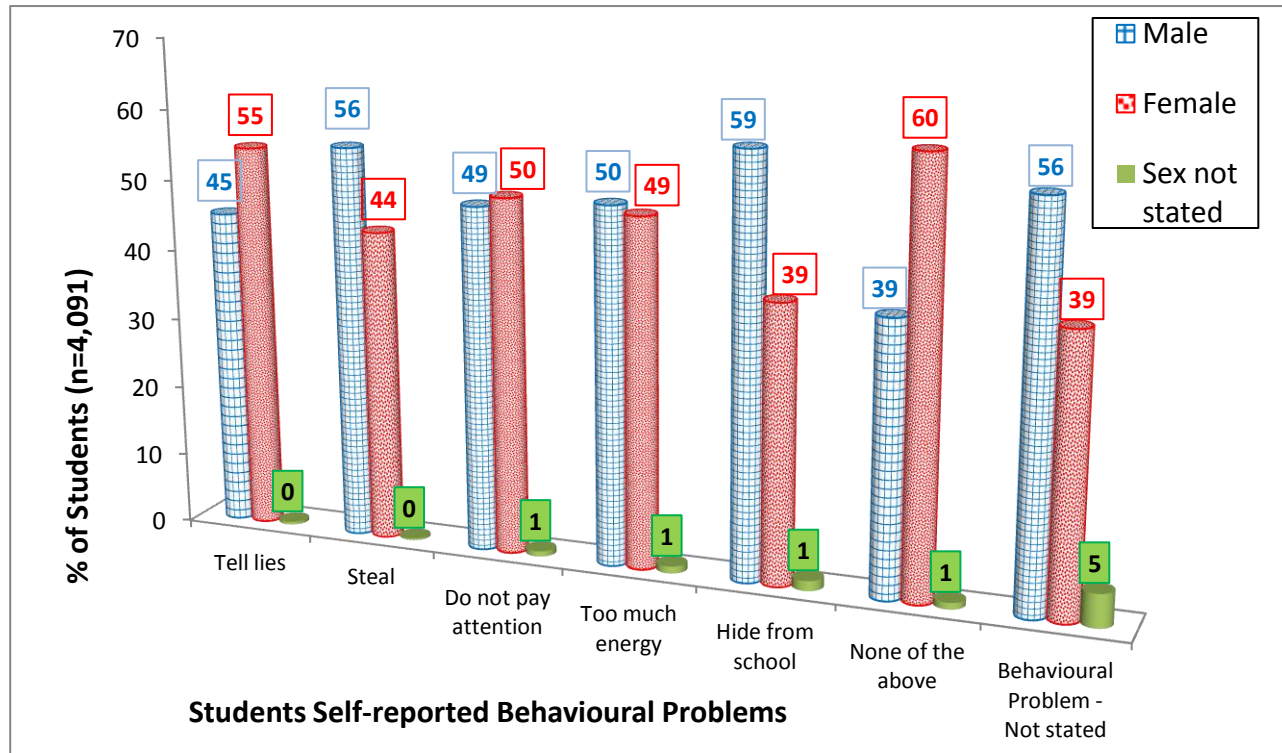
\*Multiple responses accepted from each student.

Figure 11 shows the distribution of the stated behavioural problems by sex. There were more girls than boys who said persons complained that they told lies while more boys reported that persons complained that they stole and hid from school. Almost equal percentages of boys and girls reported that persons complained that they did not pay attention and had too much energy.

The statistical tests for significant relationships between each behavioural problem and sex were rendered invalid due to low expected counts in sub tables.



**Figure 11. Behavioural Problems analysed by Sex**



When the management of behavioural problems was investigated, it was found that 5 of the 43 administrators reported that parents/guardians were rarely involved in handling students' emotional or behavioural problems but no administrator said parents were never involved.

As shown in table 17 below, 44% of administrators reported that between one and ten students were referred to outside agencies such as the Child Development Agency, Child Guidance Clinic (located at the University of the West Indies) and Office of the Children's Registry for emotional and behavioural problems, while 16% reported that more than 20 students were referred externally.

**Table 17. Number of Students Referred to Outside Agencies**

Number of students	# of Administrators	% of Administrators
0	4	9
1-10	19	44
11-20	3	7
20+	7	16
Not stated	10	23
<b>Total</b>	<b>43</b>	<b>99*</b>

\*Due to rounding

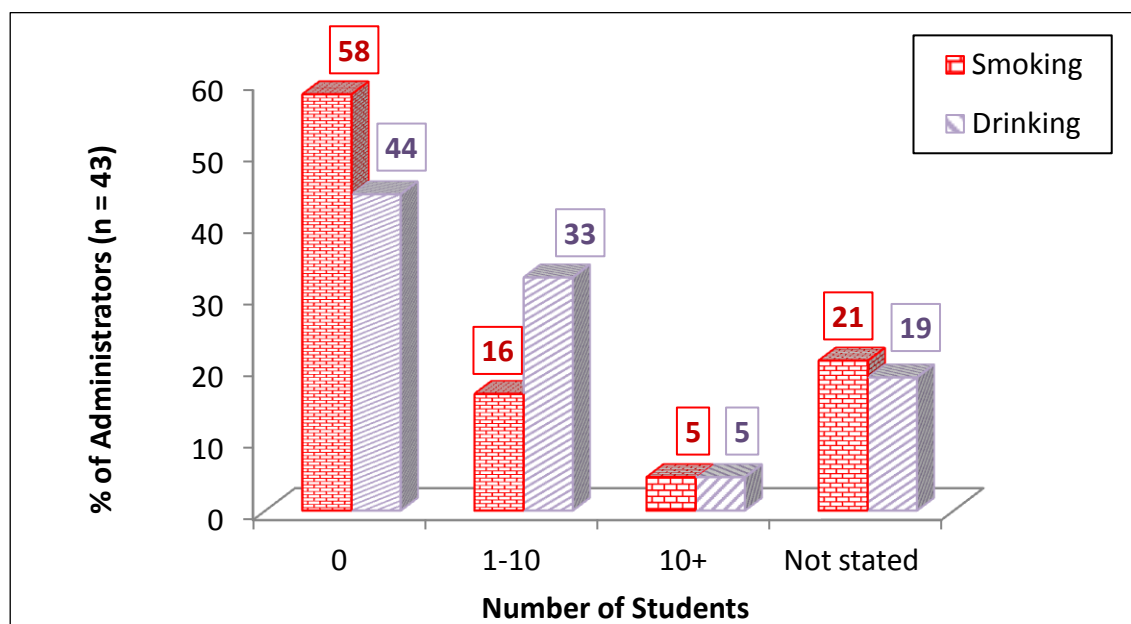
## **5) Substance Abuse**

### *Smoking and Alcohol*

Administrators were asked whether students were caught drinking or smoking in the past school year. At 58%, the majority of administrators said that no student had been caught smoking, while 44% said that none had been caught drinking. Sixteen percent (16%) reported that between one and ten students had been caught smoking while one-third (33%) reported that between one and ten had been caught drinking. Five percent (5%) of administrators reported that more than 10 students were caught drinking or smoking in the past school year (figure 12).

Students were asked “During the past month, have you smoked any of the following?” They were provided with a list of specific substances as well as the option to provide other responses including “Do not smoke”. Sixteen percent (16%) of the surveyed students indicated that they had not smoked in the past month, while approximately 52% did not respond to the question. The most commonly reported substances smoked were ganja at approximately 6%, followed by cigarette (5%) and tobacco (3%). It should be noted that 1% of the students reported smoking crack and heroin respectively in the past month. Less than 1% of students reported smoking substances such as grabba, lizard tail, prescribed drugs and ash juice (table 18).

**Figure 12. Students Caught Smoking or Drinking at School in Past School Year**



**Table 18. Substances Smoked in Past Month as Self-reported by Students**

Substance Smoked in past month	Count	Percent of Respondents (n=4,091)
Stated "Do Not Smoke"	656	16
Ganja	252	6
Cigarette	194	5
Tobacco	122	3
Seasoned 'Spliff'	58	1
Crack	43	1
Paper and Leaf of Almond / Banana / Cho Cho / Hibiscus	42	1
Heroin	38	1
Other, not stated	871	21
No indication of smoking status	2,131	52
<b>Total Count</b>	<b>4,421</b>	

\*Multiple responses accepted from each student.

As regards to substance abuse, the data showed gender differences with more female students reporting that they drank alcohol and smoked cigarettes than their male counterparts while more males said they smoked tobacco, ganja, seasoned spliff, crack and heroin.

Only smoking tobacco and ganja were found to be substances that were valid and statistically significant in relation to sex.

## **6) Violence and Injury Prevention**

This section presents on conflicts and mechanisms available and accessed to deal with them in the schools surveyed.

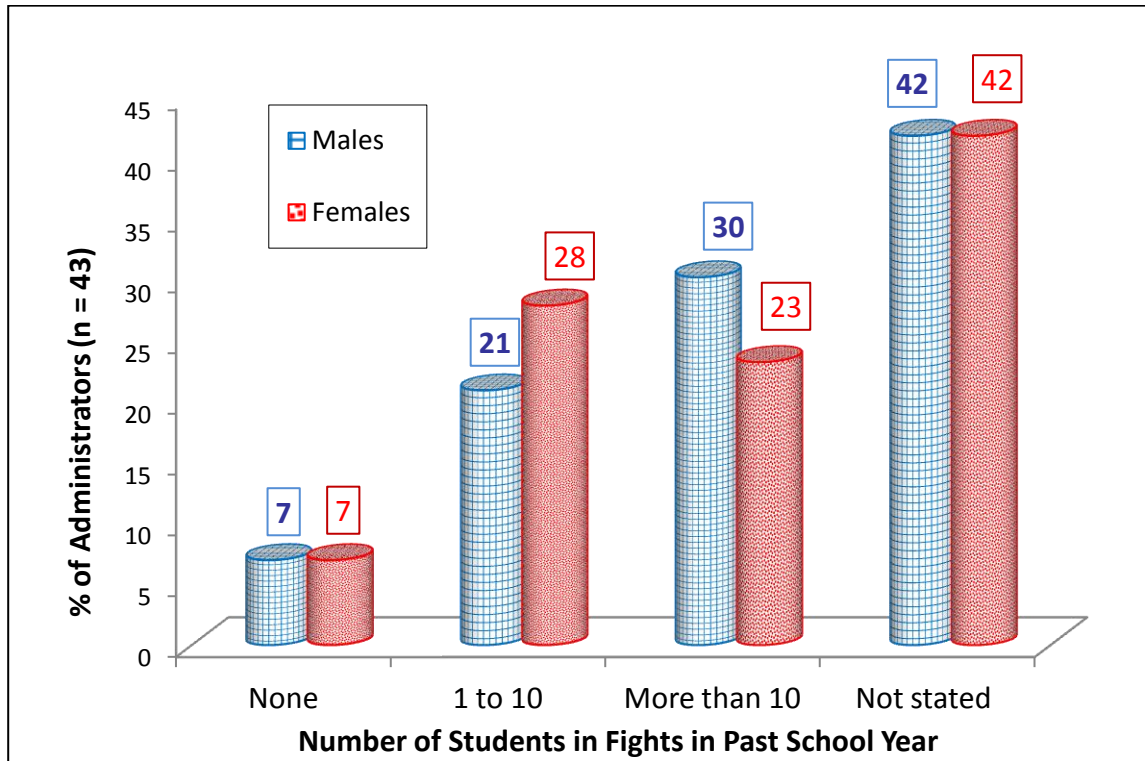
### *Fights*

Administrators were asked about the number of students involved in fights over the past year specified by sex. As shown in figure 13, just under a half (42%) of the administrators surveyed did not provide a response while 7% reported no fights either among male or female students. Only one school was an all-girls school. Twenty-eight percent (28%) of the administrators reported that girls were involved in 1-10 fights compared to 21% reporting males being involved in 1-10 fights. However, more males were involved in more than 10 fights as reported by 30% of administrators compared to 23% who reported female students being involved in more than 10 fights.

When asked about witnessing fights at school, 20% of students stated that they had not witnessed any fights at school while some gave no response to the question. Thirty-three percent (33%) of the students reported having witnessed 2-4 fights in the past month, while 11% had witnessed between 5-7 fights and approximately 15% witnessed eight or more fights (table 19).

Also displayed in table 19 is the number of fights witnessed by students according to school type. Seven percent (7%) of students surveyed from primary schools and 43% of students from special schools said they did not witness any fight in the month prior to the survey. Almost one fifths of students from all types of school with the exception of special schools (13%) witnessed a fight in

**Figure 13. Number of Students in Fights by Sex as Reported by Administrators**



the past month while more than 15% of students, led by primary schools (27%), from all type of schools except special schools (9%) and secondary high schools (12%) said they witnessed fights eight to ten times in the past month.

With p values of  $0.00 < 0.05$  statistical significant relationships were indicated between number of fights witnessed by students and type of school. However, this was rendered invalid since the minimum expected cell count in this table is less than one.

Students were further questioned as to whether they had witnessed fights involving weapons to which 60% responded negatively. Twenty-seven percent (27%) reported witnessing between 1-3 fights involving weapons while 5% reported witnessing more than 9 fights in which weapons were used in the month prior to the survey (table 20).

**Table 19. Student Reports of Number of Fights Witnessed by School Type**

Number of time witnessed fights in the past month	School Type														
	Primary School		All Age School		Primary & Junior High		Special School		Secondary High School		Technical High School		Total		
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	p value
Did not witness fight	34	7	30	16	27	9	10	43	633	24	91	19	825	20	.000 <sup>a,b,c</sup>
1 time	107	21	38	21	69	24	3	13	486	19	88	19	791	19	
2-4 times	158	31	60	32	101	35	6	26	882	34	158	34	1,365	33	
5-7 times	68	13	25	14	37	13	1	4	271	10	41	9	443	11	
8-10 times	136	27	29	16	46	16	2	9	320	12	88	19	621	15	
Not stated	1	0	1	1	1	0	1	4	13	0	1	0	18	0	
Witness Fight but did not state Frequency	1	0	2	1	6	2	0	0	16	1	3	1	28	1	
Total	505	100	185	100	287	100	23	100	2,621	100	470	100	4,091	100	

<sup>b</sup>. The minimum expected cell count in this sub table is less than one. Chi-square results may be invalid.

<sup>c</sup>. More than 20% of cells in this sub table have expected cell counts less than 5. Chi-square results may be invalid.

**Table 20. Fights with Weapons Witnessed by Students at School in Past Month**

	# of Students	% of Students
None	2,470	60
1 to 3	1,117	27
4 to 6	163	4
7 to 9	64	2
More than 9	200	5
Not stated	77	2
<b>Total</b>	<b>4,091</b>	<b>100</b>

Administrators were also questioned as to whether they were aware of fights among students involving weapons to which 18 reported no female students being involved in fights with weapons; 12 said they had seen between 1 and 7 fights with weapons among female students and 13 did not respond. For male students, 16 Administrators reported between 1 and 8 fights with weapons, 2 reported 10 and one reported 20. Ten (10) administrators said they were not aware of any fight among male students that involved weapons and 14 did not respond.

#### *Method of Conflict Resolution*

Table 21 shows the methods students reported employing to resolve conflicts. At approximately 43%, majority of the students reported that their main method of addressing conflicts at school was to “walk away”, representing more than three times the 13% of students who chose to “fight it out”. Nearly one out of five students (17%) indicated that they responded to conflicts by speaking to an adult, while 22% reported that they generally “talk it out”.

**Table 21. Students’ Self-reported Method of Dealing with Conflict**

	# of Students	% of Students
Talk it out	905	22
<b>Fight it out</b>	550	<b>13</b>
Speak to an adult	687	17
I walk away	1,754	43
Other	162	4
Not stated / Invalid response	33	1
<b>Total</b>	<b>4,091</b>	<b>100</b>

### *Disciplinary Methods*

Students were asked about methods of discipline utilized by teachers in the schools using a pre-determined list of methods with the option to provide additional responses. The most common disciplinary method that students reported observing teachers use was “talk to them”, reported by 51% of students. This was followed by 38% who reported that teachers called in or gave a letter to their parents, 35% who said teachers sent students out of class and 24% who said they have seen teachers send students for counselling. According to 15% of students, teachers beat students as a method of discipline, while 9% reported that teachers called students names (table 22). Other methods such as conduct forms/order marks, expulsion, put/stand in corner and ignore the student were reported by less than 1% of students.

**Table 22. Teachers’ Disciplinary Methods as Observed by Students**

	<b>% of Students (n=4,091)</b>
Talk to them	51
Call in parents / Give letter to give parents	38
Send them out of class	35
Send them for counselling	24
Beat student	15
Call them names	9
Demerit / Detention / Suspension	4
Apply punishment by chores / Lines	1
Send student to higher authority	1
Show verbal/physical aggression	1
Other, not specified	1
Not stated	1

\*Multiple responses accepted from each student.

According to most administrators, the combination of counselling, parental involvement and suspension were used as measures in response to students’ behavioural problems.



## 7) Reproductive Health

Students were asked about their source of information on sex and what they knew about preventing the spread of Human Immunodeficiency Virus (HIV) and other sexually transmitted diseases (STDs).

### *Source of Information on Sex*

Approximately three-quarters of the students (74%) reported that they received information about sex from their guidance counsellor, 56% reported obtaining information from their parents and approximately a half (51%) said they received information about sex from their teachers (table 23).

**Table 23. Students' Sources of Information about Sex**

Source of Information*	% of Students (n=4,091)
Guidance Counsellor	74
Parents	56
Teacher	51
TV / radio	46
Other family	37
Internet	34
Friend	33
Magazine	26
Family friend	19
Other	5

\*Multiple responses accepted from each student.

### *Knowledge of HIV and STD Prevention*

Approximately two-thirds (68%) of the students surveyed said that a method of preventing the spread of HIV and STDs is condom use, while about 64% acknowledged abstinence as a prevention method and 40% said “stick to one faithful partner”. Over one-quarter (28%) of the students indicated that avoidance of blood transfusions is a method of prevention of HIV and STDs, while 6% said “no hugging or kissing” prevents the spread of HIV and STD (table 24).

**Table 24. Students' Knowledge about HIV / STD Prevention**

<b>Method Of Prevention*</b>	<b>% of Students (n=4,091)</b>
Condom use	68
Abstinence	64
Stick to one faithful partner	40
No blood transfusion	28
I do not know	8
No hugging or kissing	6
Not stated	1

\*Multiple responses accepted from each student.

## **8) School Health Services**

### *Sick Bay and First-aid Kit*

Approximately three-quarters (74%) of administrators reportedly having a “sick bay” or room designated for the treatment and observation of students and staff when needed, at the school. Additionally, 91% reported that their school had a first aid kit or cupboards with materials and medications readily available to staff and students<sup>2</sup>.

### *Availability of School Nurse*

Fifty one percent (51%) of administrators reported that their school had a school nurse. Those without a school nurse indicated that there was a protocol in place where students with a medical issue are escorted to the nearest health facility (health centre or hospital) by a member of the school staff (usually a guidance counsellor) and parents are informed.

Students were also asked whether there was a nurse on staff at their school. Just over two-thirds (70%) of the students reported that there was a nurse at their school, while 26% said there was not. The remainder either did not know or did not respond.

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<sup>2</sup> Percentages based on responses from 41 of the 43 administrators for questions regarding sick bay facility and first aid supplies.

### *School Health Programme Medical Form Used*

As table 25 shows, 8 administrators reported that their school did not use the School Health Programme Medical form. Three of these 8 (38%) schools are primary full day schools. Of the 29 schools that reportedly used the form, 52% (15 of 29) are secondary full day schools.

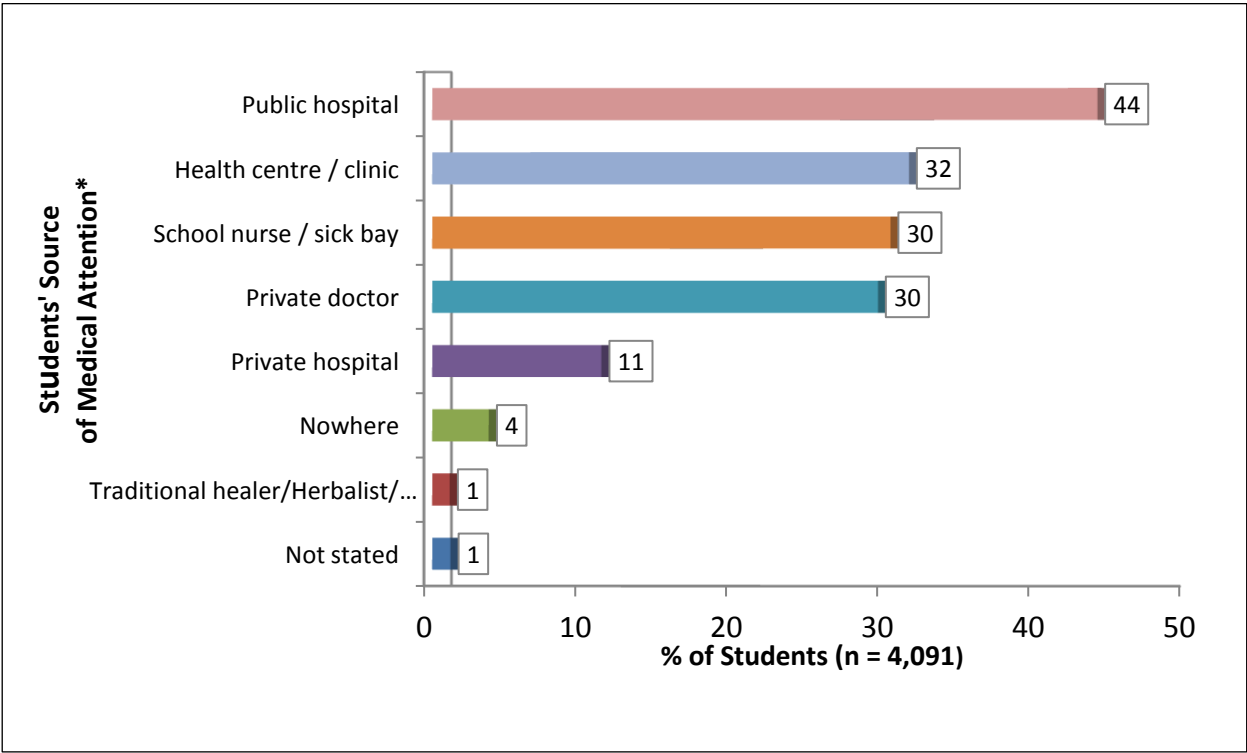
**Table 25. School Health Programme Medical Form Used by School Type**

<b>School Health Programme Medical Form Used</b>	<b>Type of School</b>						
	Primary - Full day	Primary & Jr. High - Shift	Primary & Jr. High - Full day	Secondary - Shift	Secondary - Full Day	Type of School - Not stated	Total
No	<b>3</b>	1	1	0	1	2	8
Yes	4	0	4	4	<b>15</b>	2	29
Not Stated	2	0	2	0	2	0	6
<b>Total</b>	9	1	7	4	18	4	43

### *Students' Source for Medical Attention*

Students were asked to indicate where they went when they were sick or needed to see a doctor. Approximately three-quarters (76%) of the students indicated that they either went to a public hospital (44%) or health centre (32%). Close to one-third (30%) said they went to their school nurse or sick bay while a similar percentage said that they went to a private doctor. Approximately one in ten (11%) sought medical attention at a private hospital, while 1% said they went to a traditional healer/herbalist, bush doctor or obeah man. Four percent (4%) of students indicated that they went “nowhere” for medical attention (figure 14).

**Figure 14. Students' Source of Medical Attention**



\* Multiple responses accepted from each student.

## SUMMARY OF FINDINGS – Regional Level

The regional analysis presented below is based on the six MOE administrative regions:

**Region I. Kingston** – Kingston and St. Andrew;

**Region II. Port Antonio** – St. Thomas, Portland and St. Mary;

**Region III. Brown’s Town** – St. Ann and Trelawny;

**Region IV. Montego Bay** – St. James, Hanover and Westmoreland;

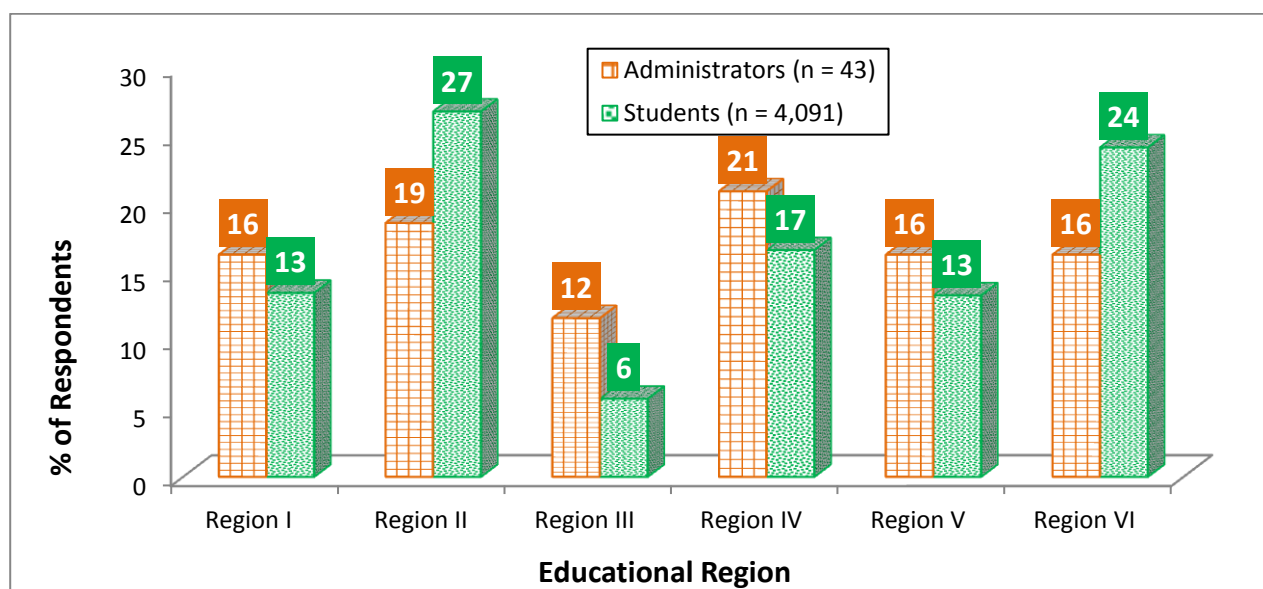
**Region V. Mandeville** – St. Elizabeth, Manchester and North Clarendon and;

**Region VI. Old Harbour** – Clarendon and St. Catherine.

The participating schools from each of these regions are documented in Appendix C.

As shown in figure 15 below, the largest proportion of school administrators in the survey were from Region IV at 21%, followed by Region II at 19%. Regions I, V and VI were each represented by 16% of the total of 43 school administrators, while 12% were from Region III. Among students who participated in the survey, the largest proportion was from Region II at 27% of the 4,091 students followed by Region VI with 24%. Seventeen percent (17%) of the students in the survey were from Region IV, while 13% were from Regions I and V. At 6%, Region III had the smallest proportion of students participating in the survey.

**Figure 15. Distribution of Administrators and Students by Ministry of Education Region**



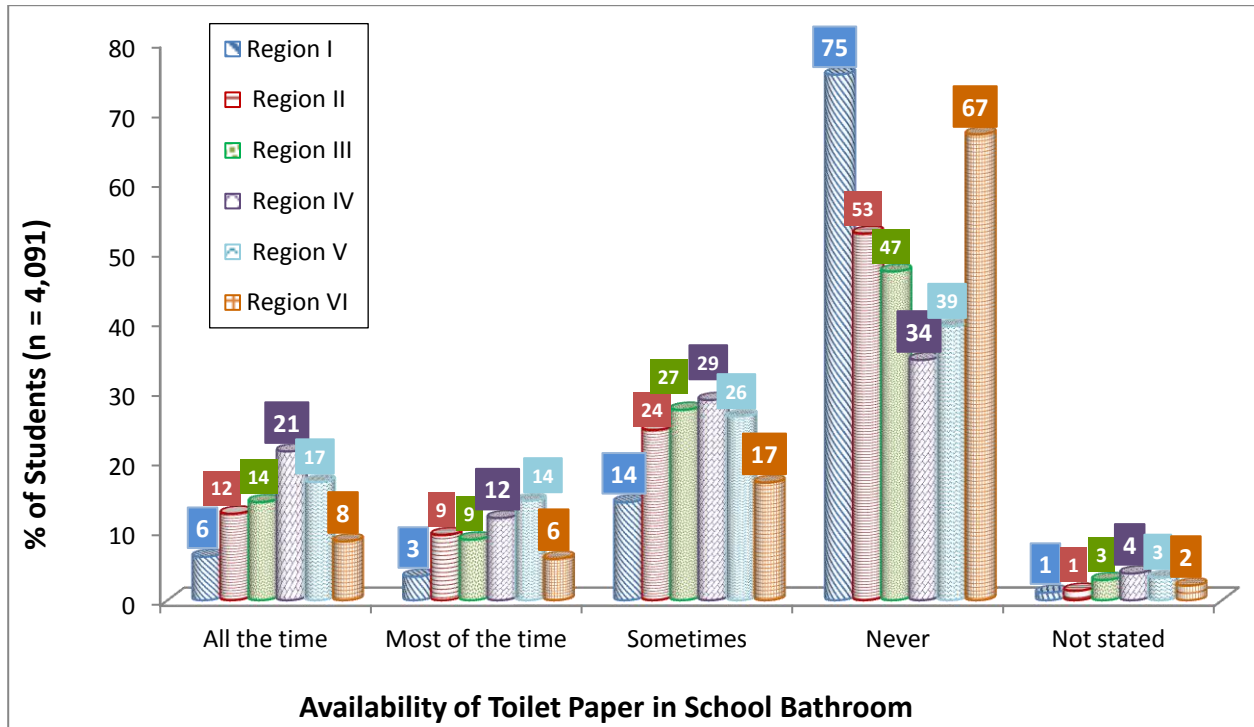
## 1) Environmental Health

### *Bathroom facilities*

As shown in figure 16 below, less than a quarter of the students in all regions reported that toilet paper was available all the time in their school's bathrooms. The highest percentage of students reporting that toilet paper was available all the time (21%) or sometimes (29%) were from Region IV while Region I had the lowest percentage of students who reported toilet paper being available all (6%) or some (14%) of the time.

With three out of four students (75%), Region I had the highest percentage of students who said that toilet paper was *never* available in their school's bathroom, while Region IV with 34% of students had the least. These results show a statistically significant relationship between education region and the availability of toilet paper in school bathrooms ( $p=0.00 < 0.05$ ).

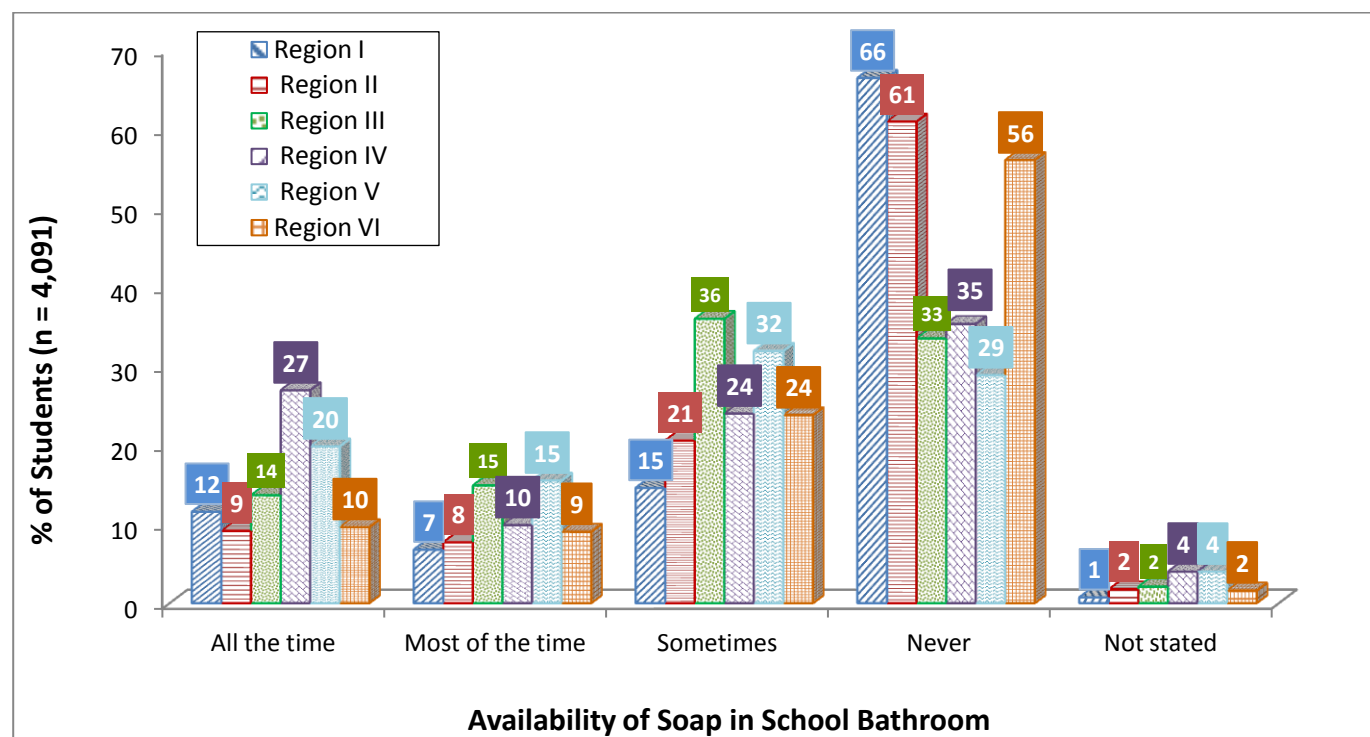
**Figure 16. Availability of Toilet Paper as Reported by Students, by Education Region**



Similar to the results for the availability of toilet paper, less than a quarter of the students from all regions reported that soap was available all of the time in their school's bathrooms with the exception of Region IV at 27%. Students from Region I gave the most reports (66%) of soap *never* being available in their school's bathroom (figure 17).

There is a statistically significant relationship between region and the availability of soap in school bathrooms ( $p=0.00 < 0.05$ .)

**Figure 17. Availability of Soap as Reported by Students, by Education Region**



More than three out of every five students from all regions except Region II said their school bathroom had water all the time. The regions with the highest proportion of students reporting consistent water supply were Region V at 76% and Region I at 74%. None of the students from Regions V and VI said water was *never* in their school's bathroom. The percentage of students from other regions who said their school bathroom *never* had water was 1% except for Region II at 2%. A statistically significant relationship was found between region and the availability of water in school bathrooms ( $p=0.00$ ).

When asked about the status of their school's bathrooms, the percentage of students who reported that their school's bathrooms was "always clean and functioning" varied from 10% in Region II up to 28% in Region IV. The percentage of students who reported that their school's bathrooms were "always dirty and in disrepair", varied from 1% in Region IV to 21% in Region II. There is a statistically significant relationship between region and students' views on the cleanliness and functioning of their school's bathroom ( $p=0.00$ ).

## **2) Nutrition**

### *Students' Consumption of Fruits and Vegetables*

As shown in table 26 below, over half of the students from all regions said they usually eat both fruits and vegetables, with Region IV and Region V leading at 65%. In contrast, approximately one in five students in Regions II, III and VI reported that they ate neither fruits nor vegetables, as did 17% in Regions I and V, and 12% in Region IV. The p value of 0.00 associated with these results indicates a statistically significant difference across the education regions with respect to students' consumption of fruits and vegetables.

Over 40% of students from all but one region said they ate fruit once daily, led by Region I at 47%, and Regions II and VI at 46%. In Region IV, 38% of students said that they ate fruit once per day, while 10% of students from this region said they ate fruit 6 or more times per day. Less than one in ten students in each region said they did not generally eat fruit, with Region VI showing the highest percentage of students (17%) who responded in this manner. The p value of 0.00 associated with these results indicates a statistically significant difference across the regions with regard to the regularity with which students eat fruit.

In most regions, at least half of the students said they ate vegetables once daily, led by Regions III (56%) and V (55%). In Region IV, 45% of students said that they ate vegetables once per day, while 7% of students in this region reported that they ate vegetables 6 or times daily. At least one in five students in all regions except Region V said they did not eat vegetables daily with Regions I and III having the highest percentage (27%).



The p value of  $0.00 < 0.05$  associated with these results indicates a statistically significant relationship between education region and students' consumption of vegetables.

*Students' Self-Reported participation in School Feeding Programme*

Students were able to provide multiple responses when asked about their source for lunches and snacks. As shown in table 26 below, the proportion of students who stated that the School Feeding Programme was a source of their lunch and snacks ranged from 7% in Region I up to 24% in Region III.

A p value of 0.00 would indicate a significant relationship between participation in the school feeding programme and education region, however, this conclusion cannot be confirmed due to limited sample size (see foot notes for table 26).

**Table 26. Students' Nutrition Indicators by Education Region (n = 4,091)**

		Education Region													p value
		Region 1 - Kingston & St. Andrew		Region 2 - St. Thomas, Portland & St. Mary		Region 3 - St. Ann & Trelawny		Region 4 - St. James, Hanover & Westmoreland		Region 5 - St. Elizabeth & Manchester		Region 6 - Clarendon & St. Catherine		Total	
		Count	% of Region 1	Count	% of Region 2	Count	% of Region 3	Count	% of Region 4	Count	% of Region 5	Count	% of Region 6	Count	
Consumption of Fruits & Vegetables	Fruit & vegetables	333	59	577	55	135	56	444	65	360	65	585	58	2,434	0.00*
	Fruits only	109	19	190	18	45	19	119	18	71	13	165	16	699	
	Vegetables only	19	3	41	4	10	4	24	4	24	4	39	4	157	
	Neither fruits nor vegetables	98	17	224	22	50	21	80	12	95	17	206	20	753	
	Missing	4	1	9	1	2	1	13	2	5	1	15	1	48	
	Total		563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091
Regularity of Eating Fruits	None	68	12	154	15	34	14	71	10	72	13	175	17	574	0.0*
	1 time per day	262	47	478	46	110	45	260	38	230	41	462	46	1,802	
	2-3 times per day	172	31	301	29	71	29	218	32	170	31	272	27	1,204	
	4-5 times per day	19	3	42	4	6	2	48	7	39	7	44	4	198	
	6 or more times per day	38	7	55	5	19	8	71	10	41	7	48	5	272	
	Missing	4	1	11	1	2	1	12	2	3	1	9	1	41	
	Total		563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091
Regularity of Eating Vegetables	None	154	27	252	24	65	27	137	20	93	17	250	25	951	0.0*
	1 time per day	254	45	560	54	135	56	304	45	304	55	508	50	2,065	
	2-3 times per day	104	18	162	16	26	11	137	20	109	20	179	18	717	
	4-5 times per day	19	3	29	3	5	2	49	7	27	5	31	3	160	
	6 or more times per day	28	5	34	3	9	4	45	7	20	4	36	4	172	
	Missing	4	1	4	0	2	1	8	1	2	0	6	1	26	
	Total		563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091
School Feeding Programme as a Source of Lunches & Snacks															0.0 <sup>a,b,c</sup>
	No	524	93	877	84	182	75	584	86	499	90	873	86	3,539	
	Yes	38	7	162	16	59	24	91	13	56	10	130	13	536	
	Missing	1	0	2	0	1	0	5	1	-	-	7	1	16	
Total		563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091	

\*The Chi-square statistic is significant at the 0.05 level.

b. More than 20% of cells in this sub-table have expected cell counts less than 5. Chi-square results may be invalid.

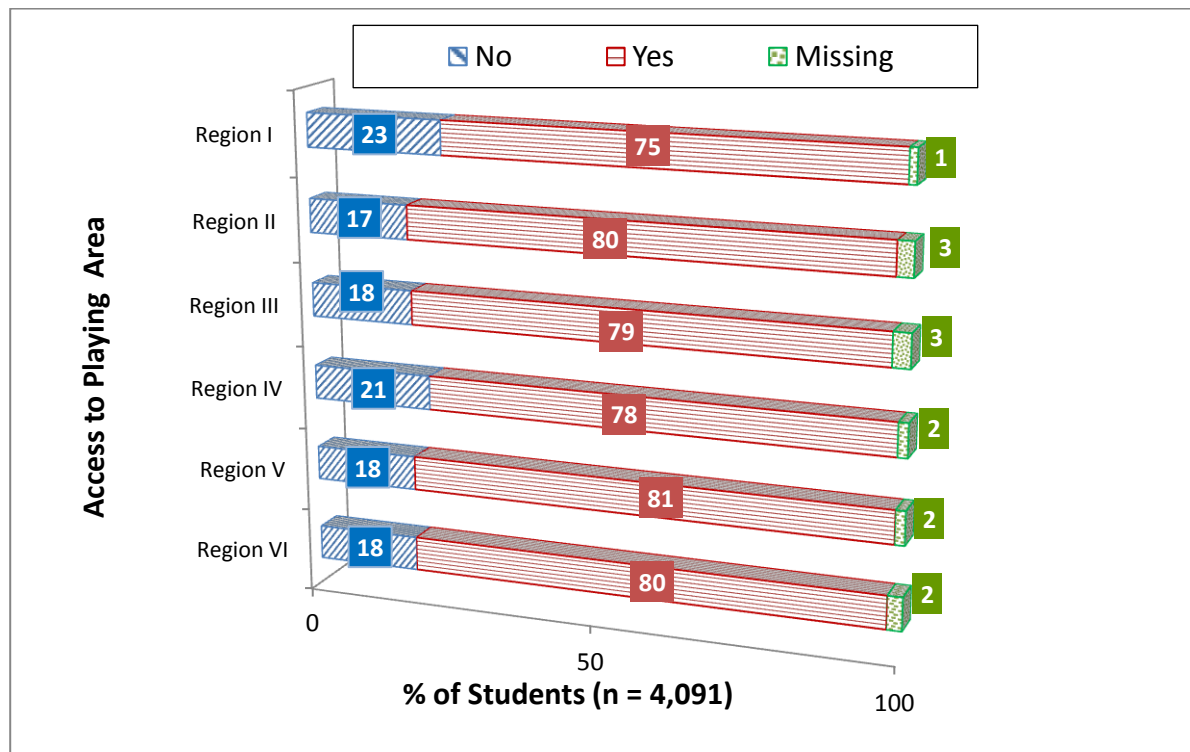
c. The minimum expected cell count in this sub-table is less than one. Chi-square results may be invalid.

### 3) Physical Activity

#### *Access to Playing Area*

As shown in figure 18, the proportion of students who reported that they have access to a play area at school ranged from 75% in Region I up to 81% in Region V. Statistical testing shows that there is no significant difference across the education regions with regard to students' access to a play area at their school.

**Figure 18. Access to Playing Area as Reported by Students, by Education Region**



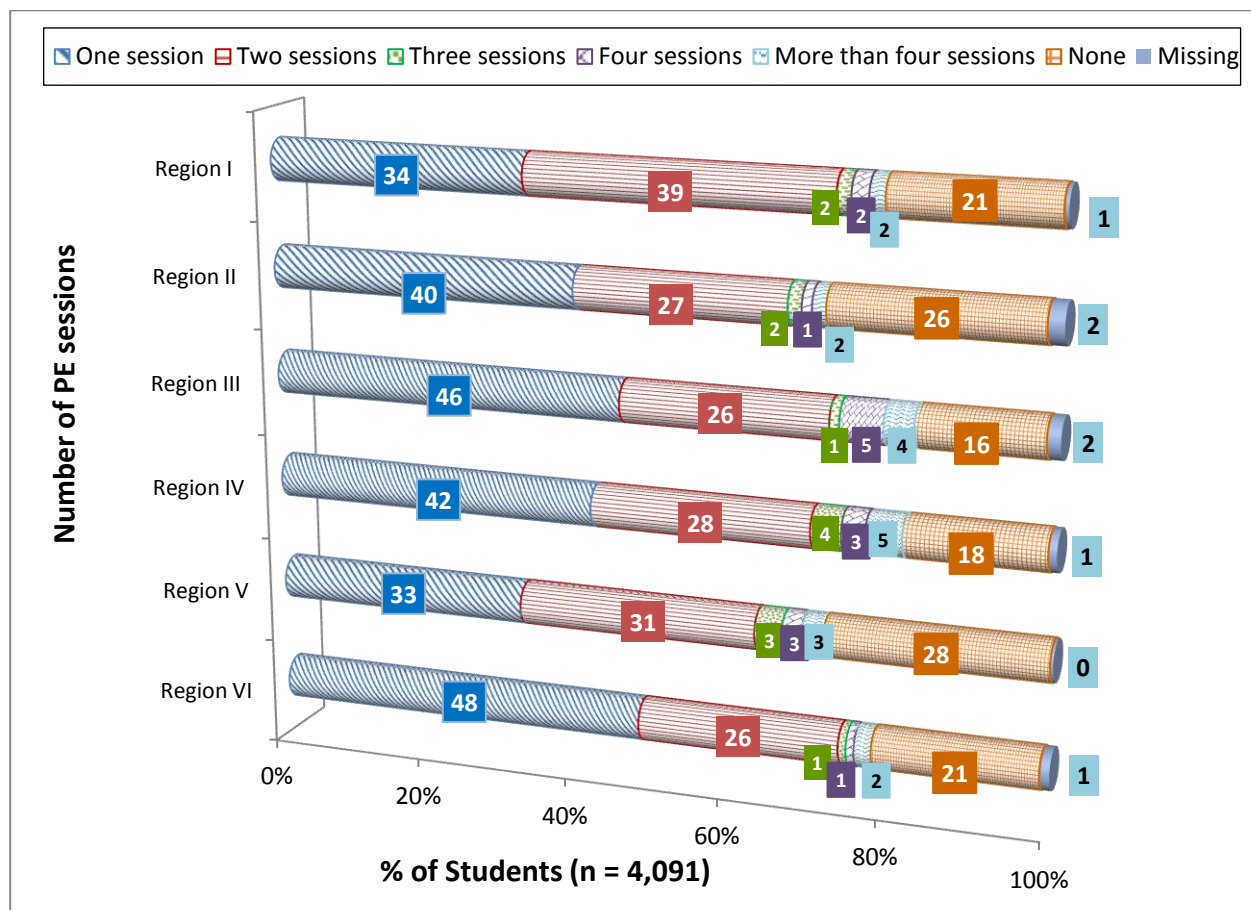
#### *PE Sessions*

Figure 19 below presents the number of weekly PE sessions offered by schools according to the students surveyed. Regions III and IV had the lowest proportion of students reporting that there are *no* weekly PE sessions offered, at 16% and 18% respectively. In comparison, Region II and Region VI had the highest proportion of students reporting there are *no* PE sessions at their

school at 26% and 28% respectively. The proportion of students who reported just one PE session per week varied widely, from 33% in Region V to 48% in Region VI.

These results show a statistically significant relationship between region and the number of school PE sessions reported by students ( $p = 0.00$ ).

**Figure 19. Number of Physical Education Sessions as Reported by Students, by Education Region**

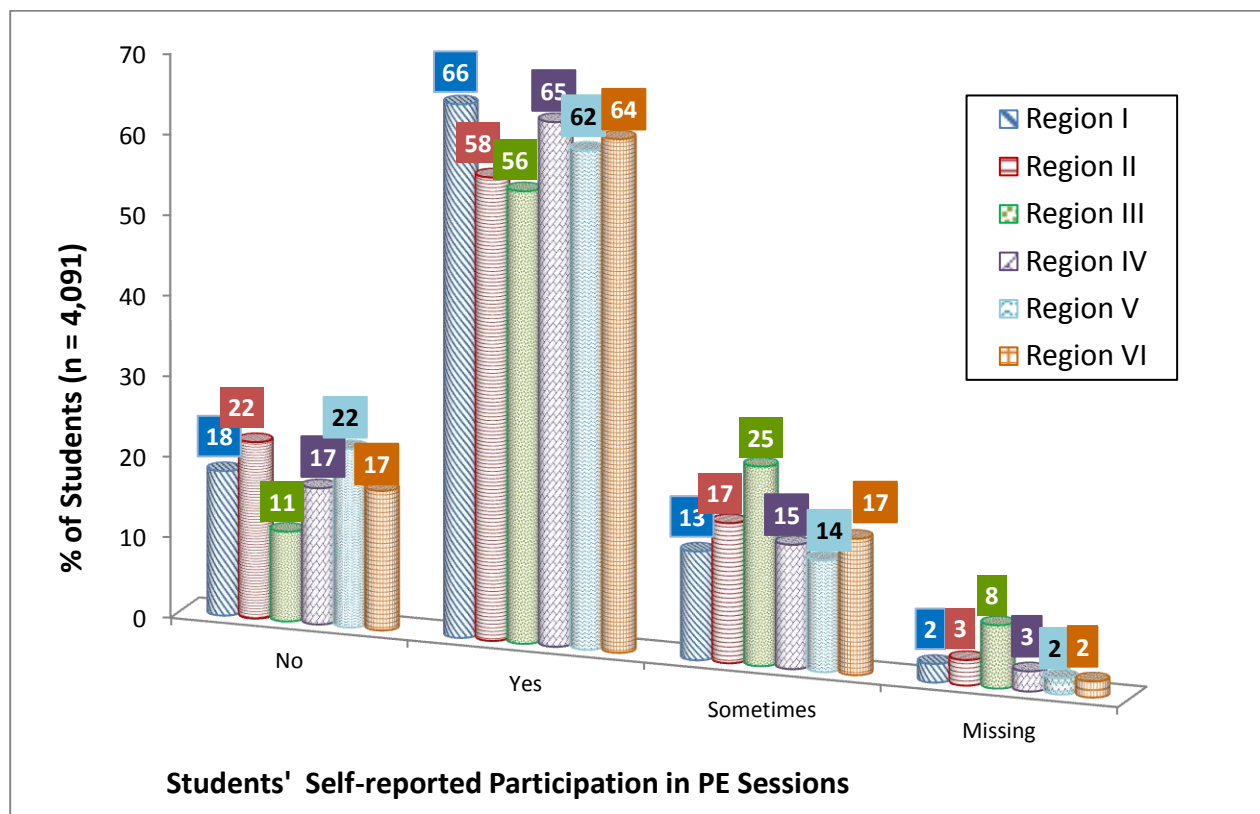


As shown in Figure 20 below, over three-quarter of students from all regions said they participated in PE sessions sometimes or all the time. Regions I and Region IV had the highest percentage of students who said they participated in PE sessions all the time at their schools, at 66% and 65% respectively. In comparison, Region II and Region V had the highest percentage of

students who said they *did not* participate in PE sessions at their school, at 22% each.

There is a statistically significant relationship between education regions and students' self-reported participation in PE sessions ( $p = 0.00$ ).

**Figure 20. Students' Self-reported Participation in Physical Education Sessions, by Education Region**



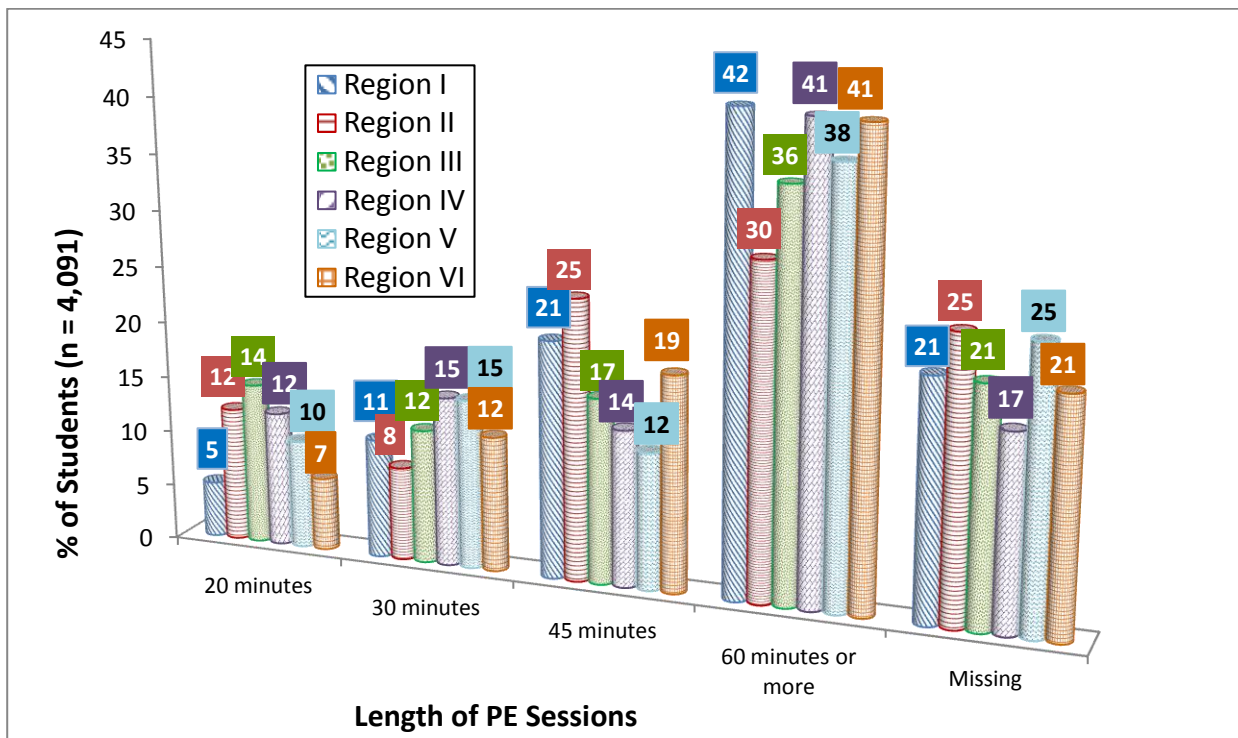
The region with the largest proportion of students reporting participation in PE sessions for 60 minutes or more was Region I at 42%, followed closely by Regions IV and VI at 41% each. Sixty minutes or more is the length of session recommended by the World Health Organization<sup>3</sup>. The

<sup>3</sup> World Health Organization (n.d.). School and Youth Health. *What is Health Promoting School?* Retrieved May 16, 2012 from [http://www.who.int/school\\_youth\\_health/gshi/hps/en/index.html](http://www.who.int/school_youth_health/gshi/hps/en/index.html) (p.7).

percentage of students who reported participating in PE sessions for 20 minutes or less ranged from 5% in Region I to 14% in Region III. This minimal length of time is less than the 30 minutes of physical activity recommended by the Ministry of Health (figure 21).

There is a statistically significant relationship between region and students' reported duration of participation in PE classes ( $p = 0.00$ ).

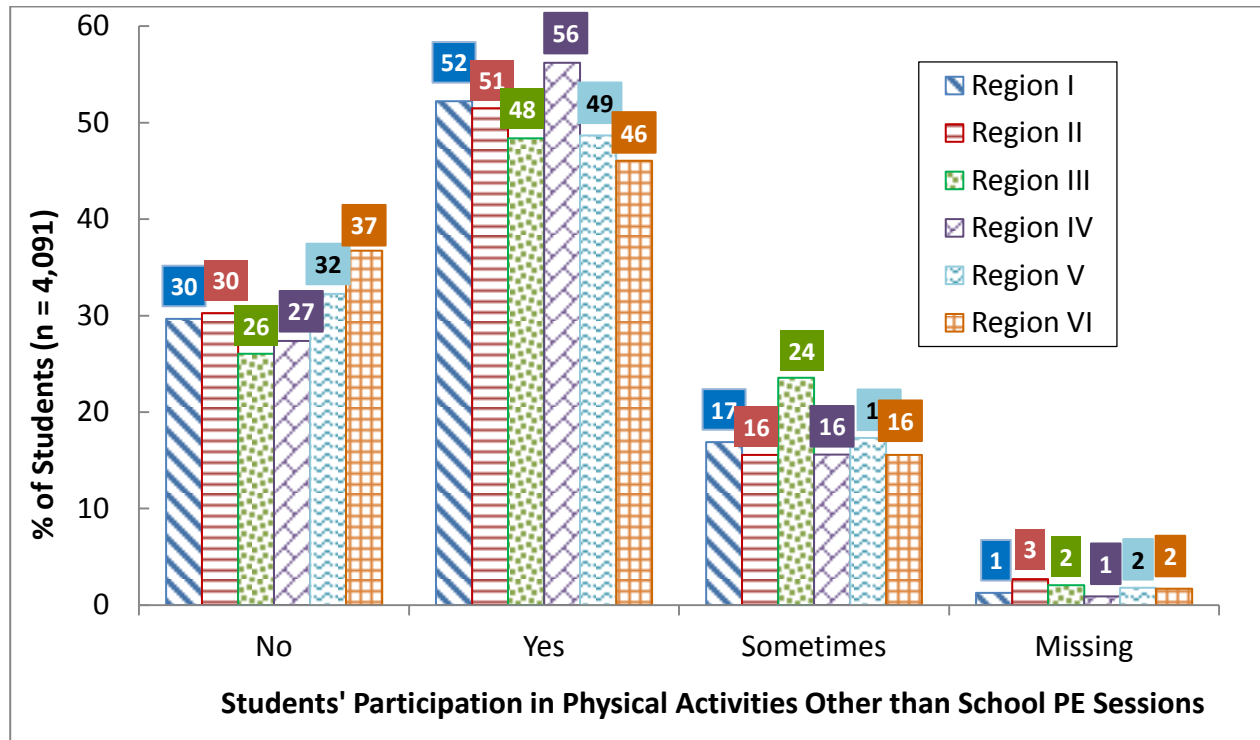
**Figure 21. Length of Physical Education Sessions as Reported by Students, by Education Region**



#### *Students' Participation in Physical Activities Other than School PE Sessions*

Figure 22 below reveals that almost half of the students from all regions with the exception of Regions III and Region VI reported that they engaged in physical activities other than PE sessions at school. At the same time however, more than a quarter of the students from all regions reported that they did not participate in physical activities outside of school PE sessions, with the highest percentage in Region VI at 37% followed by Region V at 32%.

**Figure 22. Students' Participation in Physical Activities Other than School PE Sessions, by Education Region**



There is a statistically significant relationship between region and students' participation in physical activities outside of school PE classes ( $p = 0.00$ ).

#### 4) Mental Health

##### *Students Self-Reported Feelings Experienced*

The survey results presented in table 27 below show that more than half of the students from all but Region V (47%) reported that during the month prior to the survey they had experienced sadness. Approximately one in five students from all regions reported feelings of being hopeless during the month prior to the survey, led by Region II at 23%, followed by Region VI at 22% and Region IV at 20%. The proportion of students who said that during the month prior to the survey they had cried for no reason ranged from 14% in Region I up to 21% in Region II.

Additionally, at least three out of ten students in all regions said that during the month prior to the survey they had experienced a loss of interest in activities they normally enjoyed, with percentages ranging from 30% in Region IV up to 37% each in Regions II and VI. Of particular concern, at least one in ten students in all regions reported that they had felt like hurting themselves during the month prior to the survey. The region with the highest proportion of students reporting thoughts of self-harm was Region II at 16%, while Region IV had the lowest proportion at 10%.

Statistically significant relationships were found between educational region and students' reported experiences with feeling sad, crying for no reason, and feeling like hurting themselves.

#### *Support for Emotional Issues*

When asked about sources of support for their emotional issues, almost half of the students from all regions led by Region VI at 55% said that they went to their parents for assistance when they experienced the particular feelings identified in the survey. The second most cited source of assistance in four out of the six educational regions was a counsellor, while in Region III and Region VI; 'a friend' was the second most commonly cited source of support.

A statistically significant relationship was found between most results related to students' sources of assistance with emotions (with the exception of pastor and family friend) and education region.

#### *Behavioural Problems*

In response to whether people had complained that they exhibited certain identified behaviours, most (49%-60%) students from all regions said no one complained that they exhibited any of the behaviours noted led by Region VI at 60%. Complaints that they "tell lies" was the most common behavioural issue identified by students, reported by over one-quarter of those surveyed in four of the six regions. The percentage of students who reported that persons complained that they stole ranged from 5% in Region V to 13% in Region I (figure 23).

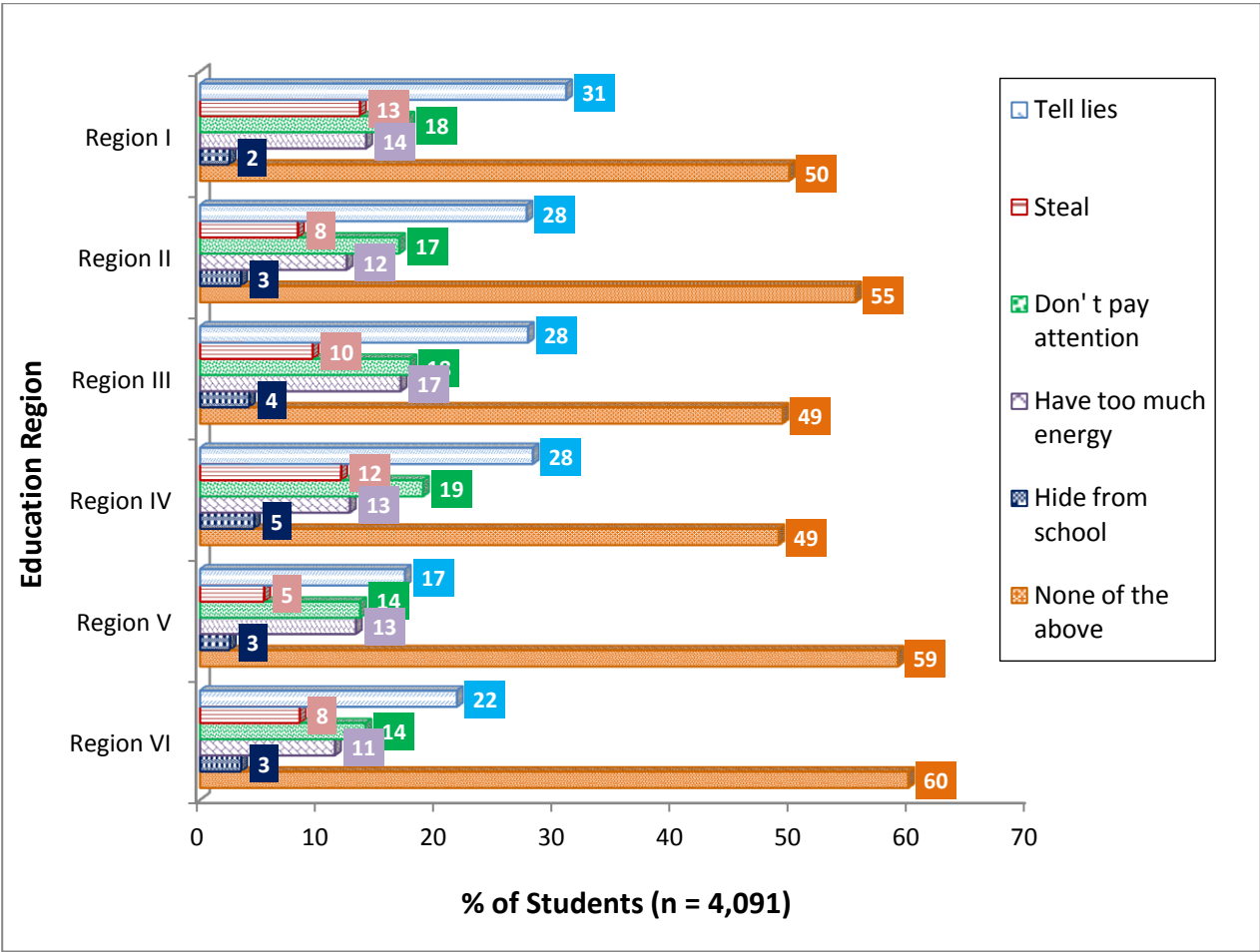
The survey results showed statistically significant relationships between region and the percentage of students who reported complaints that they told lies and/or stole ( $p = 0.00$ ).



**Table 27. Emotions Reported by Students, by Education Region**

		Educational Region												
		Region I - Kingston & St. Andrew		Region II - St. Thomas, Portland & St. Mary		Region III - St. Ann & Trelawny		Region IV - St. James, Hanover & Westmoreland		Region V - St. Elizabeth & Manchester		Region VI - Clarendon & St. Catherine		Total
		Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count
<b>Sad</b>	No	206	37	343	33	93	38	256	38	245	44	373	37	1,516
	Yes	302	54	567	54	121	50	349	51	259	47	543	54	2,141
	Missing	55	10	131	13	28	12	75	11	51	9	94	9	434
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091
<b>Hopeless</b>	No	403	72	674	65	167	69	471	69	401	72	696	69	2,812
	Yes	105	19	236	23	47	19	134	20	103	19	219	22	844
	Missing	55	10	131	13	28	12	75	11	51	9	95	9	435
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091
<b>Crying for no reason</b>	No	427	76	687	66	168	69	498	73	418	75	732	72	2,930
	Yes	81	14	223	21	46	19	107	16	84	15	183	18	724
	Missing	55	10	131	13	28	12	75	11	53	10	95	9	437
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091
<b>Loss of interest in activities usually enjoyed</b>	No	304	54	529	51	129	53	398	59	304	55	539	53	2,203
	Yes	204	36	381	37	85	35	207	30	200	36	376	37	1,453
	Missing	55	10	131	13	28	12	75	11	51	9	95	9	435
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091
<b>Feel like hurting yourself</b>	No	440	78	745	72	186	77	537	79	442	80	778	77	3,128
	Yes	68	12	165	16	28	12	68	10	62	11	137	14	528
	Missing	55	10	131	13	28	12	75	11	51	9	95	9	435
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091

Figure 23. Students’ Self-reported Behavioural Problems, by Education Region



\*Multiple responses accepted from each student.

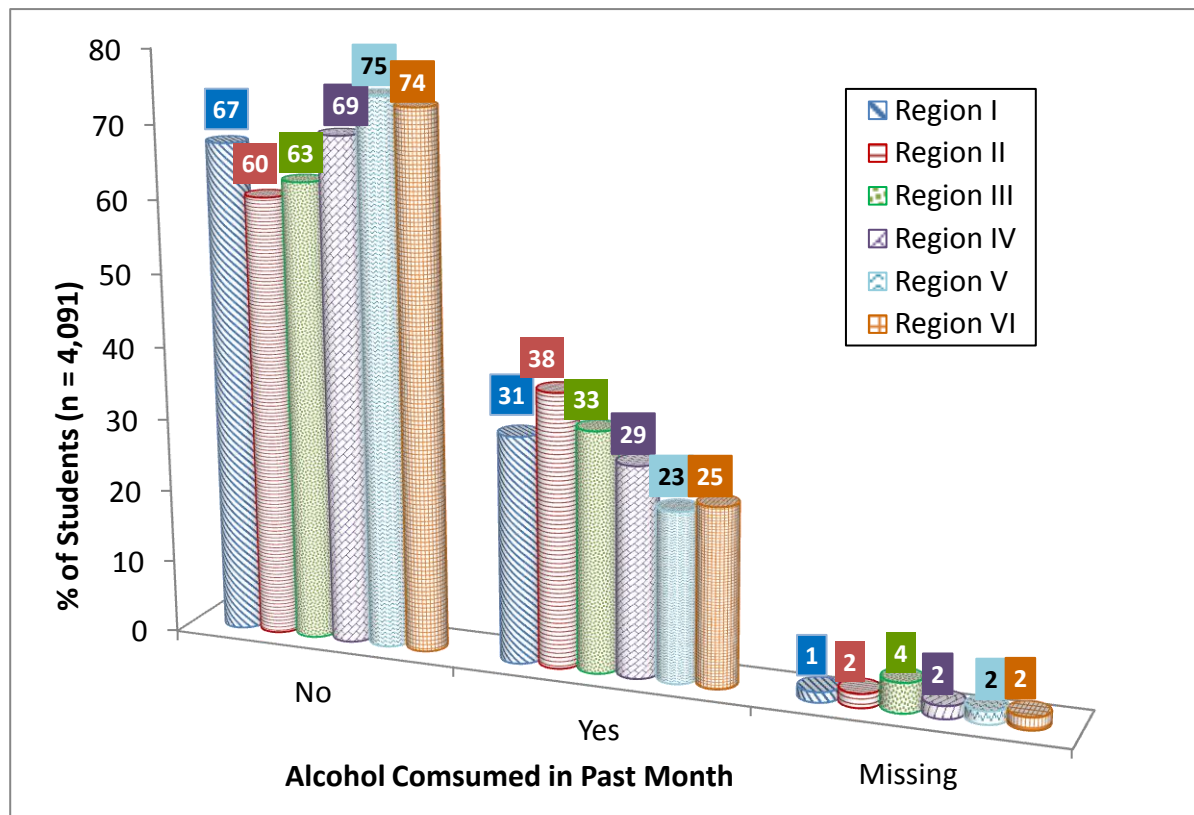
## 5) Substance Abuse

### *Alcohol Consumption*

As shown in figure 24 below, at least one-quarter of students from all regions except Region V said they consumed alcohol during the month prior to the survey.

The p value of 0.00 indicates a statistically significant relationship between education region and students' self-reported consumption of alcohol.

**Figure 24. Students' Self-reported Alcohol Consumption, by Education Region**



### *Smoking*

Most students from all regions reported that they did not smoke. For those who reported smoking in the month prior to the survey, the most common substance they smoked was ganja, led by Region III at 13%. The lowest percentage of students reporting that they smoked ganja in the past

month was in Region V and Region VI at 4% each. Between 1% and 2% of students from all regions except Region V said they smoked crack and heroin during the month prior to the survey.

## **6) Violence and Injury prevention**

### *Fights*

As shown in table 28 below, at least one in five students from the majority of the regions reported that they had not witnessed any fights in the month prior to the survey, with the exception of Regions I and III. At the same time, approximately one in five students, or more, said they had witnessed one fight in the previous month in four of the regions, while the percentages were lower in Region I (13%) and II (16%). Noteworthy is the 20% of students from Region I who said they witnessed 8 to 10 fights during the previous month. Region V (8%) had the lowest proportion of students who said they had witnessed 8 to 10 fights.

The resulting p values of 0.00 suggest that there is a statistically significant relationship between students witnessing of fights and education region; however this conclusion cannot be confirmed due to limited sample size (footnote in table 28).

### *Fights with Weapons*

More than a half of the students surveyed from all regions except Region III (43%) said they had not witnessed any fights in the previous month in which weapons were used. At the same time, at least one in five students from all regions said they had witnessed 1 to 3 fights involving weapons in the previous month, with the highest percentages reported in Region III (36%) and Region I (33%). Others reported having witnessed more than three fights involving weapons, including 9% of students in Region III who said they witnessed more than 9 such fights in the previous month.

The resulting p value of 0.00 indicates that there is a statistically significant difference among the regions with regard to students' witnessing of fights where weapons were used.

**Table 28. Fights Witnessed by Students in Past Month at School, by Educational Region**

	Region I - Kingston & St. Andrew		Region II- St. Thomas, Portland & St. Mary		Region III - St. Ann & Trelawny		Region IV - St. James, Hanover & Westmoreland		Region V - St. Elizabeth & Manchester		Region VI - Clarendon & St. Catherine		Total
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count
Did not witness any fight	73	13	211	20	34	14	148	22	154	28	205	20	825
1 time	74	13	171	16	47	19	151	22	150	27	198	20	791
2 to 4 times	210	37	337	32	91	38	206	30	162	29	359	36	1,365
5 to 7 times	89	16	118	11	26	11	63	9	35	6	112	11	443
8 to 10 times	114	20	188	18	38	16	105	15	47	8	129	13	621
Missing	-	-	2	0	4	2	3	0	5	1	4	0	18
Witnessed fight but did not state frequency	3	1	14	1	2	1	4	1	2	0	3	0	28
<i>Total</i>	<i>563</i>	<i>100</i>	<i>1,041</i>	<i>100</i>	<i>242</i>	<i>100</i>	<i>680</i>	<i>100</i>	<i>555</i>	<i>100</i>	<i>1,010</i>	<i>100</i>	<i>4,091</i>

Note: More than 20% of cells in this sub-table have expected cell counts less than 5. Chi-square test results (p value 0.00 < 0.05) may be invalid.

**Table 29. Fights with Weapons Witnessed by Students in Past Month at School, by Educational Region**

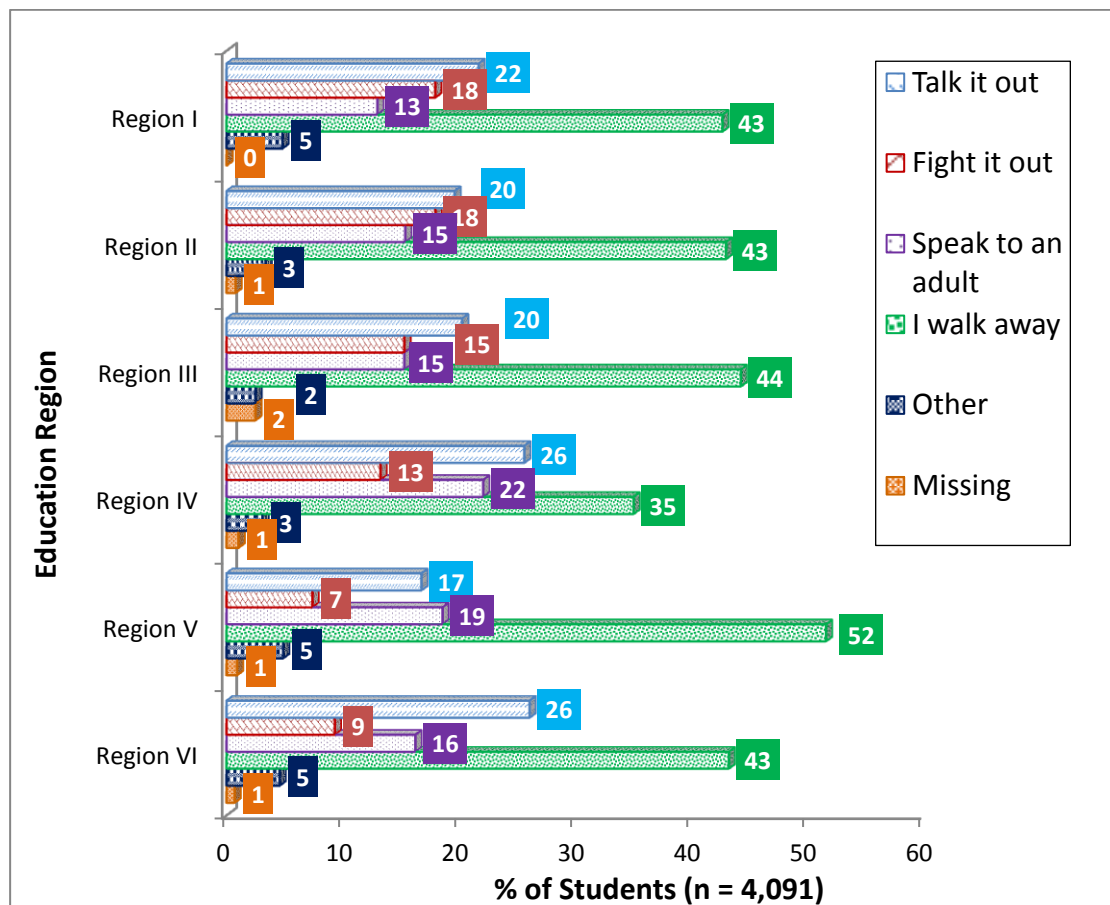
	Region I - Kingston & St. Andrew		Region II- St. Thomas, Portland & St. Mary		Region III - St. Ann & Trelawny		Region IV - St. James, Hanover & Westmoreland		Region V - St. Elizabeth & Manchester		Region VI - Clarendon & St. Catherine		Total
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count
None	290	52	596	57	104	43	372	55	404	73	702	70	163
1 to 3	188	33	316	30	86	36	189	28	110	20	228	23	64
4 to 6	34	6	46	4	18	7	33	5	11	2	21	2	200
7 to 9	10	2	14	1	3	1	23	3	4	1	10	1	79
More than 9	35	6	49	5	22	9	38	6	19	3	37	4	4,091
Missing	6	1	20	2	9	4	25	4	7	1	12	1	
<i>Total</i>	<i>563</i>	<i>100</i>	<i>1,041</i>	<i>100</i>	<i>242</i>	<i>100</i>	<i>680</i>	<i>100</i>	<i>555</i>	<i>100</i>	<i>1,010</i>	<i>100</i>	

### Conflict Resolution

Figure 25 below shows that more than one-quarter of students from all regions said they “walk away” when confronted with an argument at school, led by Region V at 52%. Region IV had the lowest proportion of students who said they walk away from an argument, at 35%. One in five students from all regions except Region V said they “talk it out” when faced with an argument or conflict. In comparison, more than one in ten students from all regions except Region V (7%) and Region VI at 9% said they “fight it out”, led by Region I and Region II where nearly one in five (18%) students said this was their usual approach to dealing with conflict.

The resulting p values of 0.00 indicate that there is a statistically significant relationship between education regions and students’ approach to resolving conflicts.

**Figure 25. Students’ Self-reported Method of Dealing with Conflict, by Educational Region**



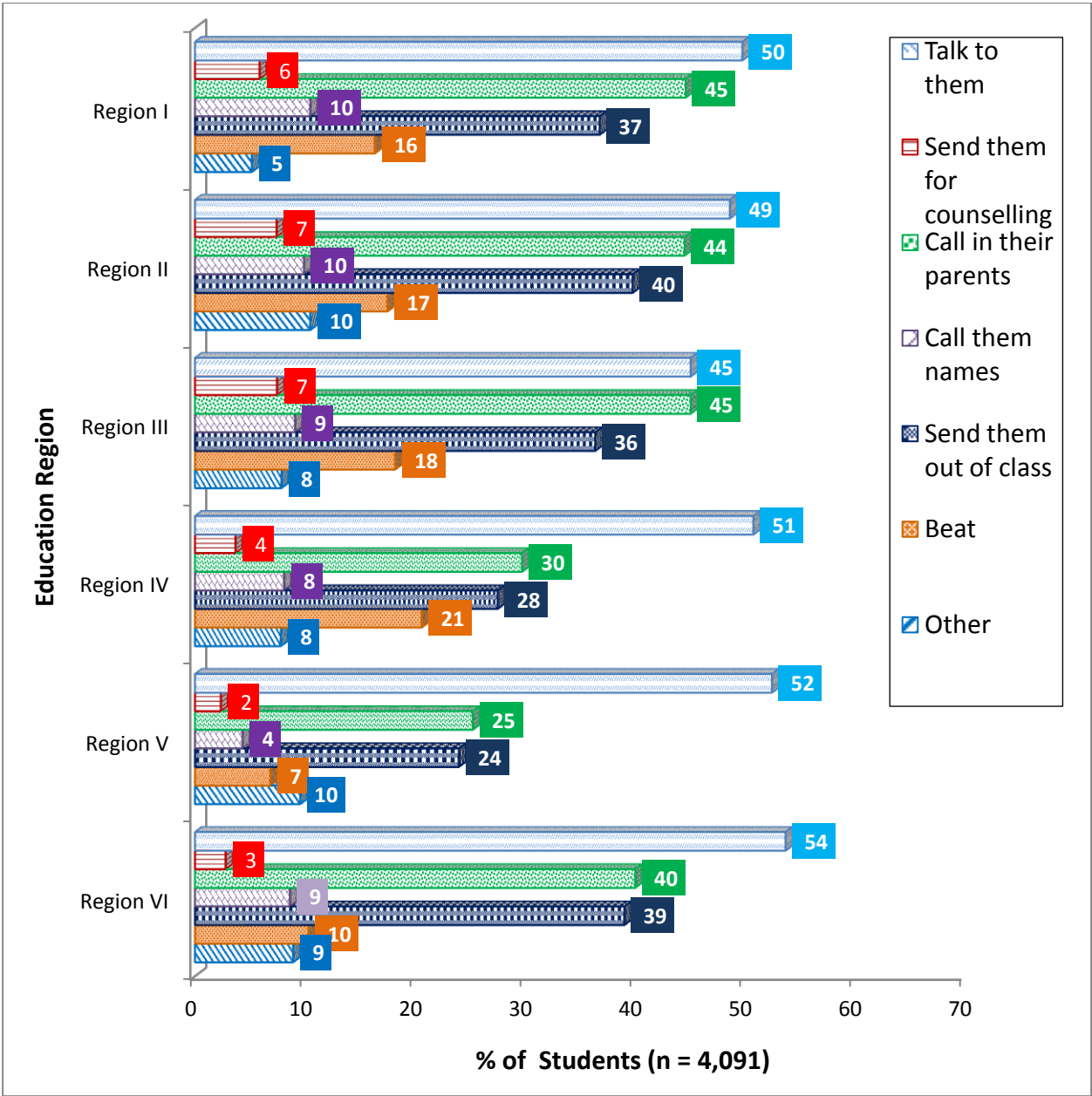
\*Multiple responses accepted from each student.

### *Disciplinary Measures*

Students were asked about the methods of discipline they had seen teachers use. With percentages ranging from 45% in Region III to 54% in Region VI, the most commonly observed disciplinary approach taken by teachers was to talk to students. The second most common disciplinary method was calling in the students' parents. The percentage of students reporting this method ranged from 25% in Region V to 45% in Regions I and III. At least one in ten students from all but Region V said they had witnessed teachers beating students as a disciplinary measure, with the highest percentage in Region IV at 21%. Analysis of "other" methods noted by the students surveyed showed demerits/detentions/suspension were also used by teachers. The percentage of students who identified these methods ranged from 1% in Regions I and III to 5% in Regions II and V (figure 26).

Statistically significant relationships were found between education region and the percentage of students who reported seeing teachers calling in parents, calling students names, sending students out of class, and beating students.

Figure 26. Teachers’ Disciplinary Methods as Observed by Students, by Education Region



\*Multiple responses accepted from each student.



## 7) Reproductive Health

### *HIV/STD Prevention*

With regards to methods of preventing HIV/STD, except for Region IV at 56%, at least two thirds of the students from all regions said that using a condom is a method for preventing the spread of HIV/STDs, making this the most commonly cited prevention measure. The second most commonly cited method was abstinence with at least half of the students from all regions identifying this as a method of prevention, led by Region VI at 73% and Region II at 67%. The proportion of students that identified no hugging or kissing as a method of prevention ranged from 4% in Region VI to 8% in Region III. The proportion of students who said they did not know how HIV and other STDs are prevented ranged from 4% in Region VI to 17% in Region IV (figure 27).

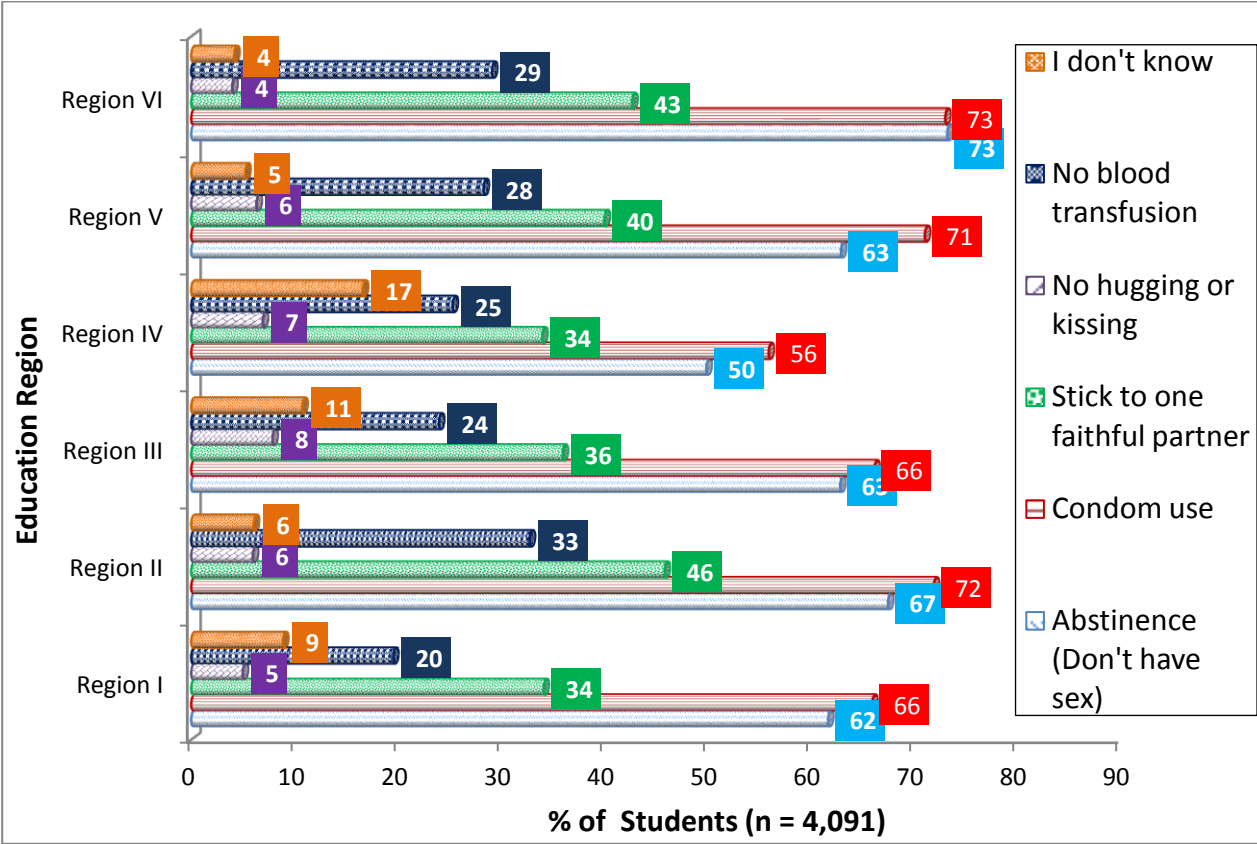
Statistically significant relationships were found between region and all responses related to the methods of HIV/STD prevention.

### *Source of Sex Information*

Table 30 below presents the various sources that students reported accessing information about sex. At least seven out of ten students from all regions except Region IV (68%) cited their schools' guidance counsellor as a source of information about sex, making this the most commonly reported source of information. Approximately half of students from all regions, led by Region II (60%), stated that their parents were a source of information about sex, making this the second most commonly cited source of information overall. Television/radio was the most dominant public media of the three options (TV/radio, Internet, magazines) in all regions, led by Region II at 51% and Region VI at 50%.

The p values presented in the last column of the table indicate that a statistically significant relationship was found between education region and all sources of information about sex accessed by students.

**Figure 27. HIV/STD Prevention Methods Reported by Students, by Education Region**



\*Multiple responses accepted from each student.

**Table 30. Students' Source(s) of Information about Sex, by Education Region**

		Region I - Kingston & St. Andrew		Region II - St. Thomas, Portland & St. Mary		Region III - St. Ann & Trelawny		Region IV - St. James, Hanover & Westmoreland		Region V - St. Elizabeth & Manchester		Region VI - Clarendon & St. Catherine		Total	p Value
		Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	
Teacher	No	292	52	497	48	93	38	339	50	284	51	478	47	1,981	.032*
	Yes	271	48	536	51	144	60	333	49	266	48	521	52	2,071	
	Missing	2	0	8	1	5	2	8	1	5	1	11	1	39	
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091	
Guidance Counsellor	No	135	24	163	16	61	25	208	31	148	27	293	29	1,008	.000*
	Yes	426	76	870	84	176	73	464	68	401	72	705	70	3,042	
	Missing	2	0	8	1	5	2	8	1	6	1	12	1	41	
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091	
Parent	No	249	44	409	39	94	39	340	50	252	45	401	40	1,745	.000*
	Yes	312	55	624	60	143	59	333	49	298	54	598	59	2,308	
	Missing	2	0	8	1	5	2	7	1	5	1	11	1	38	
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091	
Other family member	No	343	61	604	58	129	53	478	70	356	64	614	61	2,524	.000*
	Yes	218	39	429	41	108	45	195	29	194	35	385	38	1,529	
	Missing	2	0	8	1	5	2	7	1	5	1	11	1	38	
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091	
Boyfriend or Girlfriend	No	451	80	781	75	174	72	563	83	470	85	828	82	3,267	.000*
	Yes	109	19	252	24	63	26	110	16	80	14	171	17	785	
	Missing	3	1	8	1	5	2	7	1	5	1	11	1	39	
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091	
Friend	No	371	66	638	61	160	66	489	72	390	70	658	65	2,706	.000*
	Yes	190	34	395	38	77	32	184	27	160	29	341	34	1,347	
	Missing	2	0	8	1	5	2	7	1	5	1	11	1	38	
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091	

**Table 30. Students' Source(s) of Information about Sex, by Education Region, cont'd**

		Region I - Kingston & St. Andrew		Region II - St. Thomas, Portland & St. Mary		Region III - St. Ann & Trelawny		Region IV - St. James, Hanover & Westmoreland		Region V - St. Elizabeth & Manchester		Region VI - Clarendon & St. Catherine		Total	p Value
		Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	
Television / Radio	No	315	56	501	48	123	51	427	63	301	54	492	49	2,159	.000*
	Yes	246	44	532	51	114	47	246	36	248	45	507	50	1,893	
	Missing	2	0	8	1	5	2	7	1	6	1	11	1	39	
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091	
Internet	No	360	64	630	61	137	57	515	76	383	69	623	62	2,648	.000*
	Yes	201	36	403	39	100	41	158	23	167	30	376	37	1,405	
	Missing	2	0	8	1	5	2	7	1	5	1	11	1	38	
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091	
Magazine	No	421	75	741	71	164	68	555	82	405	73	717	71	3,003	.000*
	Yes	140	25	292	28	73	30	118	17	145	26	282	28	1,050	
	Missing	2	0	8	1	5	2	7	1	5	1	11	1	38	
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091	
Other	No	519	92	986	95	216	89	657	97	518	93	936	93	3,832	.000*
	Yes	42	7	47	5	21	9	16	2	32	6	64	6	222	
	Missing	2	0	8	1	5	2	7	1	5	1	10	1	37	
	Total	563	100	1,041	100	242	100	680	100	555	100	1,010	100	4,091	

\* The Chi-square statistic is significant at the .05 level.

## 8) School Health Services

### *Source for Medical Attention*

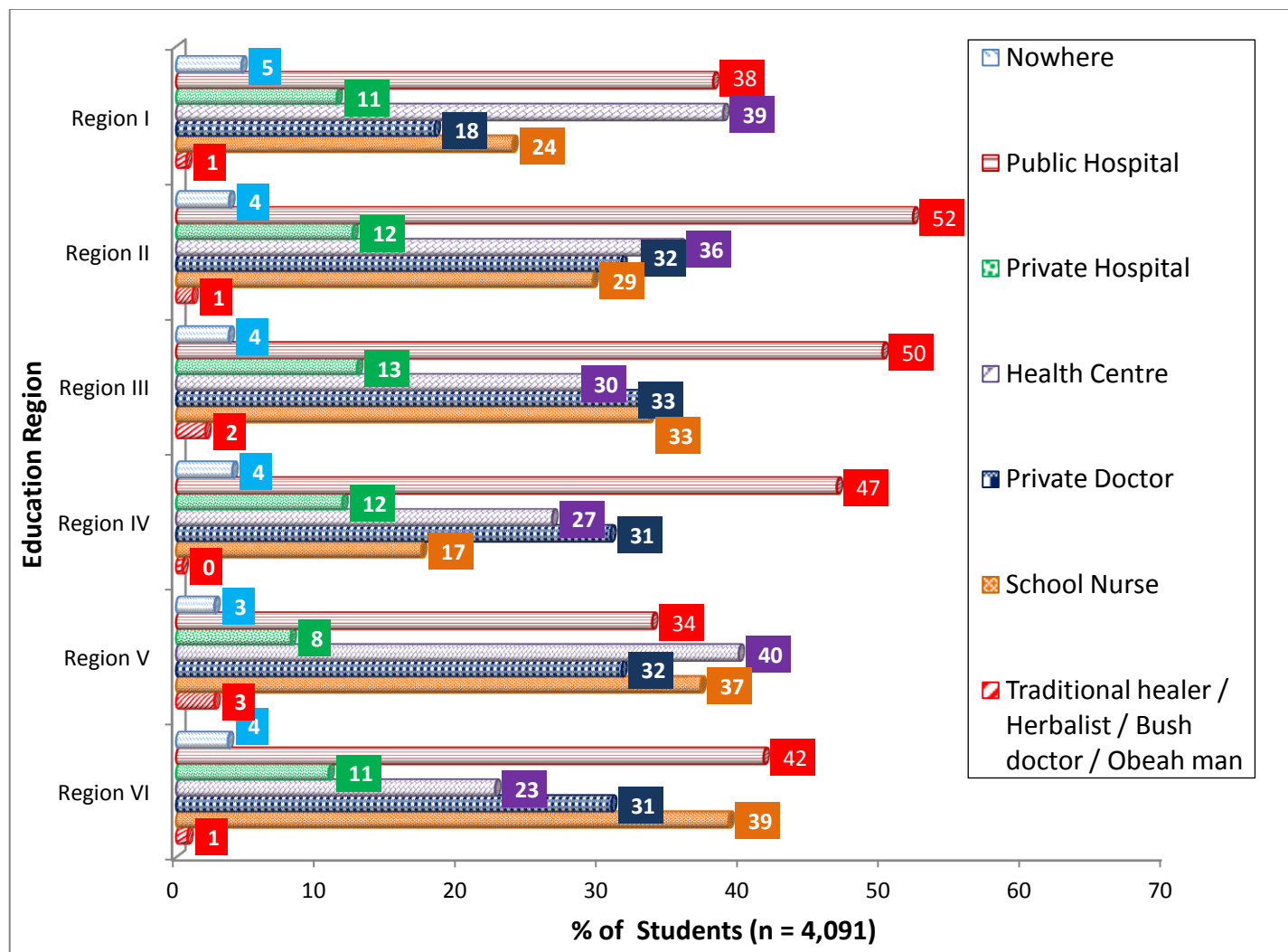
As shown in figure 28 below, except for Regions I and V, most students indicated that they would usually go to a public hospital for medical attention, led by Region II at 52% ( $p = 0.00$ ). In Regions I and V, health centres were most commonly named by students as their source of health care ( $p = 0.00$ ). The data also show that traditional healer/herbalist/bush doctor/obeah man was cited by up to 3% of students across all regions as a source of assistance with medical concerns ( $p = 0.013$ ).

### *School Nurse*

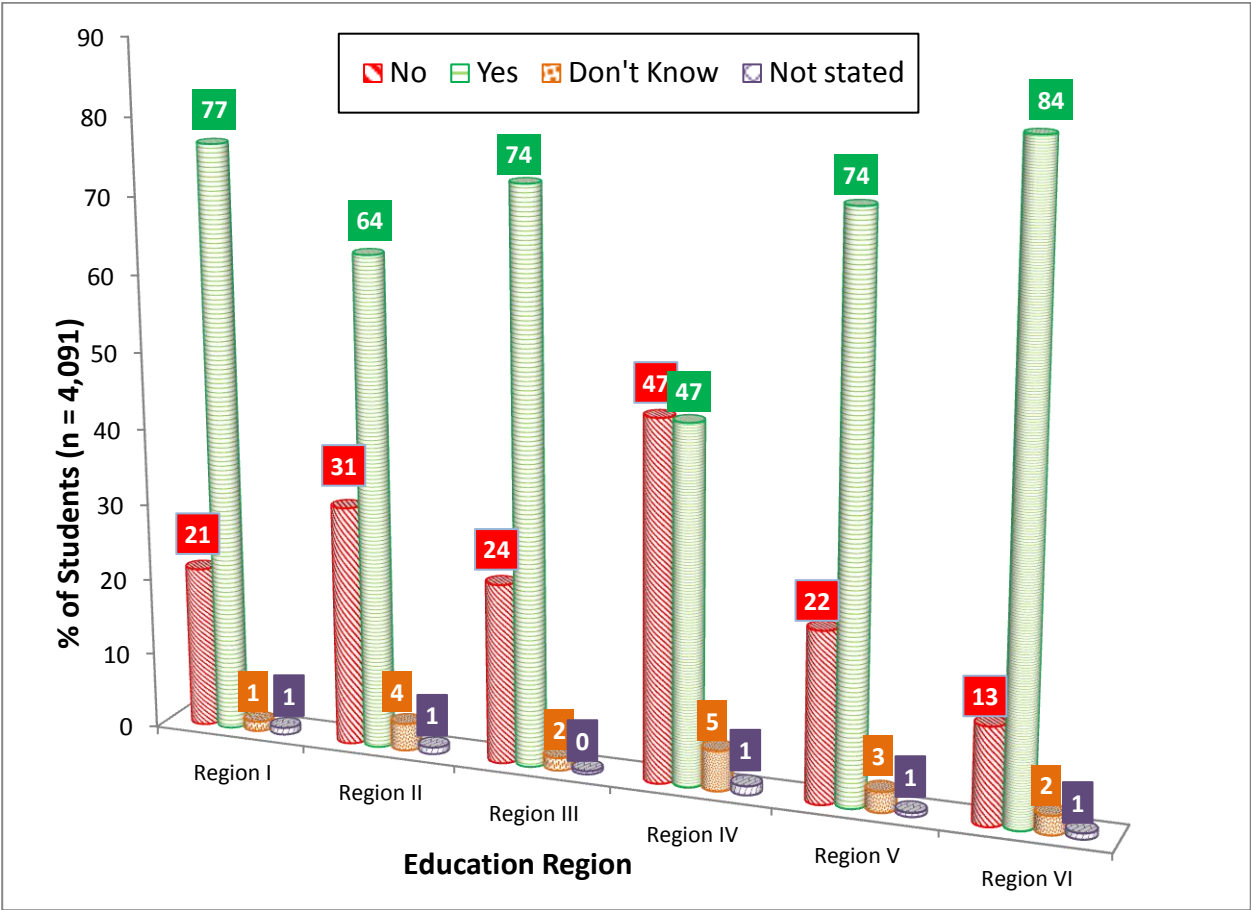
When asked about access to a school nurse, more than 60% of the students from regions all except Region IV (47%) indicated that they were aware of a nurse being on staff at their school (figure 29).

With a  $p$  value of 0.00, a statistically significant relationship was found between region and students' knowledge of a nurse being on staff at their school.

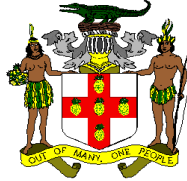
**Figure 28. Venue Doctor Accessed by Students, distributed by Education Region**



**Figure 29. Access to School Nurse as Reported by Students, by Education Region**



## APPENDIX A: Health Promoting School Survey Instrument - Student



School: \_\_\_\_\_

Date: \_\_\_\_\_

Questionnaire Administrator:

Questionnaire #: \_\_\_\_\_

**THE MINISTRY OF HEALTH AND MINISTRY OF EDUCATION**

**HEALTH PROMOTING SCHOOL SURVEY**

### **Introduction:**

Hello Student:



The Ministries of Health and Education are assessing schools in an effort to develop Health Promoting Schools in Jamaica. We believe that your involvement in this survey will be beneficial in helping us to gather key information that will be useful in implementing this programme. We therefore ask that you complete this questionnaire. Please answer all questions honestly. Please read all questions carefully and remember there are no incorrect answers. Only your view is the correct answer.

*Please do not write your name on the questionnaire*

### **QUESTIONNAIRE FOR STUDENTS**

#### **Demographic:**

##### **A. School Type:**

- a. Primary School ☐
- b. All Age School ☐
- c. Primary & Junior High ☐
- d. Special ☐
- e. Secondary High ☐
- f. Agricultural High ☐
- g. Technical High ☐

A.1. How old are you? .....

A.2. What is your date of birth? \_\_\_\_/\_\_\_\_/\_\_\_\_  
DD /MM/ YY

A.3. What is your gender? Female ☐ Male ☐

A.4. What grade are you in? .....

A.5. How long have you been attending this school?

- a) Less than 1 year ☐
- b) 1- 3 years ☐
- c) 4-6 years ☐
- d) 7- 9 years ☐

### **GENERAL INFORMATION & HEALTH SERVICES**

1. Do you have Health and Family Life Education classes in your school?

- a) Yes ☐
- b) No ☐
- c) Don't Know ☐

2. Which of the following extra curricula activities do you participate in at school?

**(You may tick more than one answer)**

- a) Healthy lifestyle club ☐
- b) Environmental club ☐
- c) 4H club ☐
- d) Red Cross ☐
- e) Drama ☐
- f) Other ☐ State \_\_\_\_\_

3. Are you required to visit the doctor for a checkup (medical) when a new school year starts?

- a) Yes ☐
- b) No ☐
- c) Don't know ☐

4. When you are sick or need to see a doctor, where do you go?

**(You may tick more than one answer)**

- a) Nowhere ☐
- b) Public Hospital ☐
- c) Private Hospital ☐
- d) Health Center /Clinic ☐
- e) Private Doctor ☐
- f) School nurse / sick bay ☐
- g) Traditional healer/herbalist, bush doctor, obeah man ☐

5. Is there a nurse at your school?

- a) Yes ☐
- b) No ☐
- c) Don't know ☐

### **NUTRITION**

6. Where do you get lunches and snacks?

**(You may tick more than one answer)**

- a) Canteen ☐
- b) Tuck Shop ☐
- c) From Home ☐
- d) School Vendors ☐
- e) School feeding programme ☐
- f) Other ☐ State \_\_\_\_\_

7. Tick the items that are usually sold at the tuck shop at your school.

**(You may tick more than one answer)**

- a) Sodas ☐
- b) Bag/box drink ☐
- c) Fruit juices ☐
- d) Pastries ☐
- e) Sweets ☐
- f) Sandwiches ☐

- g) Patties ☐
- h) Fried chicken ☐
- i) Cooked meal ☐
- j) Fruits ☐
- k) Other ☐ State \_\_\_\_\_

8. During a normal week how often have you gone hungry because you don't have anything at school to eat?

- a) Never ☐
- b) I hardly ever ☐
- c) Sometimes ☐
- d) Most time ☐
- e) All the time ☐

9. Which of the following do you usually eat?

- a) Fruits & vegetables ☐
- b) Fruits only ☐
- c) Vegetables only ☐
- d) Neither fruits nor vegetable ☐

10. How many times per day do you usually eat fruits?

- a) None ☐
- b) 1 time per day ☐
- c) 2 - 3 times per day ☐
- d) 4 - 5 times per day ☐
- e) 6 or more times per day ☐

11. How many times per day do you usually eat vegetables?

- a) None ☐
- b) 1 time per day ☐
- c) 2 - 3 times per day ☐
- d) 4 - 5 times per day ☐

e) 6 or more times per day ☐

12. How many times per day do you drink water?

a) None ☐

b) 1-3 times ☐

c) 4-5 times ☐

d) 6-7 times ☐

e) 8 or more times ☐

**ENVIRONMNETAL HEALTH**

**13. Please tick (✓) one answer to each of the following statements.**

	All of the time	Most of the time	Sometimes	Never
1. I wash my hands before eating				
2. I wash my hands after using the toilet				
3. I eat food that falls to the ground				
4. I cover my mouth when I cough or sneeze				

**14. How do you get rid of garbage at your school?**

**(You may tick more than one answer)**

- a) Put it in bins ☐
- b) Put it in my pocket ☐
- c) Put it in my desk ☐
- d) Throw it on the floor / ground ☐
- e) Other ☐ State \_\_\_\_\_

15. Please tick (✓) one answer to each of the following statements.

	All of the time	Most of the time	Sometimes	Never
i. Toilet paper is available in my school's bathroom				
ii. Soap is available to wash my hands at school				
iii. Water is available to wash my hands at school				

16. Which of the following best describes the bathrooms at your school?

- a) Always clean and functioning ☐
- b) Sometimes clean ☐
- c) Sometimes dirty ☐
- d) Always dirty and in disrepair ☐
- e) I don't know ☐

### **VIOLENCE AND UNINTENTIONAL INJURIES**

17. What do you do when you get into an "argument" (conflict) with someone at school?

- a) Talk it out ☐
- b) Fight it out ☐

- c) Speak to an adult ☐
- d) I walk away ☐
- e) Other ☐ State \_\_\_\_\_

18. During the past month, have you seen a fight or someone being attacked at your school?

- a) Yes ☐
- b) No ☐

19. If yes, how many times?

- a) 1 time ☐
- b) 2-4 times ☐
- c) 5 – 7 times ☐
- d) 8 – 10 times ☐

20. In the last month, how many fights have you seen at school in which a weapon was used?

- a) None ☐
- b) 1- 3 ☐
- c) 4- 6 ☐
- d) 7- 9 ☐
- e) More than 9 ☐

21. During the past month, did you have an injury at school that required you to see a nurse/doctor?

- a) Yes ☐
- b) No ☐

22. What methods have you seen teachers use to discipline students?

- a) Talk to them ☐
- b) Send them for counselling ☐
- c) Call in their parents ☐
- d) Call them names ☐



- e) Send them out of class ☐
- f) Beat ☐
- g) Other: ☐ State \_\_\_\_\_

### **PHYSICAL ACTIVITY**

23. Do you have access to a play area at your school?

- a) Yes ☐
- b) No ☐

24. How many PE classes do you have per week?

- a) One session ☐
- b) Two sessions ☐
- c) Three sessions ☐
- d) Four sessions ☐
- e) More than four sessions ☐
- f) None ☐

25. Do you take part in PE classes?

- a) Yes ☐
- b) No ☐
- c) Sometimes ☐

26. If yes, for how long do you participate in each class?

- a) 20 minutes ☐
- b) 30 minutes ☐
- c) 45 minutes ☐
- d) 60 minutes or more ☐

27. Outside of the PE Classes do you participate in any other form of games or physical activity at your school?

- a) Yes ☐
- b) No ☐
- c) Sometimes ☐

### **ADOLESCENT REPRODUCTIVE HEALTH**

28. How can you prevent the spread of HIV and other sexually transmitted diseases?

**(You may tick more than one answer)**

- a) Abstinence (don't have sex) ☐
- b) Condom use ☐
- c) Stick to one faithful partner ☐
- d) No hugging or kissing ☐
- e) No blood transfusion ☐
- f) I do not know ☐

29. Where do you get your information or learn about sex?

**(You may tick more than one answer)**

- a) Teacher ☐
- b) Guidance Counsellor ☐
- c) Parent ☐
- d) Other family member ☐
- e) Boyfriend/Girlfriend ☐
- f) Friend ☐
- g) Television/Radio ☐
- h) Internet ☐
- i) magazine ☐
- j) Other ☐ State \_\_\_\_\_

### MENTAL HEALTH & SUBSTANCE ABUSE

30. Tick the feelings below that you experienced during the past month:

**(You may tick more than one answer)**

- a) Sad ☐
- b) Hopeless ☐
- c) Crying for no reason ☐
- d) Loss of interest in activities that you use to enjoy ☐
- e) Like hurting yourself ☐

31. If you experience any of the feelings listed in Question # 29, who would you go to for assistance?

**(You may tick more than one answer)**

- a) Pastor ☐
- b) Parent ☐
- c) Teacher ☐
- d) Guidance counsellor ☐
- e) Coach ☐
- f) Friend ☐
- g) Family member ☐
- h) Family friend ☐
- i) Other ☐ State \_\_\_\_\_

32. Has anyone complained that you?

**(You may tick more than one answer)**

- a) Tell Lies ☐
- b) Steal ☐
- c) Do not pay attention ☐
- d) Have too much energy ☐
- e) Hide from school ☐
- f) None of the above ☐

33. During the past month, have you consumed (drank) any drink containing alcohol?

- a) Yes ☐
- b) No ☐

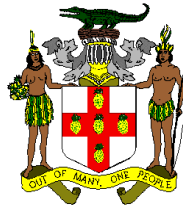
34. During the past month, have you smoked any of the following?

**(You may tick more than one answer)**

- a) Tobacco ☐
- b) Cigarette ☐
- c) Ganja ☐
- d) Seasoned 'spliff' ☐
- e) Crack ☐
- f) Heroin ☐
- g) Other ☐ State \_\_\_\_\_

**Thank You**

## APPENDIX B: Sample of Health Promoting School Survey Instrument - Administrator



School: _____ _____
Date: _____
Questionnaire Administrator: _____
Questionnaire #: _____

**THE MINISTRY OF HEALTH AND MINISTRY OF EDUCATION**

**HEALTH PROMOTING SCHOOL SURVEY**

### **QUESTIONNAIRE FOR ADMINISTRATOR**

#### **Introduction:**

**Thank you for agreeing to participate in this survey. The Ministry of Health and Ministry of Education are assessing schools in an effort to develop Health Promoting Schools in Jamaica. We ask that you complete this questionnaire to reflect your school's status in the areas requested. The information gathered will ONLY be used as a guide to advance the Health Promoting School agenda in your school. Thank you in advance for your time**

### **GENERAL INFORMATION**

Name of School: \_\_\_\_\_

Type of School:        (i)        ( ) Primary        ( ) Primary & Jr. High        ( ) Secondary

                              (ii)        ( ) Shift        ( ) Full Day

Contact Person: \_\_\_\_\_

1. Number of Students on Roll:    Males \_\_\_\_\_ Females \_\_\_\_\_ Total \_\_\_\_\_

2. Number of Teachers:            Males \_\_\_\_\_ Females \_\_\_\_\_ Total \_\_\_\_\_

3. Number of non-academic staff: Males \_\_\_\_\_ Females \_\_\_\_\_ Total \_\_\_\_\_

4. Average daily attendance of students: Males \_\_\_\_\_ Females \_\_\_\_\_ Total \_\_\_\_\_

5. Do you have a Health Advisory Committee in your school?

                              ( ) Yes            ( ) No

6. Is Health and Family Life Education Curriculum (HFLE) taught at all grade levels?

                              ( ) Yes            ( ) No

I. If no, state at which grades it is taught? \_\_\_\_\_

II. If yes, please indicate the frequency with which it is taught per grade per week

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

III. Who teaches the HFLE?

- ☐ Class Teacher      ☐ School Nurse      ☐ Guidance Counsellor  
☐ Resource Persons      ☐ Other \_\_\_\_\_

7. Are there any active health related clubs?

- Healthy Lifestyle club      ☐ Yes      ☐ No  
Environmental club      ☐ Yes      ☐ No  
Red Cross      ☐ Yes      ☐ No  
4 H club      ☐ Yes      ☐ No

Other \_\_\_\_\_

8. Identify any other active clubs in your school.

- ☐ Girl Guides    ☐ Drama      ☐ Debating    ☐ Glee      ☐ Dance      ☐ Sports  
☐ Key club      ☐ Science      ☐ other \_\_\_\_\_

9. Is there a critical incident plan in your school?

- ☐ Yes      ☐ No

**HEALTH PROMOTING SCHOOL INFORMATION**

**HEALTH SERVICES**

10. Are students required to do a medical upon entry to school?

- ☐ Yes      ☐ No

11. Is the school health programme medical form used in your school?

- ☐ Yes      ☐ No



12. Is there one room (sick bay) designated for the treatment and observation of students and staff?

( ) Yes            ( ) No

13. Is there a first aid kit or cupboards containing materials and medication readily available to staff and students at your school?

( ) Yes            ( ) No

14. Do you have a school nurse or someone assigned to deal with medical care?

( ) Yes            ( ) No

(i) If no, what protocol exists to deal with medical related issues?

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15. Are students health records kept in a secure area?

( ) Yes            ( ) No

16. Who has access to health records?

( ) Nurse            ( ) Guidance Counsellor            ( ) Other \_\_\_\_\_

**NUTRITION**

17. Is your school on the School Feeding Programme?

( ) Yes            ( ) No

(i) If yes which component?

a) Snacks            b) Cooked Lunch            c) Both

18. What are the sources from which students obtain food while at school?

- ☐ Vendors
- ☐ School Canteen
- ☐ Packaged lunch from home
- ☐ Nearby shops and restaurants
- ☐ Tuck shop
- ☐ Other \_\_\_\_\_

19. Is there a canteen at your school?

- ☐ Yes                      ☐ No

(i) If yes, is it certified by the Ministry of Health?

- ☐ Yes                      ☐ No

20. Does your school provide access to fruits and vegetables?

- ☐ Yes                      ☐ No

(i) If yes, select the from the options below

- ☐ Both Fruits & Vegetables      ☐ vegetable only      ☐ Fruits Only

21. In what forms are fruits provided?

- ☐ Whole Fruit                      ☐ 100% Fruit Juice      ☐ both Whole and 100% Fruit Juices

22. In what forms are vegetables provided?

- ☐ Raw                                  ☐ Cooked                                  ☐ both raw and cooked

23. Indicate the quantities (lbs/Kg) of fruits provided for sale daily?

**FRUITS** (List type and quantity)

Type \_\_\_\_\_                      Quantity \_\_\_\_\_

Type \_\_\_\_\_                      Quantity \_\_\_\_\_

Type \_\_\_\_\_ Quantity \_\_\_\_\_  
Type \_\_\_\_\_ Quantity \_\_\_\_\_

24. Indicate the quantities (lbs/Kg) of vegetables available for daily use?

**VEGETABLES** (list type and quantity)

Type \_\_\_\_\_ Quantity \_\_\_\_\_  
Type \_\_\_\_\_ Quantity \_\_\_\_\_  
Type \_\_\_\_\_ Quantity \_\_\_\_\_  
Type \_\_\_\_\_ Quantity \_\_\_\_\_

25. What beverages are available for sale?

- ☐ Sodas
- ☐ Fruit Drink (Box)
- ☐ Fruit Drink (Bag)
- ☐ Fruit Drink (Bottle)
- ☐ Water
- ☐ Other \_\_\_\_\_

26. How many children are on the PATH Programme?

Male \_\_\_\_\_ Female \_\_\_\_\_ Total \_\_\_\_\_

### **PHYSICAL ACTIVITY**

27. Do the students have access to a playing area?

☐ Yes ☐ No

28. Are physical education sessions offered at all grade levels?

☐ Yes ☐ No

i. If no, please specify the grades that it is not offered \_\_\_\_\_

29. How many physical education sessions are offered per week?

- ☐ One session, state minutes \_\_\_\_\_  
☐ Two sessions, state minutes \_\_\_\_\_  
☐ Other \_\_\_\_\_

30. Is there at least one teacher assigned to teach physical education in your school?

- ☐ Yes            ☐ No

31. Are students given fitness test before engaging in PE session?

- ☐ Yes            ☐ No

### **ENVIRONMENTAL HEALTH**

32. What type of water supply is available at the school?

- ☐ Public piped ☐ Tank – school            ☐ Well            ☐ other

33. Are there safe drinking water fountains/taps for children?

- ☐ Yes            ☐ No

ii. Are fountains/taps accessible to all (short, tall physically challenged)?

- ☐ Yes            ☐ No            ☐ Don't Know

34. What facilities are in place for storage of garbage?

- ☐ Bins            ☐ Skips            ☐ Drums            ☐ Other \_\_\_\_\_

35. How is garbage disposed of?

☐ Public collection    ☐ Recycling    ☐ Incinerator    ☐ other \_\_\_\_\_

36. What type of toilets do you have at your school?

☐ Pit                      ☐ Water closet                      ☐ other \_\_\_\_\_

37. Does your school provide soap for hand washing purpose?

☐ Yes                      ☐ No

(i) If no what measures are in place to ensure that good hygiene is practiced?

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38. When was the last time your school was visited by a public health inspector?

☐ less than a month ago                      ☐ 2 – 6 months ago  
☐ over 6 months                      ☐ over a year                      ☐ Never

### **VIOLENCE AND UNINTENTIONAL INJURIES**

39. Does your school maintain a record of injuries?

☐ Yes                      ☐ No

40. State number of students in a fight in the past year?

Males \_\_\_\_\_ Females \_\_\_\_\_ Total \_\_\_\_\_

41. State number of students who used a weapon in a fight in the past school year?

Males \_\_\_\_\_ Females \_\_\_\_\_ Total \_\_\_\_\_

42. Does your school keep a record of unintentional injuries?

( ) Yes ( ) No

(i) If yes, please indicate the frequency for each option below

Trip/fall \_\_\_\_\_ Burns \_\_\_\_\_ Equipment related injuries \_\_\_\_\_

Sports injuries \_\_\_\_\_ Other \_\_\_\_\_

43. Is there a security and safety committee in your school?

( ) Yes ( ) No

(i) If Yes, Please specify level of activity

( ) Active ( ) Inactive

44. List the five most challenging types of behavioural problems existing in your school.

- (1) \_\_\_\_\_
- (2) \_\_\_\_\_
- (3) \_\_\_\_\_
- (4) \_\_\_\_\_
- (5) \_\_\_\_\_

45. List the disciplinary measures that are used in response to these challenges in your school?

- (1) \_\_\_\_\_
- (2) \_\_\_\_\_

- (3) \_\_\_\_\_  
(4) \_\_\_\_\_  
(5) \_\_\_\_\_

### **MENTAL HEALTH & SUBSTANCE ABUSE**

46. Does the school have a Guidance Counsellor?

( ) Yes              ( ) No

(i) If no, how are guidance and counselling issues handled?

- ( ) Referral  
( ) Principal  
( ) Teachers  
( ) School Nurse  
( ) Other (Specify) \_\_\_\_\_

47. Who provides counselling most of the time?

- ( ) Guidance Counsellor  
( ) Principal  
( ) Teacher  
( ) School Nurse  
( ) Other (Specify) \_\_\_\_\_

48. Is there a private facility for the provision of Counselling?

( ) Yes              ( ) No

49. State number of students referred to outside agencies for emotional or behavioural problems

Males \_\_\_\_\_ Females \_\_\_\_\_ ( ) None      Total \_\_\_\_\_

50. List the agencies according to priority to which students are referred?

- (1) \_\_\_\_\_
- (2) \_\_\_\_\_
- (3) \_\_\_\_\_
- (4) \_\_\_\_\_
- (5) \_\_\_\_\_

51. How involved are parents/guardians in handling emotional or behavioural problems?

( ) Always      ( ) Sometimes      ( ) Never      ( ) Rarely

52. Identify the most common emotional and behavioural problems among students.

- (1) \_\_\_\_\_
- (2) \_\_\_\_\_
- (3) \_\_\_\_\_

53. State number of suspensions that occur in the past school year.

Males \_\_\_\_\_ Females \_\_\_\_\_ ( ) None    Total \_\_\_\_\_

54. State number of students who were caught smoking at school in the past school year.

Males \_\_\_\_\_ Females \_\_\_\_\_ ( ) None    Total \_\_\_\_\_

55. State number of students who were caught drinking alcohol at school in the past school year.

Males \_\_\_\_\_ Females \_\_\_\_\_ ( ) None    Total \_\_\_\_\_



### **ADOLESCENT REPRODUCTIVE HEALTH**

56. Is sex education taught in your school?

( ) Yes            ( ) No

(b) If yes, does it include HIV/AIDS and other STIs Prevention?

( ) Yes            ( ) No

57. Are there challenges regarding sex and reproductive health in your school?

( ) Yes            ( ) No

If yes, list the main challenges.

- (1) \_\_\_\_\_
- (2) \_\_\_\_\_
- (3) \_\_\_\_\_
- (4) \_\_\_\_\_
- (5) \_\_\_\_\_

58. State number of students who have become pregnant or gotten a girl pregnant in the past school year.

Female \_\_\_\_\_ Male \_\_\_\_\_ None \_\_\_\_\_ Total \_\_\_\_\_

59. How often do you involve parents/guardians in relevant school matters?

( ) Always            ( ) Sometimes            ( ) Never  
( ) Rarely

60. What mechanisms do you have in place for the participation of parents and the community?

- ☐ PTA                                      ☐ One of parents and community  
☐ Home school, consultation    ☐ Parent advisory committee  
☐ Board sub-committee            ☐ School board  
☐ Others (list) \_\_\_\_\_

General Comments: \_\_\_\_\_

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Person/s interviewed:

- ☐ Principal                      ☐ Years at this school  
☐ Vice Principal              ☐ Years at this school  
☐ Teacher                      ☐ years at this school  
☐ Guidance Counsellor    ☐ years at this School  
☐ Nurse                        ☐ Years at this school

#### OBSERVATION SHEET

Observe and comment on the following:

- Healthy Lifestyle Club
- Canteen/Tuck shop
- Bathrooms

Public Health Inspector Report

## APPENDIX C: Participating Schools by Education Regions

<b>Region I: Kingston – Kingston and St. Andrew</b>	<b>Region II: Port Antonio – St. Thomas, Portland and St. Mary</b>
<ol style="list-style-type: none"> <li>1. Danny Williams School for the Deaf</li> <li>2. Dunoon Park Technical High</li> <li>3. Essex Hall Primary</li> <li>4. John Mills Primary &amp; Junior High and Infant</li> <li>5. Kingston High</li> <li>6. Mona High School</li> <li>7. Rousseau Primary</li> <li>8. Tivoli Gardens High</li> </ol>	<ol style="list-style-type: none"> <li>1. Annotto Bay High</li> <li>2. Buff Bay High</li> <li>3. Fair Prospect High</li> <li>4. Hillside Primary</li> <li>5. Mount Angus Primary &amp; Junior High</li> <li>6. Pear Tree River Primary and Infant</li> <li>7. Port Antonio High</li> <li>8. Port Morant Primary &amp; Junior High</li> <li>9. Seaforth High</li> <li>10. St. Mary Technical High</li> <li>11. St. Thomas Technical High</li> <li>12. Titchfield High</li> </ol>
<b>Region III: Brown's Town - St. Ann and Trelawny</b>	<b>Region IV: Montego Bay - St. James, Hanover and Westmoreland</b>
<ol style="list-style-type: none"> <li>1. Aabuthnott Gallimore High</li> <li>2. The Edgehill School of Special Education</li> <li>3. Ferncourt High</li> <li>4. First Hill All Age</li> <li>5. Lowe River Primary &amp; Junior High</li> <li>6. Marcus Garvey Technical</li> <li>7. Ocho Rios High</li> <li>8. Ulster Spring Primary</li> <li>9. Unity Primary</li> </ol>	<ol style="list-style-type: none"> <li>1. Anchovy Primary</li> <li>2. Askenish All Age</li> <li>3. Cambridge Primary School</li> <li>4. Cave Valley All Age</li> <li>5. John's Hall All Age</li> <li>6. Knockalva Technical High</li> <li>7. The Llandilo School of Special Education</li> <li>8. Merlene Ottey High</li> <li>9. Montego Bay High</li> <li>10. Niagara Primary</li> <li>11. Petersfield High</li> <li>12. Petersfield Primary and Infant</li> <li>13. Strawberry Primary and Junior High</li> <li>14. Vaughansfield Primary and Infant</li> </ol>

<b>Region V: Mandeville St. Elizabeth, Manchester and North Clarendon</b>	<b>Region VI: Old Harbour – Clarendon and St. Catherine</b>
<ol style="list-style-type: none"> <li>1. Alligator Pond Primary &amp; Infant</li> <li>2. B. B. Coke High</li> <li>3. Balaclava High</li> <li>4. Christiana (Leased) Primary &amp; Infant</li> <li>5. Maggotty High</li> <li>6. Pike All Age</li> <li>7. St. Elizabeth Technical High</li> <li>8. The Woodlawn School of Special Education</li> </ol>	<ol style="list-style-type: none"> <li>1. Beulah All Age</li> <li>2. Central High</li> <li>3. Edwin Allen High</li> <li>4. Green Park Primary &amp; Junior High</li> <li>5. Jericho Primary</li> <li>6. Old Harbour High</li> <li>7. St. Catherine High</li> <li>8. St. Jago High</li> </ol>