



## **BARBADOS, 2002 DATA ANALYSIS**

Prepared  
for

**The National Council on Substance Abuse (NCSA)**



by

**Caribbean Development Research Services (CADRES)**

with the assistance of  
the



and

**the Centers for Disease Control**



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## **EXECUTIVE SUMMARY**

### **BACKGROUND:**

This report comments on data collected for the Barbados component of the Global Youth Tobacco Survey (GYTS) and is intended to establish the extent to which children in schools smoke and if so, whether this is experimental or habitual and if there have been any changes since 1999 when the last survey was conducted. Additionally the study collects data on issues related to smoking such as the use of alcohol, illegal drugs and also looks at community and sporting involvement and sexual activity.

### **METHODOLOGY:**

The survey employed a two-stage cluster sample of 19 Secondary Schools in Barbados. In total some 1,931 students were given self-administered questionnaires and the survey achieved a student response rate of 86% or 1,654 students which can be considered representative of the population although the response rate achieved in 1999 was a 5% higher.

### **DEMOGRAPHICS:**

The survey captured the opinion of 49% female and 51% male students, which reflected the demographic profile of the schools. In addition the students ranged in age from 11 to 17 and were drawn from form-levels 3, 4 and 5. Significantly, this year's survey captured the opinion of 6% more boys than in 2002, which reflects an increase in the quantity of boys enrolled in Barbadian schools.

### **MAJOR OBSERVATIONS/ISSUES:**

The survey determined that 32.5% of students in the age groups surveyed had at some time taken one or two puffs of a cigarette. This pattern of experimentation differed between boys and girls by 5%, with boys accounting for 35% and girls, 30% of students who had taken one or two puffs of a cigarette. This experimentation was not repeated in most cases, leaving 0.6% of students who could be considered daily smokers. This level of experimentation was lower than the 1999 level which was 36% and did not differ significantly between boys and girls. This overall reduction in the level of experimentation was gender biased since girls experimented much less, while experimentation among boys did not change significantly.

Among daily smokers some 3% indicated that they had a desire to quit smoking and this was evenly distributed among male and female students. Moreover, only 1% of smokers manifested habitual indicators such as a desire to have a morning cigarette.

Possible influences to student smoking were examined and it was found that parental smoking was quite rare. Only 3% of both parents smoked; however, a higher number of fathers (15%) than mothers (3%) smoked and interestingly this level of parental smoking was similar to what was detected in 1999.

The media was also identified as a possible influence. 76% of students recalled *anti*-smoking messages in various sections of the media compared with 60% of students who saw smoking messages and 92% who might have been influenced by the sight of actors smoking on television. It would appear that advertising promoting smoking was less visible to students in 2002, however, anti smoking messages were also lower in this period.

It would appear that the school was still an underutilised source of influence since only 42% of students interviewed recalled being exposed to anti-smoking education in schools. Additionally 30% of the students indicated that smoking and health was never discussed as part of lesson.

### **TOBACCO USE:**

Most students surveyed indicated that they started either experimenting, or smoking at the age of 12, or 13. Boys started at 10 or 11, while girls usually commenced at 13 or 14 and smoking ages were similar to those established in 1999.

Students usually obtained cigarettes through either buying them directly from a vendor (2%) or machine (0.5%). Of the students who bought cigarettes, only 2% indicated that they were ever prevented from buying because of their age. Students generally smoked in their home (9%) although in-home smoking was 3% lower than 1999. Smoking in friend's homes stood at 4%, social events (3%) and public places (3%). Smoking in the school was not the preferred venue and only happened in 1% of cases.

### **KNOWLEDGE AND ATTITUDE TOWARDS TOBACCO:**

In response to questions on their perception of smokers, 75% of students said that they would not be influenced by close friends to smoke, however, there was a 8% -15% level of uncertainty in relation to this question. Responses indicated that smoking for boys was seen as a significant popularity boost with 31% indicating that boys who smoked cigarettes had more friends, compared to 17% who indicated they had fewer friends. The reverse was noted for girls where the responses indicated that girls who smoked cigarettes had fewer friends (16%), while those who did not smoke had more friends (35.5%). Therefore, students had a lower opinion of girls who smoked than boys who smoked, suggesting a gender bias that makes it more acceptable for boys to smoke than girls. These general perceptions were similar to those established in the 1999 GYTS survey.

## **SMOKING AND HEALTH CONCERNS:**

In total 83% of the students felt that smoking was dangerous to their health while a lower number (60%) definitely felt that second-hand smoke was hazardous to their health. This reflects a lower level of confidence in the dangers of smoking this year, since the level of certainty was 90% in 1999. The majority of students (77%) supported the banning of smoking in public places. Additionally, among those who smoked, health reasons (7%) and family dislike (2%) emerged as the main motivations to stop smoking.

## **THE USE OF ALCOHOL AMONG STUDENTS AND THEIR FRIENDS:**

In response to questions on the use of and experimentation with alcohol, responses indicated that 87% of students have experimented with low alcohol content alcoholic beverages and 65% with high alcohol content beverages, which is coincidentally higher than the numbers experimenting with cigarettes. Curiously the data collected this year shows no significant gender bias, while in 1999 male students started using substances earlier and were inclined to harder substances than female students. The majority of students indicated that they had their first drink between ages 12 – 13 (21%), with a large number indicating their first drink was age 7 or younger (18%).

## **SPORTS, COMMUNITY ACTIVITIES AND DRUG USAGE:**

Among the students, 17% reported experimenting with illegal drugs and 13.5% of the students who play sports, indicated that they would take drugs if they believed it could better their performance. As for anti-drug education in school, 56% reported having been exposed to such instruction in primary and secondary schools. The prevalence of anti-drug education was clearly higher at the primary school level (24%) than at the secondary level (7.5%).

## **SEXUAL ACTIVITY:**

Student responses to questions on their level of sexual activity indicate that slightly less than half of the students are sexually active and more boys than girls are active. The single largest group of persons admitting to sexual activity is 12 years old or younger; however, a major limitation of this type of analysis would be the fact that the term “*sexually active*” can be subjected to various interpretations.

Against this background of sexual activity, it is perhaps fortunate that 87% of students have been exposed to sex education classes at either the primary or secondary level and lowest level of exposure was among 13 year old students.

### **3.0: BACKGROUND:**

The World Health Organisation (WHO) has stated that around 4 million persons die each year from tobacco related illnesses and by 2030 this death toll is expected to rise to 10 million. Against this background, agencies with responsibility for global health issues have been studying the patterns of tobacco use, in an effort to design anti-smoking programmes and to judge the success of programmes, which have already been implemented.

In an effort to collect much needed data on smoking habits among young people, the Global Youth Tobacco Survey (GYTS), has been initiated by the Centre for Disease Control (CDC) and the World Health Organisation (WHO). By the end of 2002, this ambitious project would have been implemented in 140 countries and has received support from CDC, the Canadian Public Health Agency, the National Cancer Institute (of the USA), UNICEF and the WHO.

In Barbados the National Council on Substance Abuse (NCSA) is the local executing agency and it collected data during May of 2002. The report to follow comments on data collected in this study and makes comparisons with data collected in the previous surveys of 1999.

### **4.0: METHODOLOGICAL SUMMARY:**

In an effort to obtain information on smoking behaviour, the survey employed a two-stage cluster sample of students in form-levels 3, 4, and 5 of 19 out of the total of 33 (23 public and 10-registered government assisted private) secondary schools in Barbados. In total 1931 students were given self-administered questionnaires and 1654 (86%) of these students returned questionnaires, which were usable and all schools selected, agreed to participate.

Overall, the response rate for schools and students was calculated at 86%, and although this response rate is some 5 percentage points lower than the response rate of the 1999 study, the survey can nonetheless be considered representative of the population of students in secondary schools throughout Barbados. Currently there are 21,752 secondary school students in Barbados.

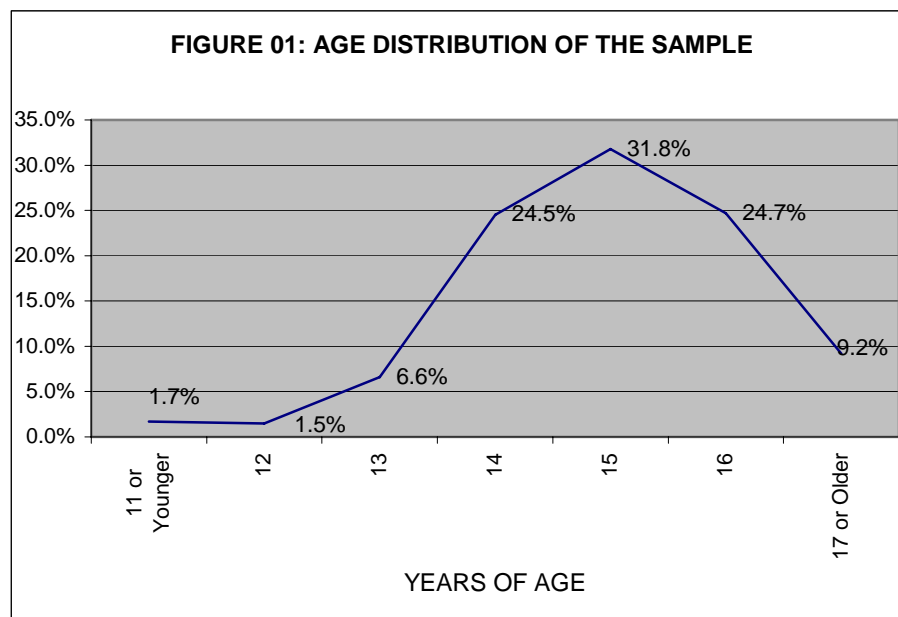
To minimise the possibility of bias in the survey from different patterns of non-participation/response by students and schools, the questionnaires were weighted according to a formula that accounted for the non-selection probability for schools and classrooms that were not chosen in the sample. This formula is reproduced in Annex II and accommodates school, class and student level non-response factors.

## 5.0: DEMOGRAPHICS:

The only demographic information sought by the survey related to age and gender. Among the students who participated in the survey, 51% were girls and 49% were boys, which represents a 6% increase in the number of boys and a commensurate decrease in the number of girls, over last year. Since this profile is reflective of the school's demographic, then it would appear as though the quantity of school age boys has increased and this would have implications for the use of substances examined in this study, since the last investigation revealed that boys were more inclined to experiment than girls and also did so at a younger age. This fact therefore imports an assumption that the expected levels of smoking and other substance use should be slightly higher than was the case in 1999 and in the instance that this is not the case, it could reflect positively on anti-smoking or drug campaigns in Barbados, or other related factors.

The age of respondents for this Barbados study was dictated largely by the requirements of the global study. The age-range of persons surveyed was from 11 to 17. As a result of the form-levels (which included levels 3, 4, and 5) from which the sample was chosen, the largest segment of students was between 14 and 16. The age distribution of this sample is presented in figure 01.

Information was also collected on the ages of students in each form-level surveyed and it is noticeable that the higher and lower ranges of the age group are almost evenly balanced between form-levels 3, 4 and 5. However there is some evidence (which in all cases amounts to less than a percentage point) of very young students in form-level 5 and very old students in form-level 3 and while it is entirely possible that a student can repeat years and grow to 17 in a lower form, the converse is highly unlikely. This raises suspicions about the extent to which students were 100% truthful, or properly understood the instrument they responded to.

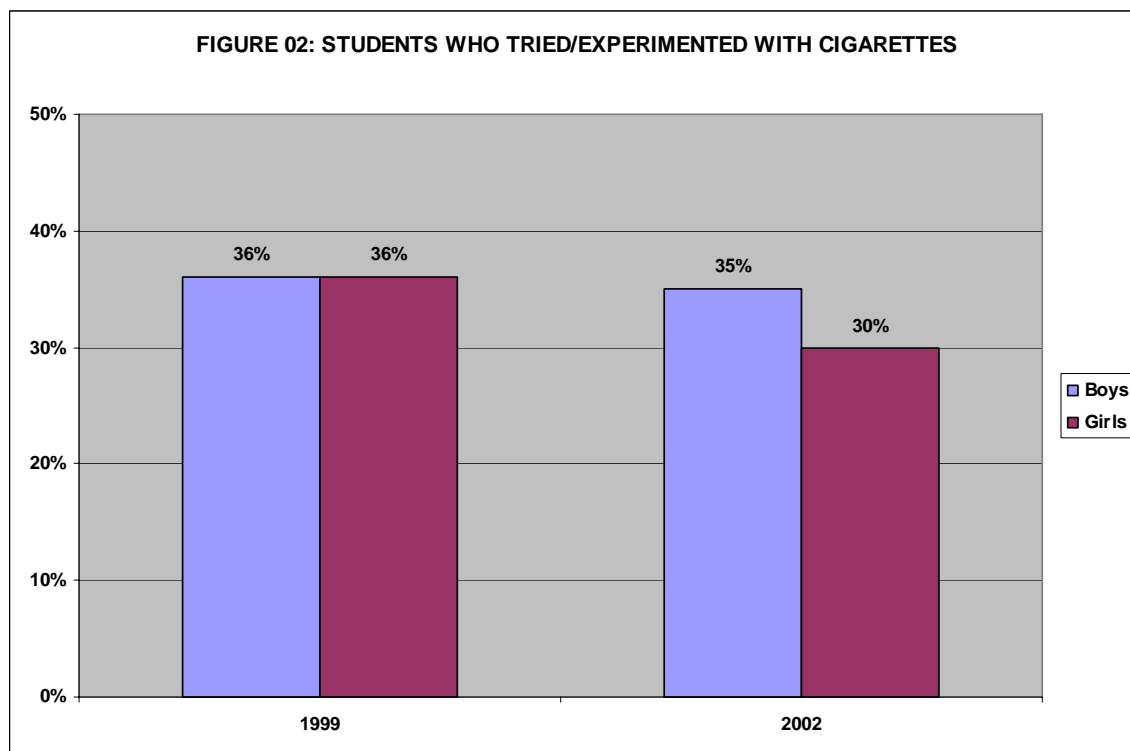


## 6.0: MAJOR OBSERVATIONS AND ISSUES:

The survey probed several major issues and in each instance, it raised many related questions that were grouped. While each of these issue groups is examined individually, select issues that are likely to be of major concern have been consolidated here.

### 6.1: SMOKING EXPERIMENTATION AND USE:

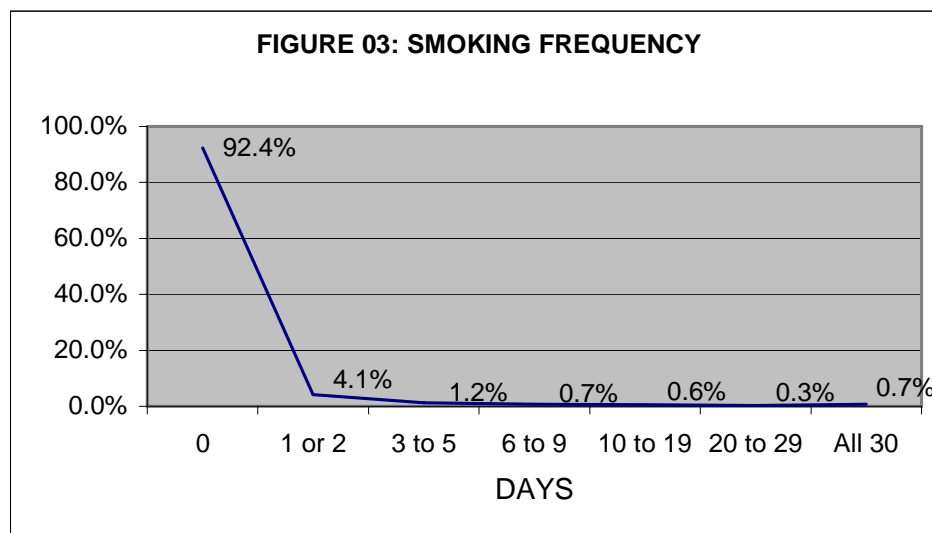
The students surveyed were asked a general question that sought to ascertain whether or not they ever smoked. Here smoking was defined as either one or two puffs of a cigarette and some 32.5% of students indicated that they had smoked before, while 67.5% had not. This pattern of experimentation, which is reflected in figure 02, appears to have been influenced marginally by gender since 35% of boys experimented, while only 30% of girls experimented. This relationship is interesting especially because in 1999 there was no significant gender relationship, but the overall level of experimentation was higher (36%). Hence it would appear that while overall experimentation dropped, usage among boys dropped less severely, although it is possible that this statistic has been influenced somewhat by the larger number of boys in this sample.



There is however a weak relationship that emerged in relation to the form-levels where students experimented most and least. Here the highest numbers of students admitting to having experimented were in form-levels 2 and 5, which were both 2.5% above average, while the form-level 3 had the lowest level of experimentation. In 1999, the highest level of experimentation was in form-level 4 and the deviation was 4% above the 1999 average of 36%, while form level 5 had the lowest level of experimentation with 30% experimentation. It is therefore evident that experimentation levels have declined and moreover there is greater uniformity among form-levels regarding student experimentation.

Compared to general experimentation, the percentage of students who admitted to having smoked in the 30 days prior to the survey period is remarkably reduced. Here some 92% of students said that they had not smoked, the inverse of which suggests that 8% of students smoked during that period. This can be compared with the quantity that experimented to reveal that more than two-thirds of those that experimented did not repeat this act in the 30 days prior to the survey, or that it was not habitual for most of those experimenting. Therefore, most of those that smoked were not habitual smokers, but did so experimentally.

Figure 03 presents this information diagrammatically and reflects a rapid decline in smoking frequency in the 30-day period under review. This decline is continuous between 1 and 29 days, except for daily smokers (all 30 days), which account for only 0.7% of those surveyed. The larger proportion of daily smokers was girls drawn from form-level 2.



## **6.2: PARENTAL INFLUENCE:**

The extent, to which the smoking of parents could have been a contributing factor to the smoking of students in the survey, was probed by way of a question that inquired into the smoking of either, or both of the student's parents. It is noteworthy that data collected in this section is almost identical to those collected in 1999 and in the few instances that it differs, this is only to the extent of one percentage point, which could be attributed to the margin of error of the study. The logical implication here would be the suggestion that while children appear to be experimenting and smoking less, their parent's habits have not changed significantly, however this determination was not the main focus of this exercise. In only 3% of instances did both parents smoke, while 16% of fathers and 3% of mothers smoked. 5% of students indicated they did not know if either of their parents smoked, which could possibly inflate the quantity of parents that smoked in instances where parents and students did not live together. The comparative examination of parental smoking is also interesting. It reveals that 81% of the students who have never smoked also have parents that are non-smokers and this is unchanged over the past three years. The inverse of this statistic suggests that 19% of students experimenting had parents who smoked. Therefore the smoking of parents could only have been a relatively minor influence, considering the fact that smoking among children is now lower, while parental smoking has remained constant.

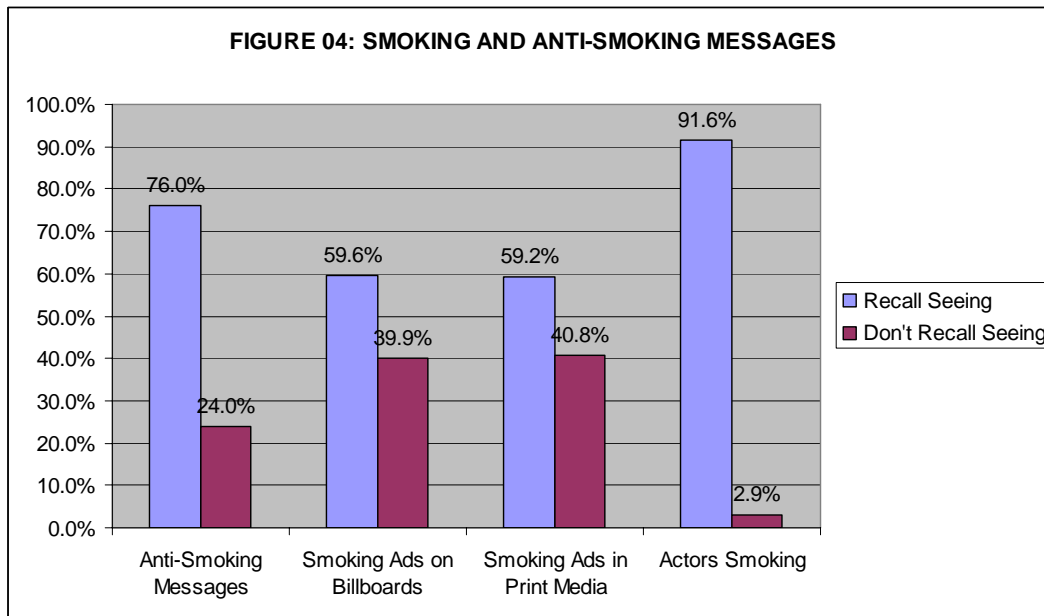
## **6.3: THE DESIRE TO QUIT SMOKING:**

Important among the attitudinal issues, which were examined, was the desire to stop smoking *presumably* among those who smoked. Among these persons, only 46% (slightly less than half) indicated a desire to stop smoking, which was 14% lower than was the case in 1999. On this occasion, there was a gender imbalance, while there was none in 1999; hence more girls than boys who smoke now want to stop. This implies that while the overall numbers of student smokers have fallen, the core that remains is more resilient to inducements to stop and moreover boys are now less inclined than girls to quit their smoking habits.

## **6.4: MEDIA INFLUENCES:**

The extent, to which the media could possibly have influenced smoking behaviour, was examined by a series of questions and the major ones are diagrammatically presented in figure 04. This general pattern suggests that students have only been marginally exposed to more anti-smoking messages, than smoking messages and the data in this study differs little from the 1999 data. The responses indicated that 76% of students actually recalled seeing an anti-smoking message over the testing period, compared with 61% that recalled seeing smoking messages on billboards and in the print media (59%).

Comparatively, it can be noted that in 1999 and 2002 a similar number of students saw anti-smoking messages, however, approximately 10% fewer students saw smoking messages in this 2002 study. An overwhelming percentage of students (92%) recall seeing actors smoking on television, hence it can be seen from figure 04 that in most cases a higher number of students recall seeing anti-smoking messages, than those seeing smoking messages in any media. This implies that anti-smoking messages are still reaching this audience with a higher level of frequency than smoking messages and moreover that the smoking messages are becoming less pronounced.

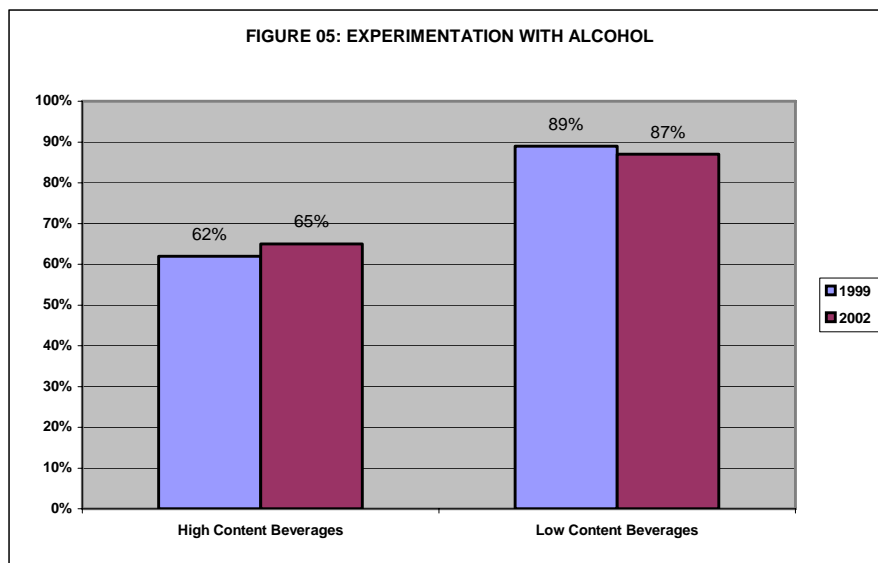


## 6.5: ANTI-SMOKING MESSAGES FROM SCHOOLS:

Here it would appear that a majority of students still are not taught, or do not recall being taught of the dangers of smoking in school. A total of 42% of students indicated that they received no instructions on the dangers of smoking, while only 42% recalled receiving such lessons and 16% were unsure. This represents 7% fewer students being taught about the dangers of smoking than was the case in 1999. Generally there was no significant difference in the recollection of anti-smoking education between form-level and gender groups, but a slightly higher number (57%) of 12 year old students noted that they received some form of education of this nature, while in 1999 teaching of this nature was more prevalent in form-levels 3 and 4. This trend would imply that more primary school children have been exposed to anti-smoking education.

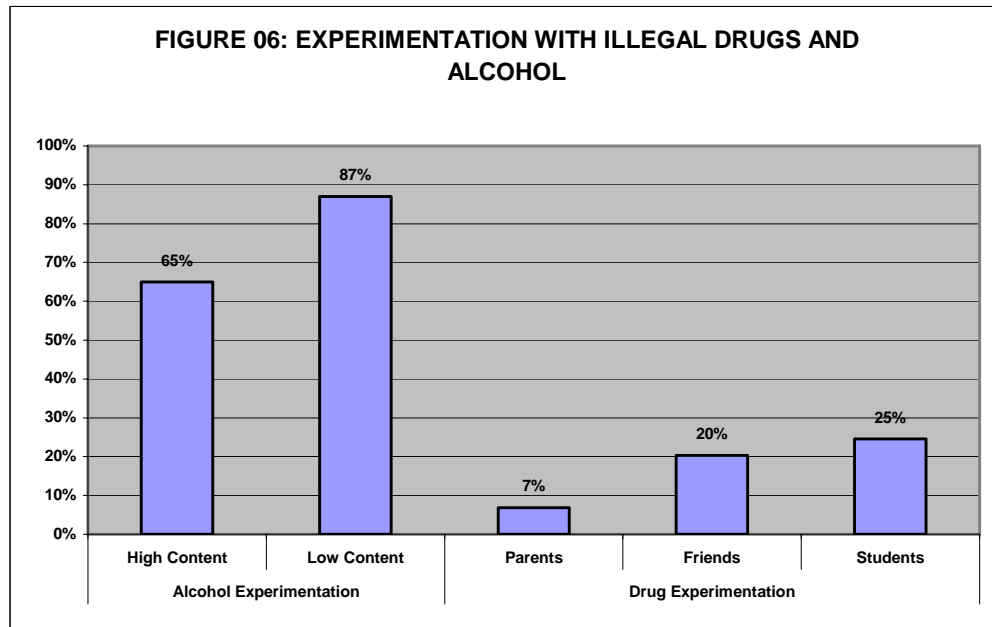
## 6.6: USE OF ALCOHOL AND PROBABLE INFLUENCES:

In relation to questions on experimentation with high and low alcohol content beverages, figure 05 demonstrates that there has been considerable experimentation among students. The quantity of students who used low content alcoholic beverages, on an experimental basis was 22% higher than those who tried high alcohol content drinks. Overall this accounts for more than two-thirds of the student population having experimented with alcohol (*high or low content*) and more than half with high content alcohol. Comparisons with the 1999 data point to similar levels of experimentation in relation to both types of alcoholic beverages, since the differences over the three years are within the margin of error of the study.



## 6.7: THE USE OF ILLEGAL DRUGS AND PROBABLE INFLUENCES:

Figure 06 facilitates an analysis of data on student experimentation with illegal drugs, as compared to the use of these by parents and close friends. Compared to the data on the use of alcohol, the quantity of students admitting to having experimented with illegal drugs appears relatively small.



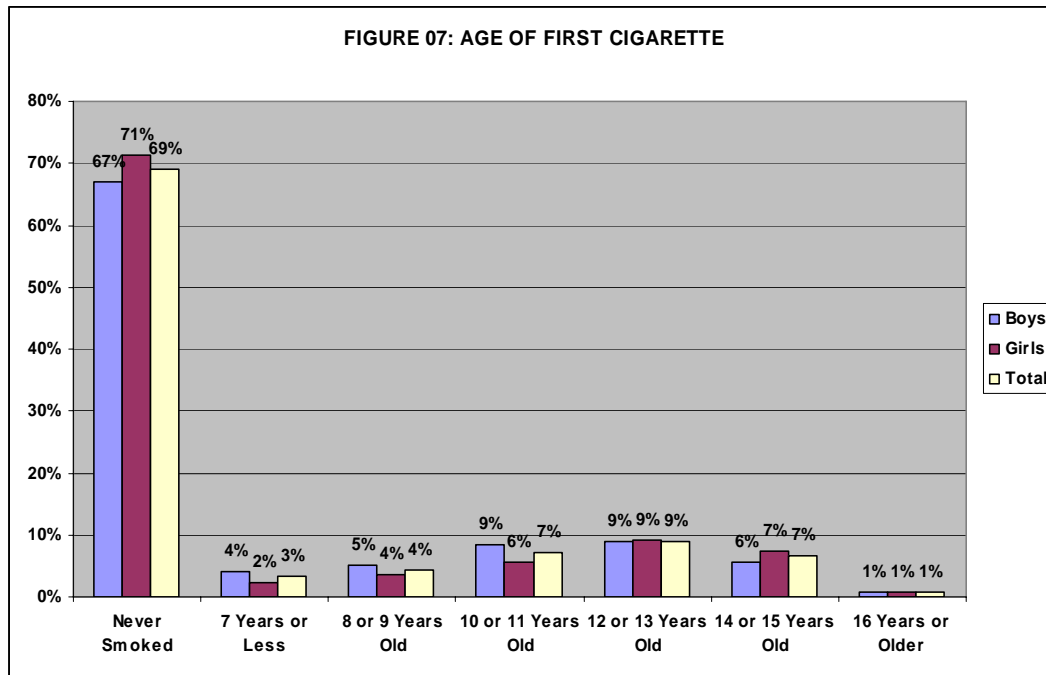
Regarding the use of illegal drugs, however, any associations would have to be made between students and friends since the reported use of illegal drugs by parents does not compare favourably with that of their offspring.

## 6.8: ANTI-ALCOHOL AND ANTI-DRUG EDUCATION:

The survey sought to establish the extent to which students had been exposed to anti-drug education in schools and here 56% of students indicated that they were given anti-drug education. These levels of education were relatively constant among boys and girls, but in relation to form levels it appears to peak in the second and fifth form.

## 7.0: TOBACCO USE:

Apart from the broad issue of experimentation, the survey established the age at which most students smoked for the first time (figure 07). This was between the ages of 10 and 12 for boys and 12 or 13 for girls and this is similar to the pattern detected in 1999. Very young smokers (7 years or younger) accounted for 4% and 2% of boys and girls respectively and this too was unchanged over the past three years. Though relatively few students started smoking at a very young age (7 or younger), it is still an area of concern.



Among smokers, the trend suggests that smoking is relatively light and occasional and not part of a daily ritual. This trend is reflected in figure 08, where it can be seen that most of the students who admitted to having smoked, used less than one cigarette per day 3%, while students who smoked more than 20 cigarettes per day only accounted for 0.5% of the sample. Additionally, students who smoked for all 30 days of the month accounted for only 0.7% and those who smoked for 1 or 2 days a month accounted for 4.1%. This pattern holds true for both boys and girls in most of the form-levels surveyed, although second formers showed a slightly higher proclivity to use less than one cigarette per day. These trends were similar to those established in 1999.

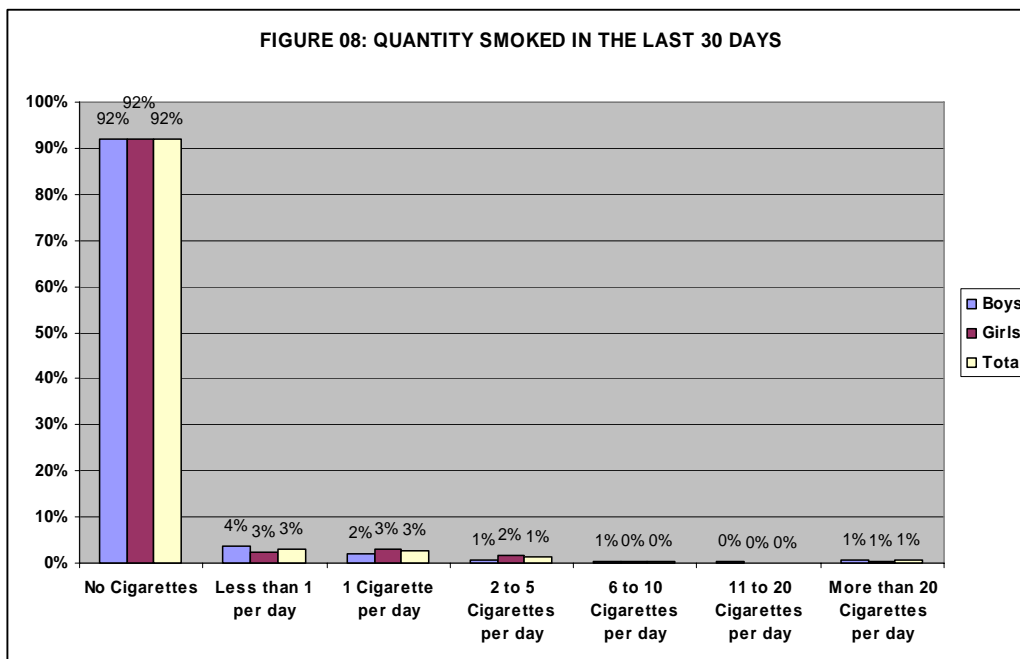
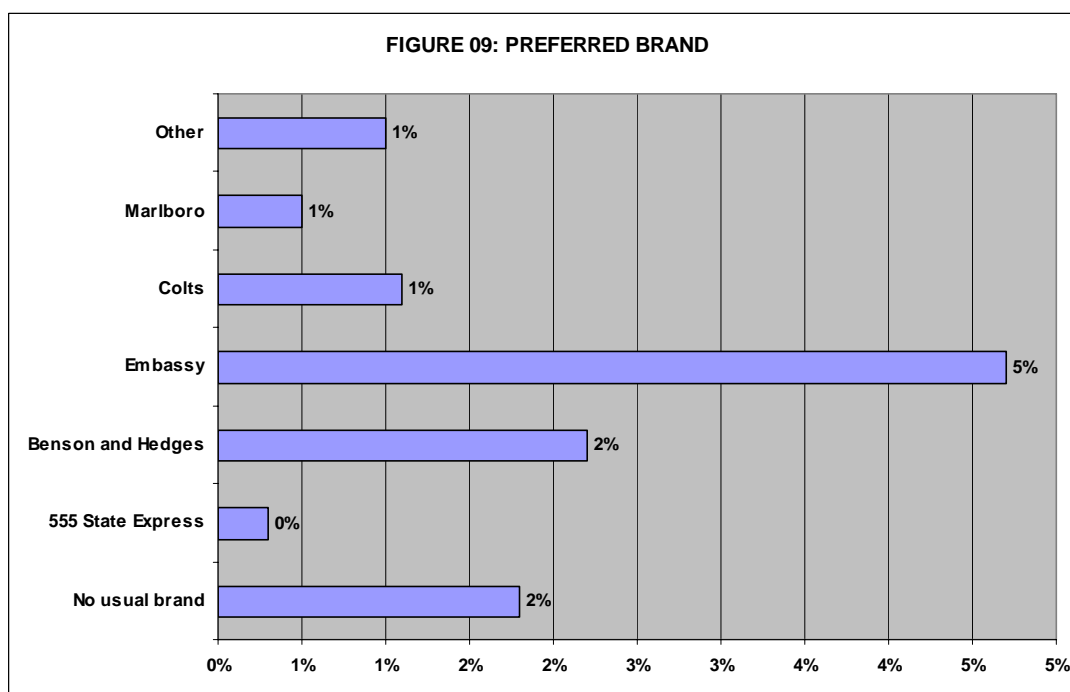


Figure 09 conveys information on the preferred brand of cigarettes for students and as in 1999; Embassy has emerged at the preferred brand for students who smoked in both gender groups. The popularity of this brand is likely to be related to cost factors, since this brand is known to be inexpensive. These data also help to support the view that smoking is an occasional activity for students who smoke and hence no brand loyalty has been established. In this instance choice appeared to have been dictated more by price or availability.



As in 1999, this 2002 study suggests that tobacco products other than cigarettes continued to be unpopular among students, with only 10% of those sampled admitting that they had ever used a product like snuff, or chewing tobacco. In this group there were 3% more boys than girls and form-level 2, emerged as the class in which tobacco products were most popular. In this class such products were twice as popular as they were in other classes.

The home continues to be the most popular place for smoking in this 2002 study, although the level of “*in home*” smoking has moved from 12% in 1999, to 9% currently. Smoking at friends’ houses also continues to be the second most popular place where 5% of students smoked and while in 1999, public places and social events accounted for 6% of students, on this occasion, it was chosen by 7% of students. There were no significant gender differences between places that children smoked and the school was the venue for smoking in less than 1% of cases.

The study also asked students if they encountered difficulty buying cigarettes and only 2% of the 6% of students who attempted to buy cigarettes were prevented from doing so because of their age. This implies that more than half of students attempting to buy cigarettes were able to do so without reference to their age. It is, however, noteworthy that the largest group of students reporting difficulty in gaining access to cigarettes was those who were 12 years old and younger.

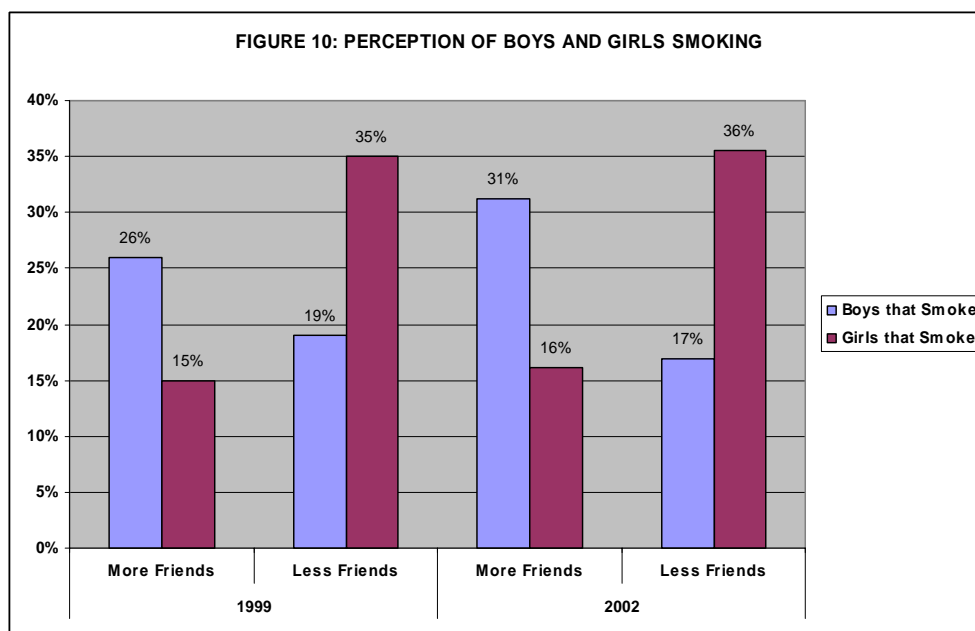
A key indicator of tobacco addiction which is the morning cigarette was used as an indicator that would assess the extent of addiction among smokers. In less than 1% of cases did respondents always feel like having a morning cigarette and this was sometimes the case among 1% of respondents. The desire for a morning cigarette was generally 4% lower in this study, than in 1999.

## 8.0: KNOWLEDGE AND ATTITUDES TOWARDS TOBACCO:

Here students were asked a range of questions about various aspects of their attitudes towards smoking and some interesting perspectives emerged. Peer influences were included in this group of questions that normally required a response based on *perception* and not *experience*. Hence the entire sample would have been required to respond to these questions.

Most students did not feel that they would have been influenced to smoke by an offer made by one of their best friends. Here 75% of students said that they would definitely not smoke, even if offered by a close friend, while 10% indicated that they would have been influenced. The quantity of students indicating that they would not be influenced is similar to the 72% of students who indicated a similar level of resistance to peer influence in 1999. There was, however, a 23% group in the sample that indicated uncertainty about the influence by responding “*probably*,” instead of “*yes*”, or “*no*”.

Based on figure 10, it is clear that among students surveyed, smoking was not seen to be a significant popularity boost and this fact remains unchanged over the years that intervened between this and the last study. However, if it could be said to boost popularity, it would be more so for boys than girls. The analysis of responses to this question from a gender perspective is interesting and suggests that girls think that smoking will make boys more popular than it will make girls. Curiously, however, there is still no significant difference in their perception of the negative effect of smoking between genders. Evidently therefore there is still some gender bias in the perception of smoking being more socially acceptable for boys than girls.



Similar perceptions were conveyed in relation to questions that investigated the reactions of students to persons who smoked based on their gender. Here students were asked to categorise their perception of smokers using specific labels. A cumulative total of 94% of students expressed negative sentiments towards the sight of a woman smoking and this is an increase over 1999 when negative sentiments totalled 90%. These suggested that female smokers lacked confidence, were stupid or losers. Comparatively men were viewed slightly less harshly, with 92% being viewed negatively. It was noticeable here that the presumably positive label “*ladies man*” was associated with only 6% of men that smoked, while only 3% of female smokers were categorised as sophisticated.

<b>TABLE 01: SMOKING IN THE FUTURE</b>				
	<b>Definitely Not</b>	<b>Probably Not</b>	<b>Probably Yes</b>	<b>Definitely Yes</b>
<b>Smoking in 12 Months?</b>	78.5%	14%	6%	2%
<b>Smoking in 5 Years?</b>	75%	19%	5%	1%
<b>Ok to smoke short Term [1 year and then Quit]</b>	72%	17%	8%	3%
<b>Difficult to Quit?</b>	18%	15%	37.5%	29%

Information in table 01 presents the responses to questions which asked students if they felt that they would be smoking 12 months and 5 years from the time the survey was taken and suggests that most students perceive smoking as a short-term activity. The largest quantity (78.5%) said they would definitely not be smoking in 12 months and a slightly smaller quantity (75%) said they would not be smoking in five years time. Although a majority of them indicated that it is not OK to smoke short term, it can be seen that a small number of students see themselves smoking in 12 months, and even smaller number see themselves smoking in 5 years.

These data reflect an improvement over the 1999 situation where slightly larger numbers of students saw themselves smoking in the long term. It is also evident that more than 82% think that smoking is addictive, since a very small number think that they could easily quit this activity. This correlates with responses to the question that asked students if they felt it was ok to smoke on a “*short term*” basis, since the 72% of students who expressed this view, was not dissimilar to the quantity of persons that expressed an intention to stop smoking within 12 months, or 5 years. Against this background, it was interesting to note that cumulatively 66.5% of students expressed the view that it would be difficult to quit smoking.

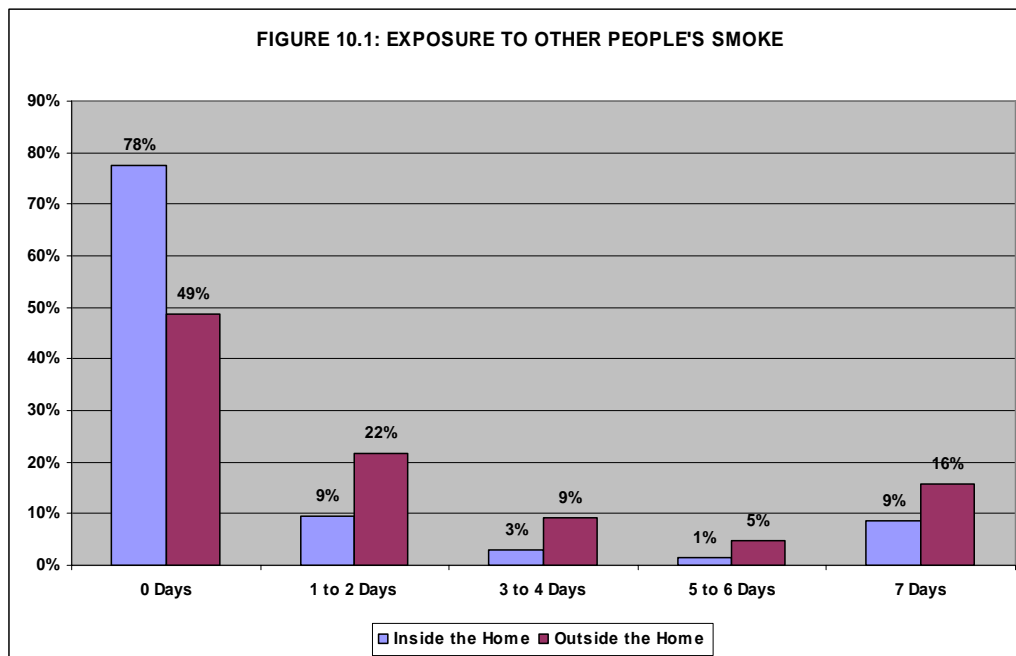
Students surveyed indicated in almost equal numbers that persons in their family discussed the harmful effects of smoking with them. 58% of students stated that they had family discussions on the harmful effects of cigarettes and this is marginally higher than in 1999 when 56% of students reported having such conversations. It is noteworthy that reports of such discussions did not vary significantly beyond 2% between boys and girls.

## **9.0: SMOKING AND HEALTH CONCERNS:**

In response to a general question on whether the students saw smoking as dangerous to their health, the overwhelming response was a definite “Yes”. Here, 83% of students believed that smoking was dangerous to their health, while a further 9% believed that it was probably dangerous to their health. More specifically, 55% believed that smoking would make them lose weight, while 40% felt that it would have a neutral impact on their weight. This section is somewhat curious since this year there was less smoking, however in 1999, 90% of students indicated that that smoking was dangerous to their health. There was also a similar pattern relating to the harmful effect of other people’s smoke. Cumulatively 84% of students in 2002 felt that other people’s smoke was harmful to them, while 88% of students felt this way in 1999. Among those thinking that other people’s smoke was harmful in 2002, 16% were somewhat less certain of the effect of second-hand smoke.

## 10.0: EXPOSURE TO OTHER PEOPLE'S SMOKING:

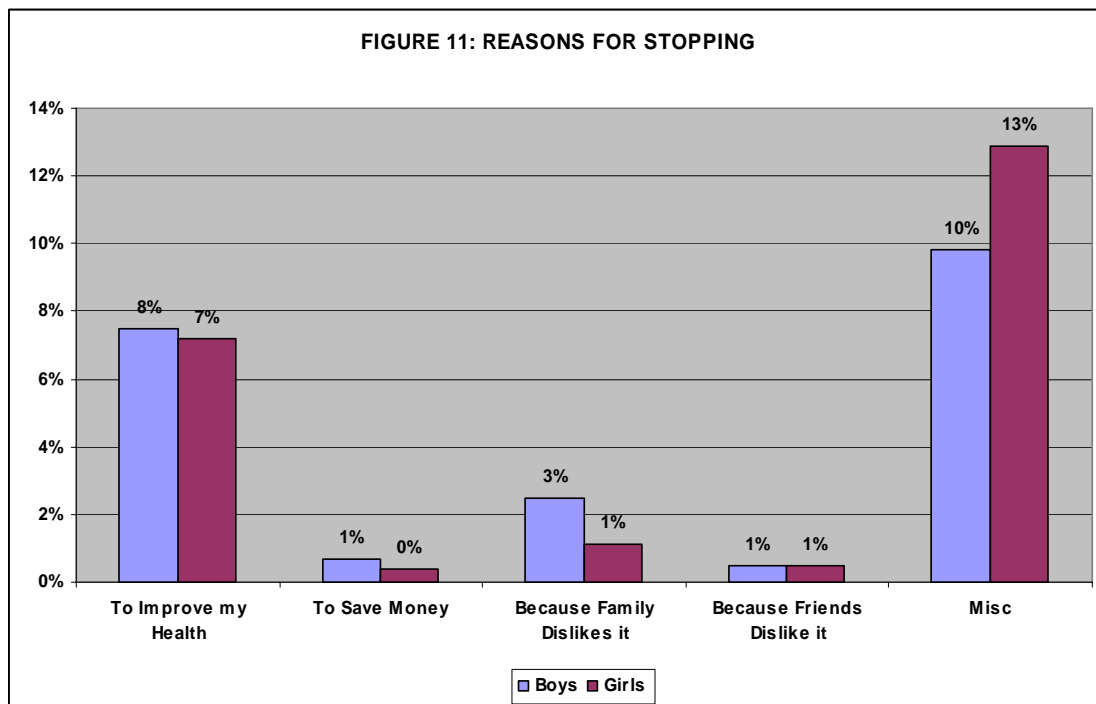
Students were exposed to more smokers outside of the home according to figure 10.1 however, an apparent trend emerges since exposure to smokers seems to be more likely on a daily basis, or to happen on one or two days a week. These data are not dissimilar to those from 1999, when almost identical levels of exposure were encountered and this supports the suggestion that while smoking among students is down, this is not necessarily the case for the adult population. In response to a related question, a majority of students (77%) supported the banning of smoking in public places and this is 2% reduction from 1999.



## 11.0: ATTITUDE TOWARDS QUITTING:

The survey raised several issues regarding the attitude of smokers towards the discontinuation of their smoking. Only 8.5% of persons in the sample were qualified to respond to this question since these had smoked in the last year. In this group of smokers, 54% indicated that they attempted to stop smoking in the last year, while 46% made no such attempt. Among those who already stopped smoking, the largest group (38%) had done so over three years before the survey had been administered.

As can be seen from figure 11, health concerns were the major reasons both boys (8%) and girls (7%) stopped smoking. It was noteworthy that family disapproval outranked the disapproval of friends as a motivation to stop. This suggests that peer pressure was not a significant influence in the discontinuation of the smoking habit. The rationale behind discontinuation is not dissimilar to that detected in 1999, however, on this occasion more students have identified other “*miscellaneous*” reasons for the discontinuation of their smoking habit.

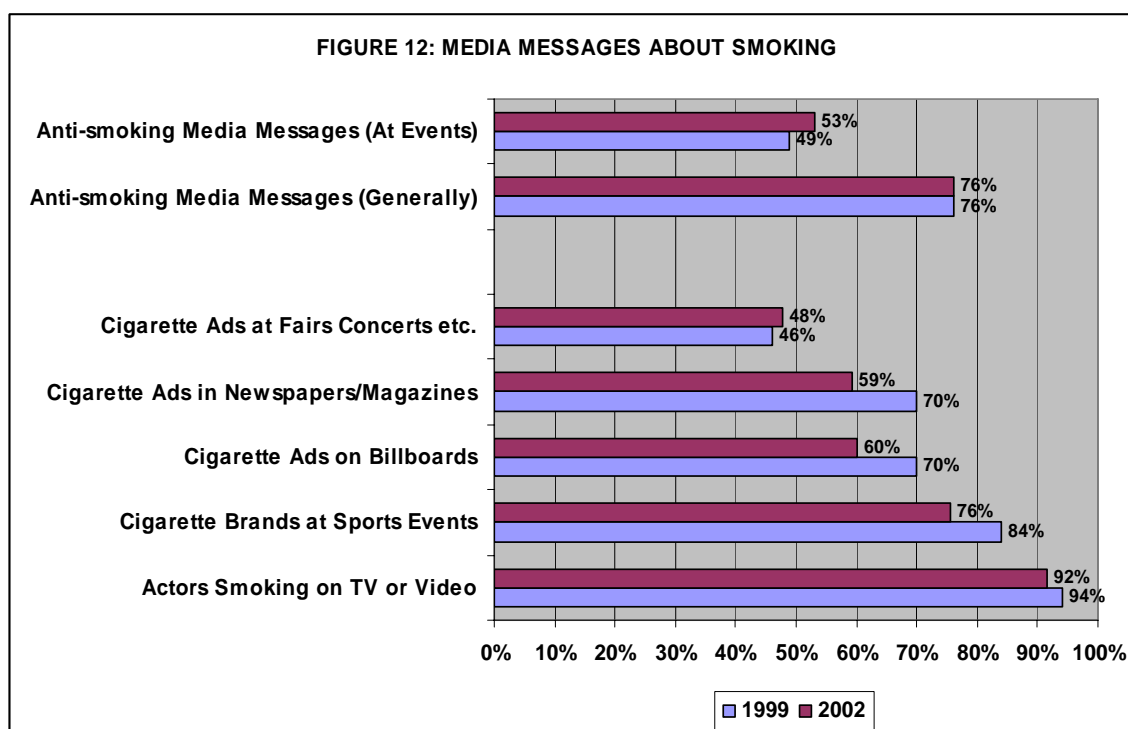


Students who were still active smokers were asked if they felt that they could stop smoking if they wanted to and only 1% indicated that they did not think that they could stop smoking. The remainder were confident that they could stop (10%), if and when they wanted to. Additionally, a large number of students (16%) indicated that they had stopped smoking already.

In this section, students were also asked about the extent to which they have received help in their quest to stop smoking, as distinct from an inquiry into the impact of such advice. Here 8% indicated that they received such advice and the largest segment of that group received help from friends (4%). This was the case with boys and girls from all age groups.

## 12.0: KNOWLEDGE OF MEDIA MESSAGES AND SMOKING INFORMATION:

Figure 12 consolidates information collected on the knowledge of media messages about smoking in the two studies conducted in Barbados. It conveniently groups the anti-smoking messages in the top section and the pro-smoking messages in the bottom section. Evidently, the most significant media influence would come from actors smoking on TV, since several students recall seeing actors smoking. There was no anti-smoking media activity that was seen by as many people as actors smoking on TV (92%). There is also little evidence that this situation has changed over the past three years.



The closest media influence would be the extent to which cigarette brands were displayed at sports events. Cumulatively, some 48% of students recall seeing such advertisements for cigarettes at sports events, which is 6% lower than the cumulative number of students that recalled seeing anti-smoking messages at similar events.

Regarding the possession of cigarette merchandise, 16.5% of the sample indicated that they had any item in their possession with a cigarette brand logo on it and this was a slightly higher level of possession than 1999 (15%). In this instance, however, more boys (19%) had items with cigarette brands on them than girls (13%), while in 1999 there was no gender difference. 11% of the students indicated that they were offered a free cigarette from a cigarette representative and more boys (14.5%) were offered these gifts than girls (8%).

### **13.0: SMOKING INFORMATION FROM SCHOOLS:**

In addition to establishing the level of anti-smoking education in schools, the survey sought to establish the extent to which Schools engaged students in discussions, or conveyed information about smoking to students. The survey result shows that in only 27% of cases, students had in-class discussions on the reasons for young people smoking and this was 4 percentage points higher than 1999.

In relation to learning the harmful effects of smoking, 42% with fairly even numbers across the form-levels and gender, indicated that they had received such lessons. Furthermore, students indicated that class discussions of this nature were conducted a term before the survey was conducted in most instances (23%) and, if not more than a year before (23%) the survey was conducted.

## 14.0: PREVALENCE OF DRINKING AND ILLEGAL BEHAVIOUR:

Figure 13 diagrammatically consolidates useful information on the extent to which both drugs and alcohol are used, either experimentally, or habitually. Low content alcohol appears to be the substance used by more than half of the students surveyed. It is also interesting to note that occurrence of experimentation or use decreases as the substance becomes “*harder*” and moreover the “*popularity*” of the top two substances, Alcohol and Marijuana. In this instance it is noticeable that girls have higher use levels than boys in relation to alcohol, while boys are more inclined towards illegal substances, such as marijuana. In all instances, however, there is a close relationship between the usage levels for boys and girls.

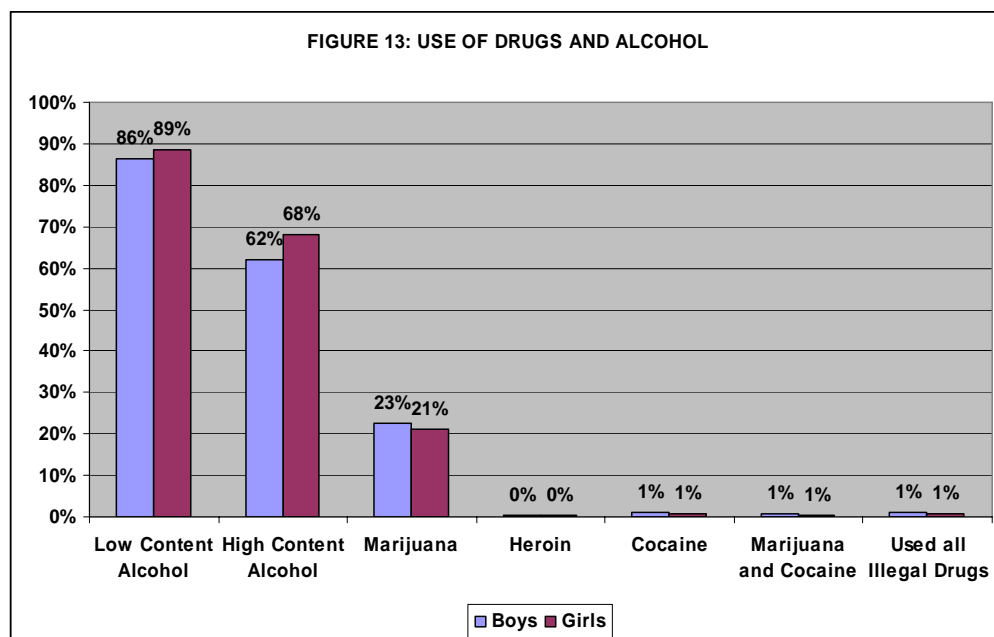
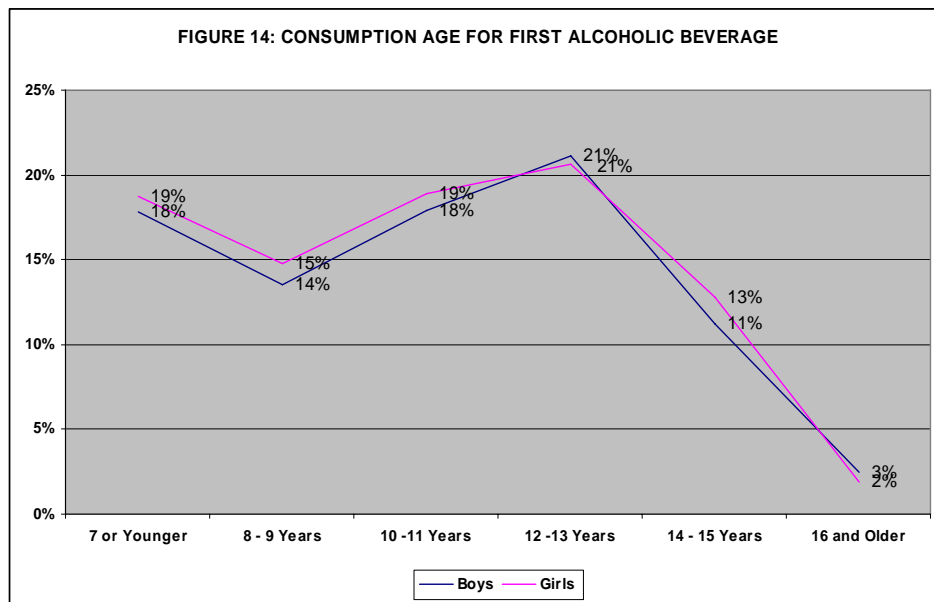
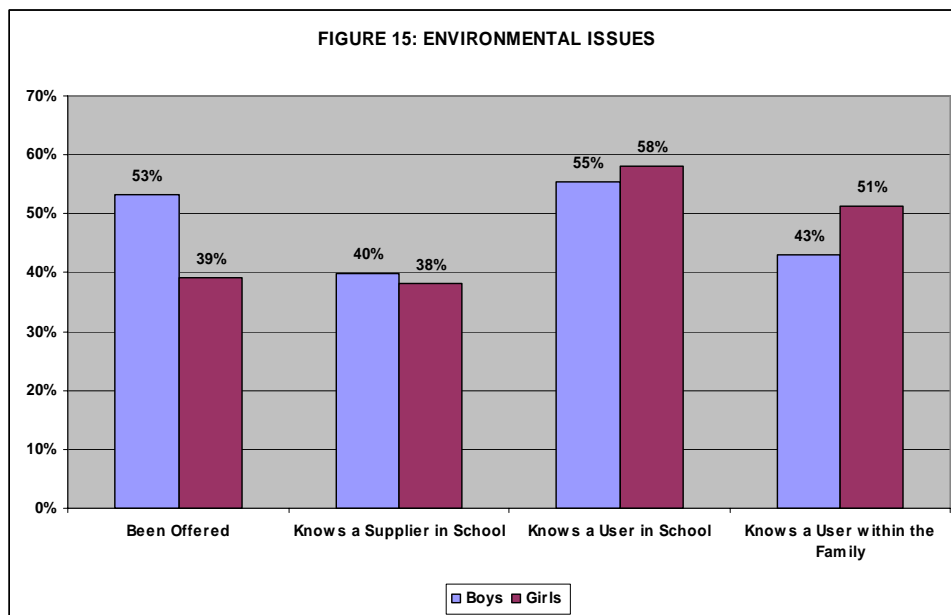


Figure 14 shows the ages at which boys and girls experimented or started using alcohol and it can be seen that there is no statistically significant difference between the ages at which boys and girls had their first drink. This pattern is very different to the findings of the 1999 study which concluded that “*boys generally started out earlier and seemed to try “harder” alcohol ....than their female counterparts*”. This shift in the influence that gender has on the age that drinking commenced can be partially explained by increase in the quantity of boys in the study and the fact that on this occasion the data is not disaggregated into stronger and lighter beverages.



This study also sought to probe the environmental factors that contribute to drug use, and asked students if they had ever been offered illegal drugs, and if so, if this has ever happened in the school. This data is presented in figure 15. It is interesting to note that the highest level of illegal drug use (marijuana) is substantially lower than any of these environmental factors and this suggests that students are exercising restraint when offered drugs, or have refused the approach of suppliers in the school, or the family. Related questions asked students if they have ever received drug education at their primary, or secondary schools and 85% of students recalled having such exposure either one or both institutions.



## 15.0: SPORTS, COMMUNITY ACTIVITIES AND DRUG USAGE:

An overwhelming majority of the students are not involved in community activities (74%). However, just over half of them are actively involved in organised competitive sports as indicated by the table below. Additionally, it would appear that this influences the fact that 76% of students did not receive drug education through community involvement, since few students attend these fora and evidently all of them do not provide such exposure.

TABLE 02: INVOLVEMENT IN ACTIVITIES		
	Sports	Community
Yes	55%	26%
No	45%	74%

Among the students who play competitive sports 14% indicated that they would take drugs if they believed that it could help improve their performance in sports, with 16% being boys and 11% girls. A conclusion may be drawn that due to the lack of drug education, students may be more inclined to believe that drugs can enhance their performance in sports, since only one-third (30%) of students involved in sports programmes were told of the dangers of using illegal drugs by coaches.

TABLE 03: DRUG USE FOR SPORTS AND RELATED EDUCATION		
	Has your coach spoken to you about drug use	Would you take drugs if you believed it could enhance your performance
Yes	30%	14%
No	29%	57%

## 16.0: SEXUAL ACTIVITY:

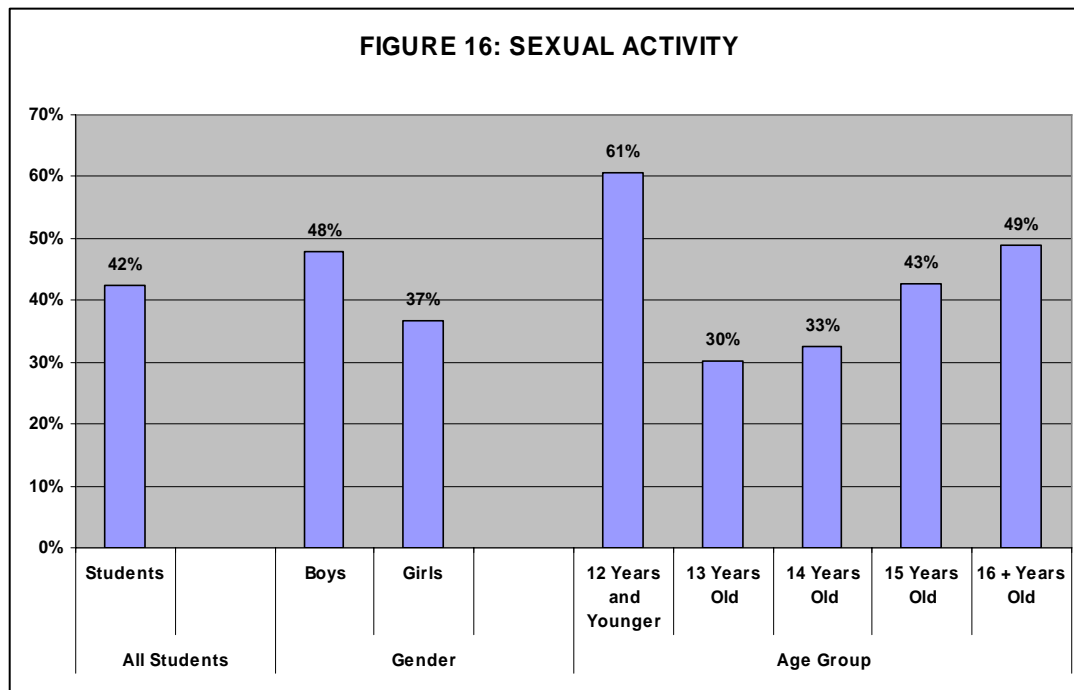


Figure 16 consolidates the information gathered on the extent to which the students in the study were sexually active and this is presented from both the age and gender perspectives. It can be seen that slightly less than half of the students are active and that more boys than girls are active. The single largest group of persons admitting to sexual activity is 12 years old or younger and it should be noted that this statistic is not influenced by the fact that the “12 year” group is larger than the others; indeed this group is similar in size to the other age groups. The implication therefore is that there was either a higher level of honesty, among these students, or there is a higher level of sexual activity among this younger generation. A major limitation of this type of analysis would be the fact that the term “*sexually active*” can be subjected to various interpretations.

Against this background of sexual activity, it is perhaps fortunate that 87% of students have been exposed to sex education classes at either the primary or secondary level and lowest level of exposure was among 13 year old students.

Among the 59% of students making plans to either “*definitely*” or “*probably*” become sexually active are 66% of boys and 51% of girls and here also the 12 year olds are the single largest group planning to become sexually active in the next three years.

**ANNEX I  
QUESTIONNAIRE**

***CORE QUESTIONS  
BARBADOS YOUTH TOBACCO SURVEY***

***PART OF THE  
GLOBAL YOUTH TOBACCO SURVEY (GYTS)***

**2002**

**THE NEXT 14 QUESTIONS ASK ABOUT YOUR USE OF TOBACCO:**

1. Have you ever tried or experimented with cigarette smoking, even one or two puffs?
  - a. Yes
  - b. No
  
2. How old were you when you first tried a cigarette?
  - a. I have never smoked cigarettes
  - b. 7 years old or younger
  - c. 8 or 9 years old
  - d. 10 or 11 years old
  - e. 12 or 13 years old
  - f. 14 or 15 years old
  - g. 16 years old or older
  
3. During the past 30 days (one month), on how many days did you smoke cigarettes?
  - a. 0 days
  - b. 1 or 2 days
  - c. 3 to 5 days
  - d. 6 to 9 days
  - e. 10 to 19 days
  - f. 20 to 29 days
  - g. All 30 days
  
4. During the past 30 days (one month), on the days you smoked, how many cigarettes did you usually smoke?
  - a. I did not smoke cigarettes during the past 30 days (one month)
  - b. Less than 1 cigarette per day
  - c. 1 cigarette per day
  - d. 2 to 5 cigarettes per day
  - e. 6 to 10 cigarettes per day
  - f. 11 to 20 cigarettes per day
  - g. More than 20 cigarettes per day
  
5. During the past 30 days (one month), how did you usually get your own cigarettes?  
(SELECT ONLY ONE RESPONSE)
  - a. I did not smoke cigarettes during the past 30 days (one month)
  - b. I bought them in a store, shop or from a street vendor
  - c. I bought them from a vending machine
  - d. I gave someone else money to buy them for me
  - e. I borrowed them from someone else
  - f. I stole them
  - g. An older person gave them to me
  - h. I got them some other way
  
6. During the past 30 days (one month), what brand of cigarettes did you usually smoke?  
(SELECT ONLY ONE RESPONSE)
  - a. I did not smoke cigarettes during the past 30 days
  - b. No usual brand
  - c. 555 State Express
  - d. Benson & Hedges
  - e. Embassy
  - f. Colts
  - g. Marlboro
  - h. Other

7. How much do you usually pay for a pack of 20 cigarettes?
- I don't smoke cigarettes.
  - I don't buy cigarettes, or I don't buy them in packs.
  - \$4.50
  - \$5.50
  - \$7.50
  - \$9.00
  - \$12.00
  - \$15.00
8. During the past 30 days (one month) how much do you think you spent on cigarettes?
- I don't smoke cigarettes.
  - I don't buy my cigarettes.
  - \$10.00
  - \$20.00
  - \$25.00
  - \$30.00
  - \$35.00
9. In a usual month (30 days) how much pocket money (allowance, income, etc) do you get?
- I don't receive any pocket money (or income, allowance, etc)
  - less than US\$1 (change all to your local currency equivalent)
  - 2 to 10 BDS\$
  - 12 – 20 BDS\$
  - 22 – 40 BDS\$
  - 40 – 60 BDS\$
  - more than 60 BDS\$
10. During the past 30 days (one month), did anyone ever refuse to sell you cigarettes because of your age?
- I did not try to buy cigarettes during the past 30 days (one month)
  - Yes, someone refused to sell me cigarettes because of my age
  - No, my age did not keep me from buying cigarettes
11. During the past 30 days (one month), have you ever used any form of tobacco products other than cigarettes (e.g. chewing tobacco, snuff, dip, cigars, cigarillos, little cigars, pipe)?
- Yes
  - No
12. Where do you usually smoke? (SELECT ONLY ONE RESPONSE)
- I have never smoked cigarettes
  - At home
  - At school
  - At work
  - At friends' houses
  - At social events
  - In public spaces (e.g. parks, shopping centres, street corners)
  - other

13. Do you ever have a cigarette or feel like having a cigarette first thing in the morning?
- a. I have never smoked cigarettes
  - b. I no longer smoke cigarettes
  - c. No, I don't have or feel like having a cigarette first thing in the morning
  - d. Yes, I sometimes have or feel like having a cigarette first thing in the morning
  - e. Yes, I always have or feel like having a cigarette first thing in the morning

**THE NEXT 17 QUESTIONS ASK ABOUT YOUR KNOWLEDGE AND ATTITUDES TOWARD TOBACCO:**

14. Do your parents smoke?
- a. None
  - b. Both
  - c. Father only
  - d. Mother only
  - e. I don't know
15. If one of your best friends offered you a cigarette, would you smoke it?
- a. Definitely not
  - b. Probably not
  - c. Probably yes
  - d. Definitely yes
16. Has anyone in your family discussed the harmful effects of smoking with you?
- a. Yes
  - b. No
17. At any time during the next 12 months do you think you will smoke a cigarette?
- a. Definitely not
  - b. Probably not
  - c. Probably yes
  - d. Definitely yes
18. Do you think you will be smoking cigarettes 5 years from now?
- a. Definitely not
  - b. Probably not
  - c. Probably yes
  - d. Definitely yes
19. Once someone has started smoking, do you think it would be difficult to quit?
- a. Definitely not
  - b. Probably not
  - c. Probably yes
  - d. Definitely yes
20. Do you think boys who smoke cigarettes have more or less friends?
- a. More friends
  - b. Fewer friends
  - c. No difference from non-smokers
21. Do you think girls who smoke cigarettes have more or less friends?
- a. More friends
  - b. Fewer friends
  - c. No difference from non-smokers

22. Does smoking cigarettes help people feel more or less comfortable at celebrations, parties, or in other social gatherings?
- More comfortable
  - Less comfortable
  - No difference from non-smokers
23. Do you think smoking cigarettes makes boys look more or less attractive?
- More attractive
  - Less attractive
  - No difference from non-smokers
24. Do you think smoking cigarettes makes girls look more or less attractive?
- More attractive
  - Less attractive
  - No difference from non-smokers
25. Do you think that smoking cigarettes makes you gain or lose weight?
- Gain weight
  - Lose weight
  - No difference
26. Do you think cigarette smoking is harmful to your health?
- Definitely not
  - Probably not
  - Probably yes
  - Definitely yes
27. Do any of your closest friends smoke cigarettes?
- None of them
  - Some of them
  - Most of them
  - All of them
28. When you see a man smoking what do you think of him? (SELECT ONLY ONE RESPONSE)
- Lacks confidence
  - Stupid
  - Loser
  - Successful
  - Intelligent
  - Ladies man
29. When you see a woman smoking, what do you think of her? (SELECT ONLY ONE RESPONSE)
- Lacks confidence
  - Stupid
  - Loser
  - Successful
  - Intelligent
  - Sophisticated
30. Do you think it is safe to smoke for only a year or two as long as you quit after that?
- Definitely not
  - Probably not
  - Probably yes
  - Definitely yes

**THE NEXT 4 QUESTIONS ASK ABOUT YOUR EXPOSURE TO OTHER PEOPLE'S SMOKING:**

31. Do you think the smoke from other people's cigarettes is harmful to you?
- a. Definitely not
  - b. Probably not
  - c. Probably yes
  - d. Definitely yes
32. During the past 7 days, on how many days have people smoked in your home, in your presence?
- a. 0
  - b. 1 to 2
  - c. 3 to 4
  - d. 5 to 6
  - e. 7
33. During the past 7 days, on how many days have people smoked in your presence, in places other than in your home?
- a. 0
  - b. 1 to 2
  - c. 3 to 4
  - d. 5 to 6
  - e. 7
34. Are you in favour of banning smoking in public places (such as in restaurants, in buses, streetcars, and trains, in schools, on playgrounds, in gyms and sports arenas, in discos)?
- a. Yes
  - b. No

**THE NEXT 6 QUESTIONS ASK ABOUT YOUR ATTITUDES TOWARD STOPPING SMOKING:**

35. Do you want to stop smoking now?
- a. I have never smoked cigarettes
  - b. I do not smoke now
  - c. Yes
  - d. No
36. During the past year, have you ever tried to stop smoking cigarettes?
- a. I have never smoked cigarettes
  - b. I did not smoke during the past year
  - c. Yes
  - d. No
37. How long ago did you stop smoking?
- a. I have never smoked cigarettes
  - b. I have not stopped smoking
  - c. 1-3 months
  - d. 4-11 months
  - e. One year
  - f. 2 years
  - g. 3 years or longer

38. What was the main reason you decided to stop smoking? (SELECT ONE ONLY)
- a. I have never smoked cigarettes
  - b. I have not stopped smoking
  - c. To improve my health
  - d. To save money
  - e. Because my family does not like it
  - f. Because my friends don't like it
  - g. Other
39. Do you think you would be able to stop smoking if you wanted to?
- a. I have never smoked cigarettes
  - b. I have already stopped smoking cigarettes
  - c. Yes
  - d. No
40. Have you ever received help or advice to help you stop smoking? (SELECT ONLY ONE RESPONSE)
- a. I have never smoked cigarettes
  - b. Yes, from a program or professional
  - c. Yes, from a friend
  - d. Yes, from a family member
  - e. Yes, from both programs or professionals and from friends or family members
  - f. No

**THE NEXT 9 QUESTIONS ASK ABOUT YOUR KNOWLEDGE OF MEDIA MESSAGES ABOUT SMOKING:**

41. During the past 30 days (one month), how many anti-smoking media messages (e.g., television, radio, billboards, posters, newspapers, magazines, movies) have you seen?
- a. A lot
  - b. A few
  - c. None
42. When you go to sports events, fairs, concerts, community events, or social gatherings, how often do you see anti-smoking messages?
- a. I never go to sports events, fairs, concerts, community events, or social gatherings
  - b. A lot
  - c. Sometimes
  - d. Never
43. When you watch TV, videos, or movies, how often do you see actors smoking?
- a. I never watch TV, videos, or movies
  - b. A lot
  - c. Sometimes
  - d. Never
44. Do you have something (t-shirt, pen, backpack, etc.) with a cigarette brand logo on it?
- a. Yes
  - b. No

45. During the past 30 days (one month), when you watched sports events or other programs on TV how often did you see cigarette brand names?
- a. I never watch TV
  - b. A lot
  - c. Sometimes
  - d. Never
46. During the past 30 days (one month), how many advertisements for cigarettes have you seen on billboards?
- a. A lot
  - b. A few
  - c. None
47. During the past 30 days (one month), how many advertisements or promotions for cigarettes have you seen in newspapers or magazines?
- a. A lot
  - b. A few
  - c. None
48. When you go to sports events, fairs, concerts, or community events, how often do you see advertisements for cigarettes?
- a. I never attend sports events, fairs, concerts, or community events
  - b. A lot
  - c. Sometimes
  - d. Never
49. Has a (cigarette representative) ever offered you a free cigarette?
- a. Yes
  - b. No

**THE NEXT 4 QUESTIONS ASK ABOUT WHAT YOU WERE TAUGHT ABOUT SMOKING IN SCHOOL:**

50. During this school year, were you taught in any of your classes about the dangers of smoking?
- a. Yes
  - b. No
  - c. Not sure
51. During this school year, did you discuss in any of your classes the reasons why people your age smoke?
- a. Yes
  - b. No
  - c. Not sure
52. During this school year, were you taught in any of your classes about the effects of smoking like it makes your teeth yellow, causes wrinkles, or makes you smell bad?
- a. Yes
  - b. No
  - c. Not sure

53. How long ago did you last discuss smoking and health as part of a lesson?
- a. Never
  - b. This term
  - c. Last term
  - d. 2 terms ago
  - e. 3 terms ago
  - f. More than a year ago

**THE LAST 3 QUESTIONS ASK FOR SOME BACKGROUND INFORMATION ABOUT YOU:**

54. How old are you?
- a. 11 years old or younger
  - b. 12 years old
  - c. 13 years old
  - d. 14 years old
  - e. 15 years old
  - f. 16 years old
  - g. 17 years old or older
55. What is your sex?
- a. Male
  - b. Female
56. In what grade/form are you?
- a. Second
  - b. Third
  - c. Fourth
  - d. Fifth

**THE NEXT SET OF QUESTIONS ASK ABOUT THE USE OF ALCOHOL, ILLEGAL DRUGS, AND ABOUT SOME ASPECTS OF YOUR EDUCATION AND LIFESTYLE:**

57. Have you ever tried, even one or two sips of low content alcoholic beverages (beer, shandy, stout, rum punch, wine) ?
- a. Yes
  - b. No
58. Have you used any low content alcohol within the last year?
- a. Yes
  - b. No
59. Have you used any low content alcohol within the last 30 days ?
- a. Yes
  - b. No
60. Have you ever tried, even one or two sips of high content alcoholic beverages (rum, vodka, gin whiskey etc.) ?
- a. Yes
  - b. No
61. Have you used any high content alcohol within the last year?
- a. Yes
  - b. No

62. Have you used any high content alcohol within the last 30 days?  
a. Yes  
b. No
63. How old were you when you had your first alcoholic drink?  
a. I have never had an alcoholic drink  
b. 7 or younger  
c. 8-9  
d. 10-11  
e. 12-13  
f. 14-15  
g. 16 and older
64. Have you ever used any illegal drugs (marijuana, cocaine, heroin, etc.)  
a. I have never used any illegal drug  
b. I have used marijuana only  
c. I have used cocaine only  
d. I have used heroin only  
e. I have used marijuana and cocaine  
f. I have used all three
65. Have you used illegal drugs (marijuana, cocaine, heroine, etc) within the last 12 months?  
a. I have never used any illegal drugs  
b. Yes  
c. No
66. Have you used illegal drugs (marijuana, cocaine, heroine, etc) within the last 30 days?  
a. I have never used any illegal drugs  
b. Yes  
c. No
67. Have you ever been offered illegal drugs?  
a. Yes  
b. No
68. Do you know someone in your school that can supply you with illegal drugs?  
a. Yes  
b. No
69. Do you know someone in your school that is using illegal drugs?  
a. Yes  
b. No
70. Do you have a close family member who uses illegal drugs?  
a. Yes  
b. No
71. Have you ever had drug education classes in Primary school or in your present school?  
a. Yes both  
b. Yes in primary school  
c. Yes in my present school  
d. No neither one

72. Do you play any organised competitive sports?  
a. Yes  
b. No
73. Would you take any drugs if you believed they could help you perform better in sports?  
a. I do not play any organised competitive sports  
b. Yes  
c. No
74. Has your coach ever spoken to you or your team about the harmful effects of drugs in sports?  
a. I do not play any organised competitive sports  
b. Yes  
c. No
75. Are you involved in any organised community groups or programs?  
a. Yes  
b. No
76. Have you ever received any drug education classes as part of a community program?  
a. Yes  
b. No
77. Do you think that you would use illegal drugs (marijuana, cocaine, heroin etc.) within the next 1 to 3 years?  
a. Definitely  
b. Probably  
c. Unsure  
d. Probably Not  
e. Definitely Not
78. Have you ever had any sex education classes at Primary school or at your present school?  
a. Yes both  
b. Yes, primary school  
c. Yes, my present school  
d. No neither one
79. Are you sexually active?  
a. Yes  
b. No
80. Do you plan to become sexually active within the next 1 to 3 years?  
a. Definitely  
b. Probably  
c. Unsure  
d. Probably Not  
e. Definitely Not

## ANNEX II

### 2002 Barbados Global Youth Tobacco Survey Sample Description and Weighting Procedures

#### Site: Barbados All Schools

#### SAMPLE DESCRIPTION:

All schools containing forms 3,4 and 5 that contained 40 or more students were included in the sampling frame. A two-stage cluster sample design was used to produce a representative sample of students in forms 3-5.

School Level - The first-stage sampling frame consisted of all schools containing forms 3-5. Schools were selected with probability proportional to school enrolment size.

Class Level - The second sampling stage consisted of systematic equal probability sampling (with a random start) of classes from each school that participated in the survey. All classes in the selected schools were included in the sampling frame. All students in the selected classes were eligible to participate in the survey.

#### OVERALL RESPONSE RATES:

Schools - 100.00% 100 of the 100 sampled schools participated.

Students- 85.66% 1654 of the 1931 sampled students completed usable questionnaires

Overall response rate -  $100.00\% * 85.66\% = 85.66\%$

#### WEIGHTING:

A weight has been associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of nonresponse. The weight used for estimation is given by:

$$W = W1 * W2 * f1 * f2 * f3 * f4$$

W1 = the inverse of the probability of selecting the school

W2 = the inverse of the probability of selecting the classroom within the school

f1 = a school-level nonresponse adjustment factor calculated by school size category (small, medium, large).

f2= a class adjustment factor calculated by school

f3 = a student-level nonresponse adjustment factor calculated by class

f4 = a post stratification adjustment factor calculated by gender and grade

#### USE OF THE WEIGHTED RESULTS:

The weighted results can be used to make important inferences concerning tobacco use risk behaviours of students in forms 3-5.