

## **V. School Drug Testing in Tai Po: Inputs, Outputs and Outcomes**

### **13. Inputs and outputs**

#### ***Student Drug testing Team and CCPSA Support Services***

13.1 On drug testing, a Student Drug Testing (SDT) team was formed comprising two nurses of different gender, two assistant social work officers and one information coordinator. In addition, a social work officer was also engaged to act as the co-ordinator of the drug testing and support programmes under the Scheme. The costing of conducting drug testing, including staff costs and costs of materials used, is estimated to be around \$3.3 million. Provision of additional staff, including four assistant social work officers, recruited by the CCPSA in Tai Po for providing professional support services to students seeking help to quit drugs and for conducting briefings and education programmes to students (including those not joining the Scheme) was also allowed, with an estimated cost of around \$ 2.2 million.

#### ***School Administrative and Logistics Support***

13.2 In addition, a sum of \$2.3 million has been allocated to 23 secondary schools in Tai Po, to recruit part-time staff, equip the testing venues, organize anti-drug activities for students, and provide support services related to drug test.

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#### ***School Social Work Services***

13.3 Additional support services have also been made available to 23 secondary schools in Tai Po through NGO that are providing school social work services to these schools. School social workers stationed in these schools have provided counseling services to students, and if required their parents or guardians, who have emotional distress when taking the drug tests. The school social workers have also conducted additional promotion and education programmes to

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116 Source: Narcotics Division, Security Bureau.

strengthen students' resolve to stay away from drugs. About \$3.5 million have been allocated to 9 NGO providing school social work services to 23 schools in Tai Po. Indeed, between November 2009 and May 2010, more than 120 counselling sessions and over 900 education programmes were organized by the additional school social workers in the 23 schools. In addition, over 1,200 consultation sessions were conducted to answer enquiries and provide advisory services to students, parents and school personnel.<sup>117</sup>

13.4 As noted from the above funding provisions for the Scheme, about one-third of the funding from the Beat Drugs Fund was earmarked for drug testing work alone. The remaining two-thirds of the resources were used to engage social workers and teachers to enhance drug education programmes for students (including those not joining the schemes) and to provide professional support services for those seeking help voluntarily.

### *Other Supports*

13.5 In addition to the above funding from the Beat Drugs Fund, resources were devoted by relevant government departments, especially Narcotics Division of Security Bureau and Education Bureau, in preparing for the Scheme and in organizing briefing sessions for teachers, parents and schools prior to the launch of the Scheme. On top of the services described above, the Government also fielded two experienced executive officers, who were designated as "Project Officer" under the Scheme, to attend and observe the drug testing visits to schools, to advise participating schools on the data privacy requirements and to serve as a communication link among the Government, the SDT team and the 23 participating schools in Tai Po. Furthermore, individuals and organizations in the community have also contributed their time and efforts by putting forward their comments and suggestions, either directly to the government and principals of the 23 secondary schools in Tai Po or indirectly through the mass media.

### *Drug Testing*

13.6 More than 12,400 students joined the Scheme. A total of 2,495 students were randomly selected for the screening test, representing about 20% of those

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117 Source: Narcotics Division, Security Bureau.

who participated in the Scheme. 1,975 students took the test and no confirmed positive case was found. Four false-positive cases were found following confirmatory testing by the Government Laboratory. The concerned students and parents were informed immediately of the results. Among the selected students, 459 students were assessed as being not suitable for the test in view of their physical condition or having taken medications. Fifty-five students could not provide a urine specimen for the test at the relevant time. Six students refused to take the test and the schools contacted their parents according to the protocol.<sup>118</sup>

13.7 During discussions with principals, a number of them pointed out that they were often invited to talks and seminars organized by schools in districts outside Tai Po, to share their experience in conducting drug testing and anti-drug programmes. The efforts made by both school and non-school stakeholders, in and outside Tai Po, in connection with the Scheme, have undoubtedly contributed a lot to anti-drug programmes for students in and outside Tai Po.

### *Observations*

13.8 The Project Team notes that the Scheme comprises a package of programs for students and their parents and drug testing is only one of its components. Additional resources have been provided to schools in organizing anti-drug activities and to NGOs in strengthening their school social worker services by organizing additional briefings and consultation sessions for parents and students. Additional resources have also been made available to the CCPSA in Tai Po in conducting education and promotion programmes for students. In short, drug testing only forms part of the Scheme which also includes anti-drug educational and prevention programs for students and their parents.

13.9 The Project Team is thus of the view that drug testing together with the various briefing sessions, counselling sessions and anti-drug activities mounted in the 23 secondary schools in Tai Po represent essentially an educational programme aimed at helping students to stay away from drugs. Given the substantial “educational” element under the Scheme, it is not appropriate to directly compare inputs with outputs or interpret outputs simply in terms of the number of students tested for drugs or the number of counselling sessions

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118 Source: Narcotics Division, Security Bureau.

<http://www.info.gov.hk/gia/general/201006/28/P201006280169.htm> retrieved on 29 June 2010.

conducted. Students attending schools in Tai Po, including those who have participated in the Scheme and those who have not, would have benefited by attending briefing and counselling sessions organized for them, exposing to the barrage of publicity and debates on the Scheme in the mass media and the Internet, engaging in discussions with parents, classmates and peers on the pros and cons of the Scheme or merely going through the process of making up their minds of whether or not to participate in the Scheme. Students attending schools outside Tai Po will not be insulated from what have been happening in Tai Po. The Project Team believes it is more appropriate to assess the Scheme based on outcomes, rather than outputs, of Scheme in terms of their impact on students attending schools in and outside Tai Po. This will be discussed in the section to follow.

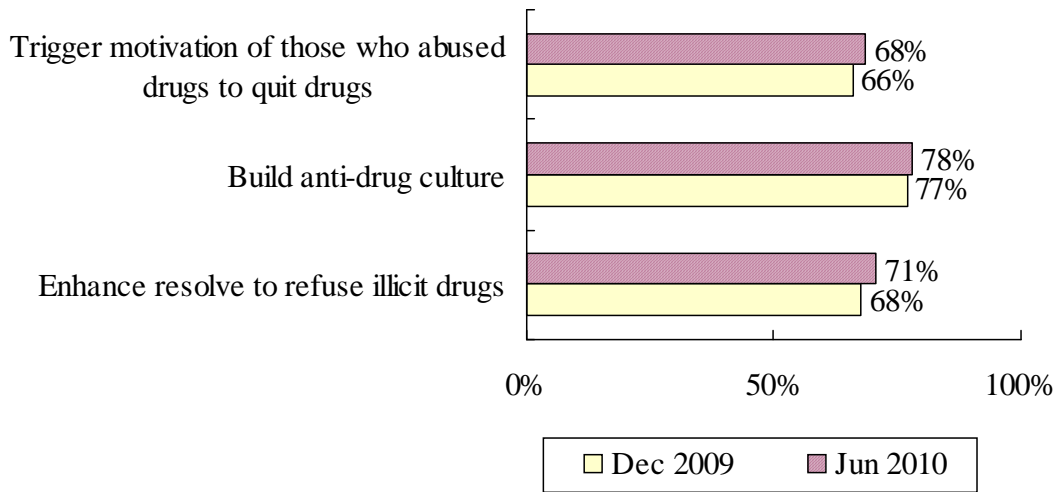
13.10 The Scheme is first of its kind ever implemented in local schools in Hong Kong, on a large number of students attending the 23 secondary schools in Tai Po. As a trial scheme, it is understandable that a fair amount of resources has to be devoted to the Scheme, in order to address the various concerns and worries raised by different parties, such as protection of students' interests and personal data, to minimize additional burden on schools to the detriment of learning and teaching, and to strengthen school social work services. As more experience is gained in conducting drug testing, the Project Team believes that there will be room for enhancing the efficiency of the Scheme. Given the educational focus of the Scheme, it may be desirable to shift the resources, in proportionate terms, from the process of drug testing to anti-drug educational activities and counselling services provided to students affected. This will be further explored and discussed in the chapter on "observations and recommendations".

## **14. Outcomes**

### *Perceived effectiveness of the Scheme*

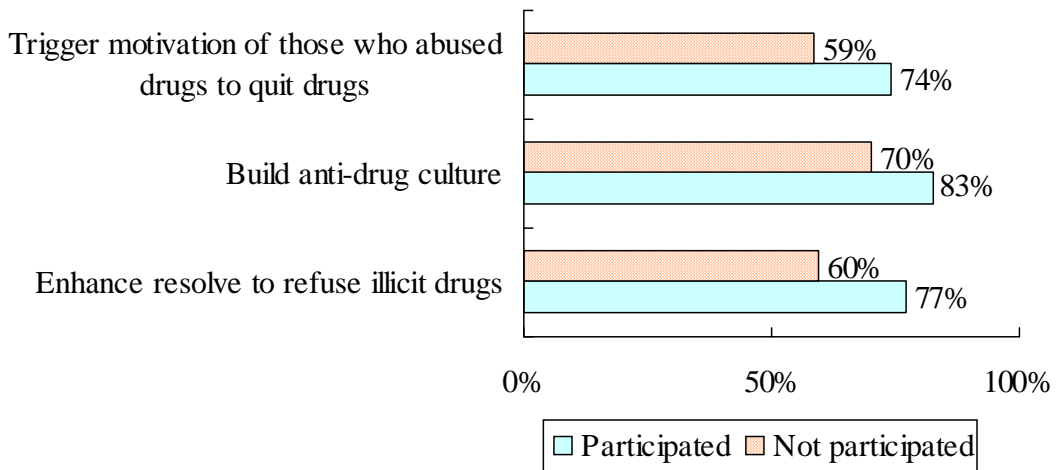
14.1 The research findings showed that in June 2010 the majority of students considered that the Scheme had enhanced their resolve to refuse illicit drugs (71%), helped build an anti-drug culture (78%) and triggered motivation of those who abused drugs to quit drugs (68%). The proportions of students holding such views were slightly higher than the corresponding percentages in December 2009, as shown in the chart below.

**Proportions of students by views on impact of the Scheme**



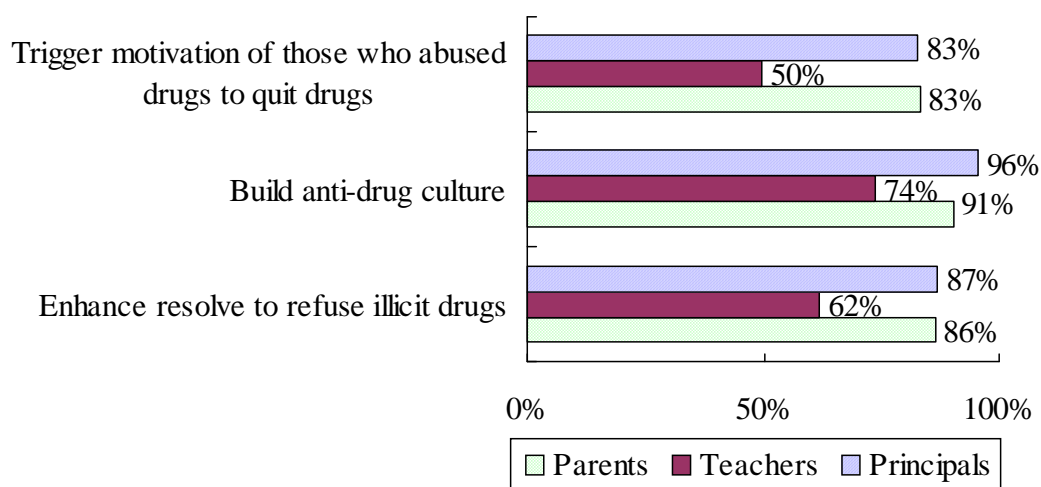
14.2 It may be of interest to note from the chart below that the proportion of students participating in the Scheme who considered that the Scheme had enhanced their resolve to refuse illicit drugs (77%), helped build an anti-drug culture (83%) and triggered motivation of those who abused drugs to quit drugs (74%) was higher than the corresponding percentage of those who had not participated in the Scheme. Nevertheless for those who had not participated in the Scheme, more than half of them considered the Scheme effective in enhancing their resolve to refuse illicit drugs (60%), helping build an anti-drug culture (70%) and triggering motivation of those who abused drugs to quit drugs (59%).

**Proportions of students in Tai Po by views on impact of the Scheme, June 2010**



14.3 The majority of parents, teachers and principals in Tai Po also considered that the Scheme had enhanced students' resolve to refuse drugs and helped build an anti-drug culture. The proportion of parents and principals sharing this view was much higher than that of teachers. While most parents and principals believed that the Scheme helped trigger motivation of those students who abused drugs to quit drugs, only about half of teachers thought so.

**Proportions of parents and teachers by views on impact of the Scheme**



14.4 During discussions with parents, teachers, principals and social workers, they pointed out that the Scheme had a deterrent effect on students to refuse drugs, especially for students who were occasional drug abusers and those who were likely to be influenced by bad peer pressure to try abusing drugs, even though they had not done so previously. For these students, they still cared about their study. For many of them their relationship with their family was still good, and they participated in the Scheme in order to satisfy their parents, to demonstrate that they had not taken drugs or to show their support of school policies. For many students, their participation in the Scheme amounted to a pledge by the students to themselves, their parents and their schools that they would stay away from drugs. The fact that they had participated in the Scheme also gave them an excuse to refuse drugs when offered by friends.

14.5 In short, based on views expressed by students, parents, teachers and principals, the Scheme had a positive impact on students and schools, by building an anti-drug culture, triggering motivation of those who had abused drugs to seek

help and enhancing their resolve to refuse drugs, with more prominent effect on students who participated in the Scheme than those who did not.

### *Self-referrals to CCPSA*

14.6 The Project Team was informed that the CCPSA in Tai Po, which was responsible for drug testing, had recorded an increase in the number of students voluntarily seeking help from the Centre since the announcement of the Scheme in mid 2009. From July 2009 to May 2010, there were 80 students in Tai Po voluntarily seeking help from the Centre directly, compared to around 42 young people cases over the same period in the previous year. Of these 80 students, 20 had participated in the Scheme. The increase in the number of self-referral cases was corroborated by the survey findings discussed above on the impact of the Scheme in enhancing students' resolve to stay away from drugs, triggering motivation to quit drugs and building an anti-drug culture.

14.7 In the course of the study, an interview was conducted with a student studying in a secondary school in Tai Po. He <sup>119</sup> was a Secondary 3 student who started taking drugs while studying Secondary 1 and since then had taken drugs only occasionally, often with friends when feeling unhappy or lonely, but at a more frequent interval during summer holidays. He was a participant of the Scheme because his father insisted that he should participate in the Scheme if he had not abused drugs. As he was afraid that he might be sampled for drug testing after having taken drugs, he sought help from the CCPSA in Tai Po last November to help him avoid the drug test. After counselling by the social worker, he agreed to quit drugs and spent efforts to stay away from his friends who had abused drugs. He had the resolve to refuse drugs when offered drugs for free by his friends.. He said he did not regret seeking help from the social worker and having quitted drugs, as he felt he was healthier. He recalled he once had a bad experience after taking several drugs simultaneously and fainted afterwards. Since that incident he realized that taking drugs could be very dangerous.

14.8 Another student who had sought help from CCPSA was also interviewed. When he sought help from social workers, details on the Scheme were not yet known and he had the impression that drug testing would be compulsory. He

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119 "He" is used to refer to students interviewed in the study, regardless of whether he is a male or female student.

started taking drugs in Secondary 1 and was an occasional drug abuser. He usually took drugs together with friends, often when feeling unhappy or lonely. Though he did not take drugs so often, he confessed that he did not know at what time he would take drugs together with friends. Thus, he was afraid that he might be caught taking drugs, if the Scheme was compulsory and he happened to be sampled for drug testing. Hence, he decided to quit drugs and self-referred to CCPSA for assistance. After the Scheme was formally launched, he did not participate in the Scheme because participation was voluntary. He told his parents that the Scheme was not meant for those who had not abused drugs and many of his classmates did not participate in the Scheme, and obtained consent from his parents for not participating in the Scheme. He did not regret seeking help from CCPSA and having quitted drugs, as he was feeling healthier after quitting drugs. Though some of his friends were still taking drugs, he was making efforts to befriend with those who had not abused drugs and stay away from those who had.

#### *Observations*

14.9 The research findings presented above indicated that, based on views expressed by students, parents, teachers and principals, the Scheme had a positive impact on students and schools, by building anti-drug culture, triggering motivation of those who had abused drugs to seek help and enhancing resolve to refuse drugs. The findings were also in line with the views of parents, teachers, principals and social workers, as expressed in focus group discussions and in-depth interviews.

14.10 Besides, the above experience of the two students interviewed in the study (as mentioned in paragraphs 14.7 and 14.8 above) reflects the thinking of those who have self-referred to CCPSA for help. Many of them are occasional drug abusers who usually take drugs together with friends, often when feeling unhappy or lonely. They do not know when they will take drugs and are afraid that their consumption of drugs will be discovered by schools if they are sampled for drug testing. Consequently, they sought help from social workers and after counselling by social workers have decided to quit drugs. Apparently, the Scheme has a deterrent effect on students, including occasional drug abusers who are afraid that drug testing will uncover their drug taking behaviour.



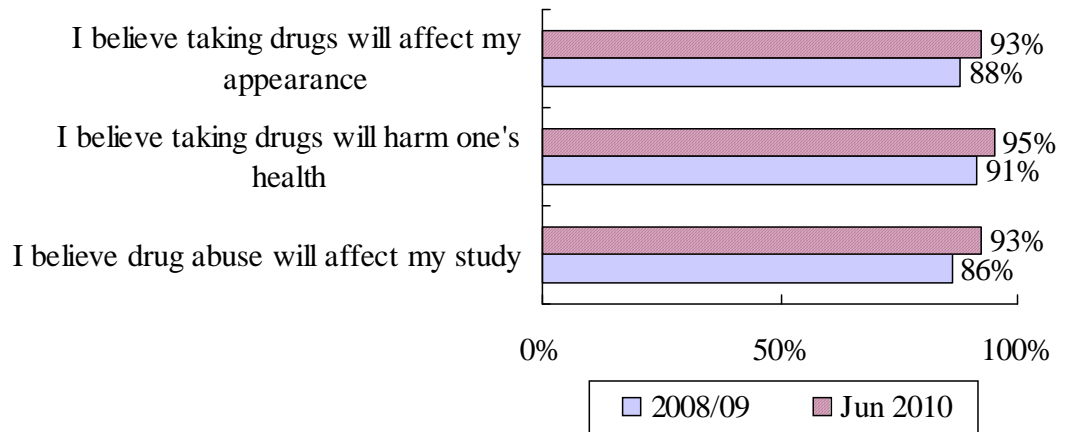
### *Other supporting evidence*

14.11 As discussed above, data collected in the June 2010 survey revealed that students, parents, teachers and principals generally perceived that the Scheme was effective on building anti-drug culture on campuses, triggering motivation of those who had abused drugs to seek help and enhancing the students' resolve to refuse drugs. On top of this assessment on the perceived effectiveness of the Scheme, the Project Team also conducted rigorous quantitative analyses on the data collected in the June 2010 survey and those of the 2008/09 survey with a view to assessing the impact of the Scheme on students' awareness of drugs, attitude towards fighting drugs and drug taking behaviour. A comparison of data obtained from the 2008/09 and June 2010 surveys showed that there was improvement in students' awareness of drugs, attitude towards fighting drugs and drug taking behaviour for those in Tai Po as well as those outside Tai Po, even after allowing for sampling fluctuations.

14.12 Although there was some evidence suggesting positive impact of the Scheme on students' awareness, attitude and behaviour, the Project Team is of the view a definitive conclusion could not be drawn due to the various limitations of this research study described in this report (paragraphs 5.22 to 5.32, and 22.1 to 22.10), and after conducting further analysis of the data. As an illustration, an example of such a comparative analysis on students' awareness of drugs based on data collected in the June 2010 survey and 2008/09 survey is given in the paragraphs to follow. Details are shown in Appendix 4.

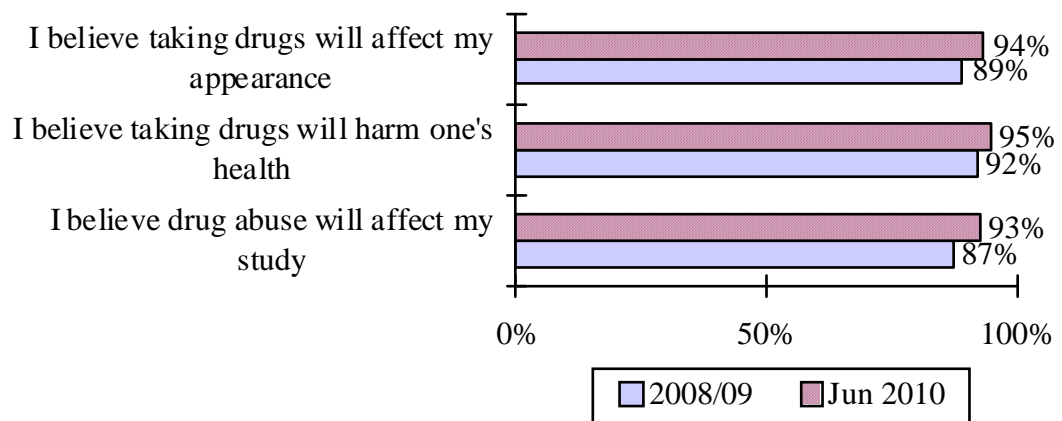
14.13 In both surveys, three questions were asked purporting to measure the underlying factor on students' awareness of drugs. For students in Tai Po, as shown in the chart below, the great majority believed that taking drugs would affect their appearance, harm their health and affect their study. Compared with 2008/09, a higher proportion of students in June 2010 were aware of the adverse effects of taking drugs. Indeed, from discussions with students, most of them indicated that they were aware that taking drugs was not good and was harmful to them. Views of teachers and social workers were similar: students knew fairly well that there were undesirable consequences of drug abuse.

**Percentage of students in Tai Po by awareness of drugs**



14.14 For students attending schools outside Tai Po, the great majority of them also believed that taking drugs would affect their appearance, harm their health and affect their study. Compared with 2008/09, the proportion of students outside Tai Po who believed that taking drugs would affect their appearance, health and study was higher in June 2010. This may reflect that the Scheme had an impact on students in Tai Po as well as those outside Tai Po in enhancing their awareness of drugs.

**Percentage of students outside Tai Po by awareness of drugs**



14.15 An index on students' awareness of drugs was compiled from data obtained in the 2008/09 survey and the June 2010 survey for the three questions presented above. The index ranges from 1 to 4, with higher scores indicating greater understanding of the harmful effects of drugs. An analysis of variance was

performed on the survey data in 2008/09 and June 2010. The results showed that “year” (i.e. 2008/09 and June 2010) but not “district” (i.e. Tai Po and outside Tai Po) had an impact on the index on awareness of drugs. The interaction between “district” and “year” however was not statistically significant. In other words, there was no significant difference between students in Tai Po and outside Tai Po, as regards the change in awareness of drugs between 2008/09 and June 2010.<sup>120</sup>

14.16 Given that confounding variables such as age and sex may affect the comparison between 2008/09 and June 2010, as there may be sampling variations in the age-sex distribution of samples of students enumerated in 2008/09 and June 2010 even though they are representative of the student population under study, an analysis of variance was conducted on the June 2010 survey data. The results showed that age had an impact on the index in addition to district (i.e. Tai Po and outside Tai Po). To control for age and sex, an analysis of covariance was conducted using age and sex as the covariates. The results showed that after controlling for age and sex, “year” did not have a significant impact on the index for students in Tai Po as well as those outside Tai Po. In other words, the change in students’ awareness of drugs between 2008/09 and June 2010, after controlling for age and sex, was not statistically significant, for students in and outside Tai Po

14.17 The index on students’ awareness of drugs is shown in the chart below. For students in Tai Po, the index was 3.57 in June 2010, which was higher than that in 2008/09 (at 3.50), by 0.07. The margin of errors arising from sampling for the estimate of difference between the index in 2008/09 and that in June 2010 was plus or minus 0.02, at 95% confidence. In other words, the increase in the index on awareness of drugs was statistically significant,<sup>121, 122</sup> as the increase was greater than what would be expected as a result of sampling fluctuations.

14.18 For students outside Tai Po, the index was 3.58 in June 2010, which was higher than that in 2008/09 (at 3.53), by 0.05. The margin of errors arising from

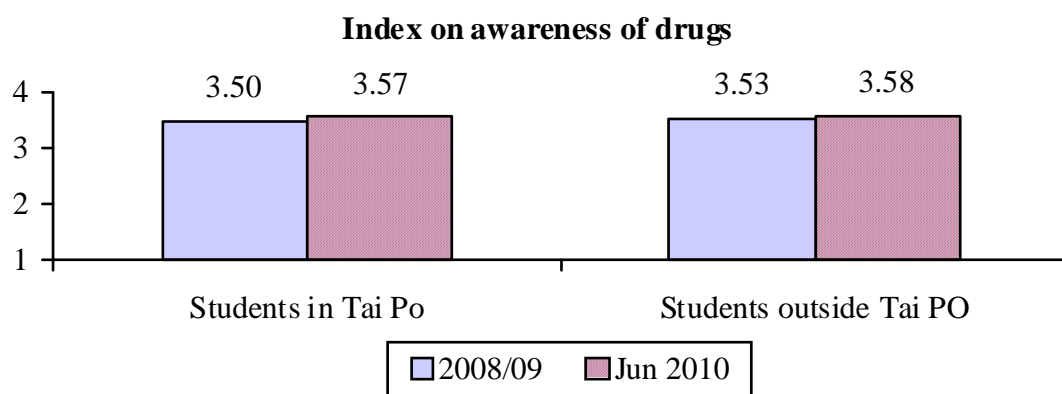
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120 Fox, John (2008), *Applied regression analysis and generalized linear models*, p. 149.

121 In statistics, a result is statistically significant if it is not a mere co-incidence or simply due to chance. It should be noted that statistical significance is not the same as “practical” significance as the latter may imply important or meaningful. Macfie, Brian P and Nufrio, Philip M (2006), *Applied statistics for public policy*, p.187

122 It should also be noted that if the sample size is large, as is the case for the present study, any difference, however, small, may still be statistically significant. Vaughan, Eva D (1998), *Statistics: tools for understanding data in behavioral sciences*, p. 263.

sampling for the estimate of difference between the index in 2008/09 and that in June 2010 was plus or minus 0.02, at 95% confidence. In other words, the increase in the index on awareness of drugs was statistically significant, as the increase was greater than what would be expected as a result of sampling fluctuations.

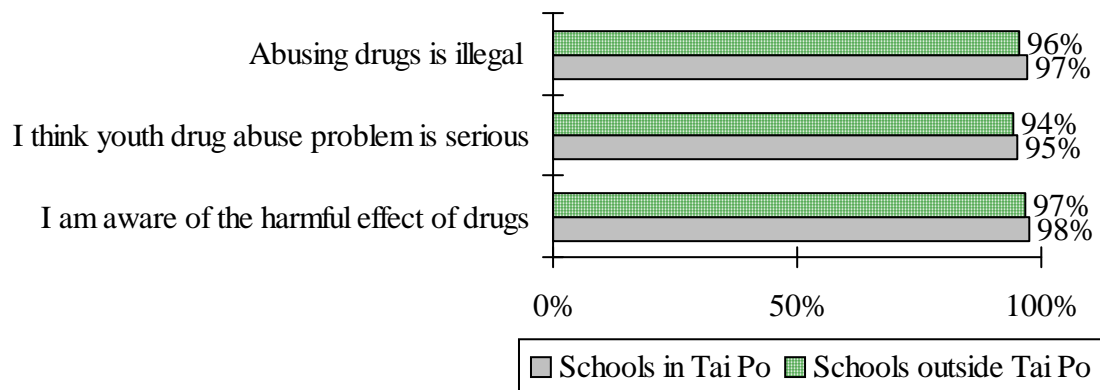


14.19 It may be of interest to note that for students who had participated in the Scheme, the index on awareness of drugs was 3.60 in June 2010, which was slightly higher than the index for students who had not participated in the Scheme, at 3.51. In other words, students who had participated in the Scheme had a better understanding of the harmful effects of drugs, as compared with those who had not participated in the Scheme. It may be noted that the survey estimates are not subject to sampling fluctuations, given that the June 2010 survey is 100% full enumeration.

### ***Views of parents***

14.20 In the June 2010 survey, views on parents were also gathered. It may be noted from the chart below that most parents of students attending secondary schools knew that abusing drugs was illegal and were aware of the harmful effect of drugs. The percentage was slightly higher for parents of students attending schools in Tai Po, as compared with those of students outside Tai Po. The great majority of parents also considered that youth abuse problem was serious. The percentage for parents of students in Tai Po was slightly higher than those of students outside Tai Po.

### Percentage of parents by views on drugs



#### *Observations*

14.21 The survey findings presented above on students' awareness of drugs had improved in June 2010, as compared with 2008/09, and the improvement was statistically significant. The Project Team notes that such improvement may be due to the launch of the Scheme, including drug testing and various educational measures. It may also be due to the impact of publicity arising out of the Scheme, resulting in increased awareness among parents and students. Besides, further analysis of the data showed that after controlling for age and sex, the difference was not statistically significant. Indeed, a time span of six months may be too short to identify the impact of the Scheme, if any, on students. In view of the limitations discussed above, the Project Team considers it not advisable to draw definitive conclusion from the comparative analysis presented above that the Scheme has a positive impact on students' awareness of drugs. Similarly, no conclusion should be drawn by comparing the 2008/09 and June 2010 data on other attributes such as students' attitude towards fighting drugs and drug taking behaviour. Nevertheless, it may be heartening to note that in June 2010, the great majority of parents of students in Tai Po and those outside Tai Po were aware that abusing drugs was illegal and of the harmful effect of drugs.