Appendix 4

Comparative analysis of data obtained in 2008/09, December 2009 and June 2010 surveys

Overview

1. In this appendix, an analysis of the data obtained in the 2008/09 survey covering a random sample of students attending secondary schools in and outside Tai Po, the December 2009 on all students attending secondary schools Tai Po and the June 2010 survey on all students attending secondary schools in Tai Po and a random sample of students attending secondary schools outside Tai Po is presented. The data are on students' awareness of drugs, perception of drugs, attitude towards fighting drugs and drug taking behaviour. Readers are advised to note the limitations of the data, as highlighted in Chapters 5 and 22 of the main report. In particular, no definitive conclusion should be drawn from the comparative analysis.

Perception and awareness of drugs and attitude towards fighting drugs

2. In the 2008/09 survey and June 2010 survey, 12 items were used to solicit students' views on their perception of drugs, awareness of drugs and attitudes towards fighting drugs. Expressed in a Likert scale of 4, with "1" denoting "totally disagree" and "4" denoting "totally agree", mean scores were computed for the items based on survey data. Of these 12 items, the item "just like smoking, taking psychotropic substances is a hobby nowadays" was excluded from the compilation of underlying factors, as its item-total correlation was less than 0.4. For the 11 items, exploratory factor analysis was performed and three underlying factors, with eigenvalues greater than 1, were identified. The three factors, namely perception of drugs, awareness of drugs and attitude towards fighting drugs, accounted for 66.9% and 66.5% of the total variance of data obtained from the 2008/09 survey and June 2010 survey respectively. The results are appended in the table below.

Item	2008/09 survey			June 2010 survey		
	Perception	**Awareness**	**Attitude**	**Perception**	**Awareness**	**Attitude**
1	*.703*	.283	.108	*.766*	.219	.187
2	*.675*	.330	.173	*.723*	.229	.196
3	*.785*	.213	.101	*.801*	.185	.129
4	*.791*	.168	.107	*.813*	.174	.161
5	*.746*	.022	.043	*.699*	.021	.093
6	*.807*	.184	.113	*.746*	.188	.140
7	.164	*.783*	.040	.135	*.755*	.050
8	.190	*.789*	.020	.179	*.710*	.043
9	.224	*.736*	.026	.180	*.778*	.065
10	.087	.026	*.920*	.190	.071	*.915*
11	.211	.046	*.890*	.266	.069	*.886*
Variance Explained (%)	32.40	18.89	15.63	33.16	17.18	16.14

Note: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. The highest loading among the factors for an item is in italics.

3. As an indication of the extent of relatedness between individual items and the three underlying factors, item-total correlations were computed and shown in the table below. It may be noted that the correlations, which ranged from 0.51 to 0.74, were fairly high.

Items/factors	**Corrected Item-Total Correlation**	
	2008 survey	**2010 survey**
Perception		
I believe taking drugs is trendy	.654	.721
If I have a chance, I will take drugs	.654	.678
I believe taking drugs will bring me more fun	.718	.734
I believe drug abusers are attractive to the opposite sex	.708	.760
I believe if I refuse drugs, my friends will tease me for being timid	.582	.558
I believe taking drugs helps me get along with my friends better	.737	.676
Awareness		
I believe taking drugs will affect my appearance	.531	.465
I believe taking drugs will harm one's health	.548	.434
I believe drug abuse will affect my study	.510	.512
Attitude		
If I take drugs, I do not mind letting my family know	.687	.738
If I take drugs, I do not mind letting my friends know	.687	.738

4. Based on data obtained in the 2008/09 survey, the internal consistency as a measure of reliability of the three factors was further assessed using the split-half method. It is an indication of the extent of similarity in the views of students across items measuring the same underlying factor. In calculating split-half reliability, items that purport to measure the same underlying factor are randomly assigned to two subsets. The total scores are then computed for each subset and the correlation between the two scores is measured. As shown in the table below, two measures of the split-half reliability were computed, namely the Spearman-Brown and Guttman Split-half coefficients, the value of which ranged from 0.62 to 0.84. In general, a value of 0.7 is considered accepted.

Factor	Spearman-Brown Coefficient (Unequal length)	Guttman Split-Half Coefficient
Perception	.836	.836
Awareness	.726	.621
Attitude	.814	.814

5. In addition, the Cronbach's Alpha was compiled to assess the internal consistency of the data, which is generally used as a measure of internal consistency. Cronbach's Alpha ranges in value from 0 to 1 and a value greater than 0.7 is considered acceptable, though a value slightly lower than 0.7 is sometimes accepted by researchers.[1] The Cronbach's Alpha for the three factors is shown in the table below. It may be noted that the Alpha coefficients range from 0.66 to 0.88, indicating that the internal consistency of items measuring the three underlying factors ranges from marginally acceptable to good.

Factor	No. of items	Cronbach's alpha	
		2008/09 survey	June 2010 post-survey
Perception	6	0.871	0.876
Awareness	3	0.710	0.659
Attitude	2	0.814	0.847

6. Finally, to assess the validity of the three factors, estimates of the convergent and discriminant validity were compiled using the 2008/09 survey data and shown in the table below. Convergent validity was assessed by the correlation among items which made up the same factor, while discriminant validity was indicated by the fact that items that did not purport to measure the same factor would not be highly correlated. As shown in the table below, the correlations between items that made up the same factor (as highlighted in the table) were in general higher than those for items that did not measure the same factor.

1 Santos, J Reyanldo A (1999), "Cronbach's Alpha: a tool for assessing the reliability of scales", in *Journal of Extension*, 37(2).

Correlations	$F1_1$	$F1_2$	$F1_3$	$F1_4$	$F1_5$	$F1_6$	$F2_1$	$F2_2$	$F2_3$	$F3_1$	$F3_2$
$F1_1$	1.000										
$F1_2$	.570	1.000									
$F1_3$	.555	.581	1.000								
$F1_4$	.524	.514	.601	1.000							
$F1_5$	.418	.395	.478	.491	1.000						
$F1_6$	.528	.541	.598	.638	.557	1.000					
$F2_1$	.320	.322	.291	.277	.197	.291	1.000				
$F2_2$	.330	.362	.282	.290	.200	.307	.479	1.000			
$F2_3$	.315	.345	.345	.287	.214	.315	.429	.448	1.000		
$F3_1$	.159	.208	.146	.192	.128	.199	.072	.076	.050	1.000	
$F3_2$	.248	.282	.281	.244	.207	.254	.100	.079	.129	.687	1.000

7. What may be concluded from the above discussion is that the three underlying factors, namely perception of drugs, awareness of drugs and attitude towards fighting drugs, which are measured by the 11 items used in the 2008/09 survey and the June 2010 survey have good validity and reliability and can be used for further analysis in the research. In the paragraphs below, survey findings in respect of individual items and the three underlying factors are presented. Furthermore, findings from the December 2009 survey on students' perception of drugs, awareness of drugs and attitude towards fighting drugs are also presented and compared with those of the June 2010 survey.

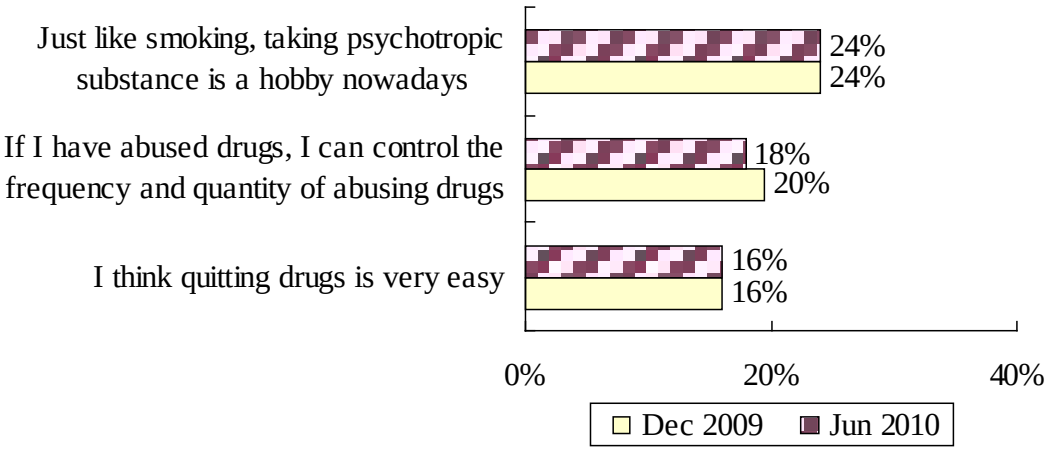
Perception of drugs

Changes between December 2009 and June 2010

Students attending schools in Tai Po

8. In both the December 2009 survey and the June 2010 survey, several questions were asked on the students' perception of drugs for those studying in secondary schools in Tai Po. As shown in the chart below, in June 2010 about 18% of students in Tai Po believed that if they had abused drugs, they could control the frequency and quantity of abusing drugs. The percentage was lower than that for the same group of students in December 2009. The difference is not subject to sampling fluctuations, given that the two surveys are 100% full enumeration.

Percentage of students in Tai Po by misconceptions about taking drugs

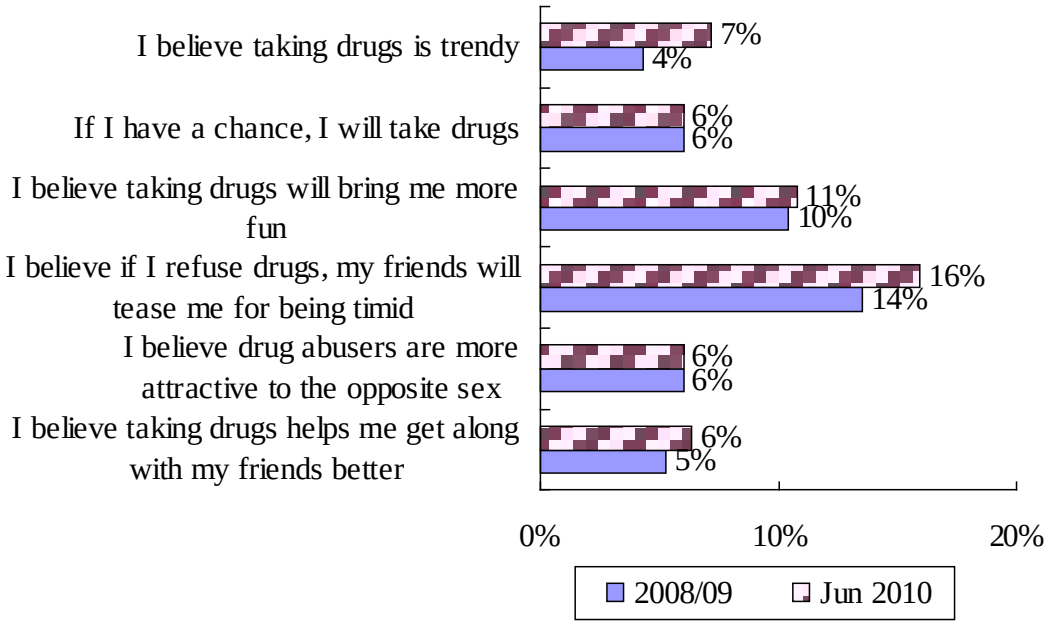


Changes between 2008/2009 and June 2010

<u>Students attending schools in Tai Po</u>

10. As discussed above, 6 questions were asked in both the 2008/09 survey and the June 2010 survey which were related to students' perception of drugs, covering students studying in secondary schools in and outside Tai Po. The findings for students in Tai Po are depicted in the chart below. It may be noted that apart from "if I have a chance, I will take drugs", the percentage of students who agreed with the 5 statements was higher in June 2010 as compared with 2008/09.

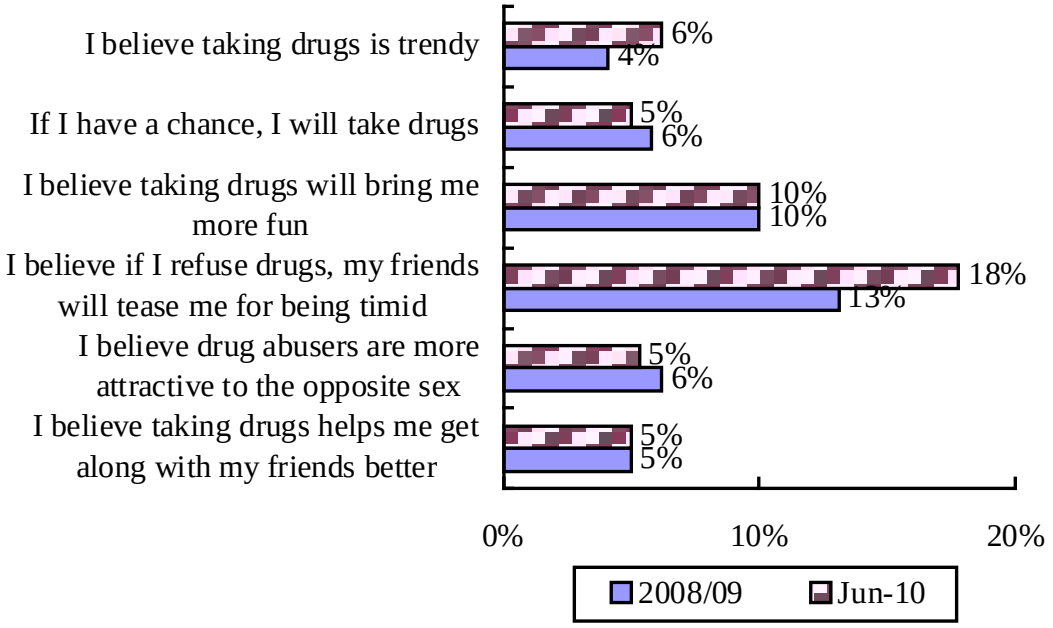
Percentage of students in Tai Po by views on drugs



Students attending schools outside Tai Po

11. For students outside Tai Po, findings of the 2008/09 survey and June 2010 survey also reveal a worrying trend. In June 2010, a higher proportion of students believed that (a) taking drugs was trendy, (b) if they refused drugs, their friends would tease them for being timid, (c) if they abused drugs, it would bring more fun and (d) help them get along with friends better, as compared with 2008/09.

Percentage of students outside Tai Po by views on drugs



Index on students' perception of drugs

12. An index on students' perceptions of drugs was compiled from data obtained in the 2008/09 survey and the June 2010 survey for the six questions presented above. The index ranges from 1 to 4, with higher scores indicating a greater extent of disagreement with the six questions. An analysis of variance was performed on the survey data in 2008/09 and June 2010 and the results are shown in the table and chart below. The Project Team is aware that the survey data in 2008/09 and June 2010 are not independent as there is overlap between the samples enumerated in 2008/09 and June 2010. It may be noted that "year" (i.e. 2008/09 and June 2010) and "district" (i.e. Tai Po and outside Tai Po) had an impact on the index on perception of drug. The interaction between "district" and "year" however was not significant. If two factors do not interact, the partial relationship between each factor and the index does not depend on which category at which the other factor is "held constant". The difference between the means across the two categories of one factor say "year" would not be significantly different across two

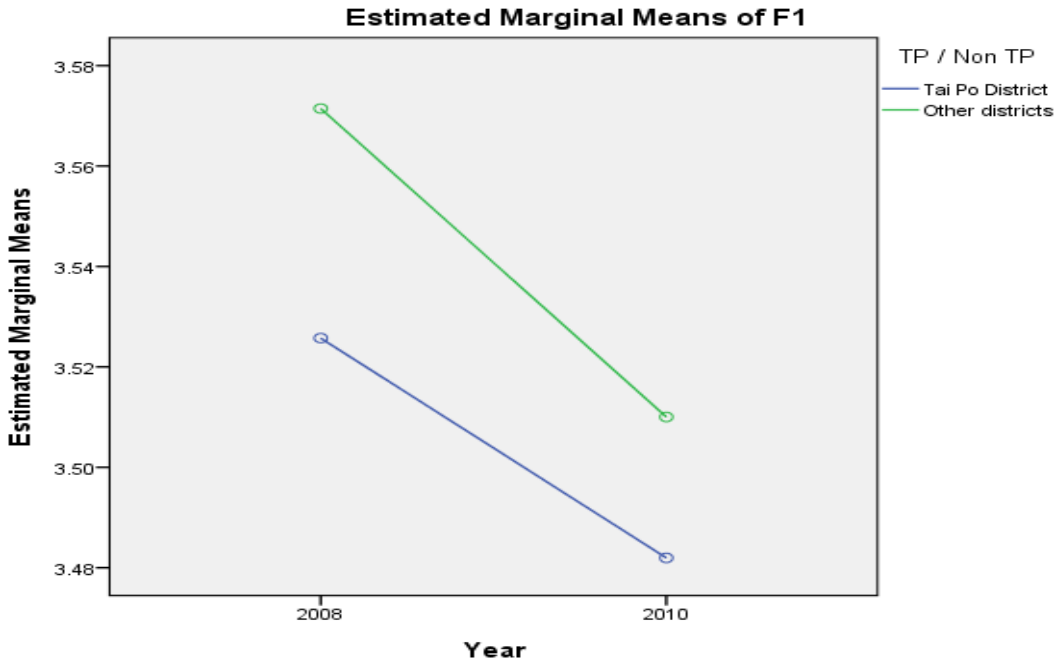
categories of the other factor (i.e. "district").[2] In other words, there was no significant difference between students in Tai Po and outside Tai Po, as regards the change in perception of drugs between 2008/09 and June 2010.

Tests of Between-Subjects Effects

Dependent Variable: Index on perception of drugs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	100.674[a]	3	33.558	108.268	.000
Intercept	245398.849	1	245398.849	791730.952	.000
Year	13.681	1	13.681	44.139	.000
District	6.731	1	6.731	21.718	.000
year * District	.385	1	.385	1.244	.265
Error	25607.641	82618	.310		
Total	1067620.405	82622			
Corrected Total	25708.315	82621			

a. R Squared = .004 (Adjusted R Squared = .004)



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

13. 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. It may be noted that age had an impact on the index in addition to district (i.e. Tai Po and outside Tai Po).

Tests of Between-Subjects Effects

Dependent Variable: Index on perception of drugs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	18.101[a]	13	1.392	4.534	.000
Intercept	183928.027	1	183928.027	598931.371	.000
Age	11.216	6	1.869	6.087	.000
District	1.525	1	1.525	4.966	.026
District * age	2.892	6	.482	1.569	.152
Error	6067.864	19759	.307		
Total	247618.768	19773			
Corrected Total	6085.965	19772			

a. R Squared = .003 (Adjusted R Squared = .002)

14. To control for age and sex, an analysis of covariance was conducted using age and sex as the covariates. As shown in the two tables below, after controlling for age and sex, “year” had a significant impact on the index for students in Tai Po and outside Tai Po. In other words, the change in students’ perception of drugs between 2008/09 and June 2010, after controlling for age and sex, was statistically significant, for students in Tai Po and outside Tai Po.

Tests of Between-Subjects Effects for students in Tai Po

Dependent Variable: Index on perception of drugs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	65.117[a]	7	9.302	29.258	.000
Intercept	1413.077	1	1413.077	4444.368	.000
Year	2.176	1	2.176	6.844	.009
Sex	.041	1	.041	.128	.720
Age	4.541	1	4.541	14.283	.000
year * Sex	1.118	1	1.118	3.517	.061
year * Age	.761	1	.761	2.394	.122
Sex * Age	3.567	1	3.567	11.218	.001
year * Sex * Age	.394	1	.394	1.240	.265
Error	4631.547	14567	.318		
Total	182444.121	14575			
Corrected Total	4696.664	14574			

a. R Squared = .014 (Adjusted R Squared = .013)

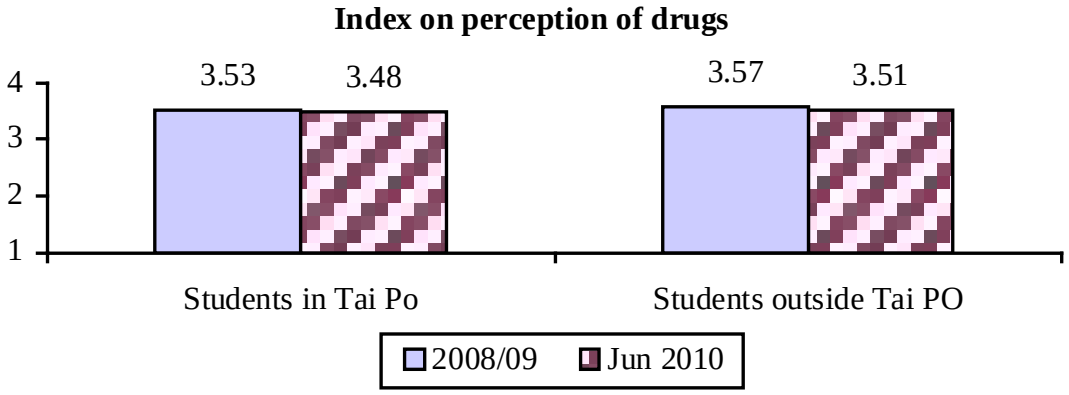
Tests of Between-Subjects Effects for students outside Tai Po

Dependent Variable: Index on perception of drugs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	104.906[a]	7	14.987	49.945	.000
Intercept	5242.791	1	5242.791	17472.583	.000
Year	7.216	1	7.216	24.050	.000
Sex	.767	1	.767	2.556	.110
Age	3.461	1	3.461	11.533	.001
year * Sex	2.360	1	2.360	7.865	.005
year * Age	2.760	1	2.760	9.197	.002
Sex * Age	4.190	1	4.190	13.965	.000
year * Sex * Age	1.083	1	1.083	3.608	.058
Error	19879.451	66252	.300		
Total	863322.152	66260			
Corrected Total	19984.356	66259			

a. R Squared = .005 (Adjusted R Squared = .005)

15. The index on perception of drug for students is shown in the chart below. For students in Tai Po, the index was 3.48 in June 2010 which was lower than that in 2008/09 (at 3.53) 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. For students outside Tai Po, the index was 3.51 in June 2010, which was also lower than that in 2008/09 (at 3.57) by 0.06. 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 reduction in the index on perception of drugs was statistically significant, as the reduction was greater than what would be expected as a result of sampling fluctuations.



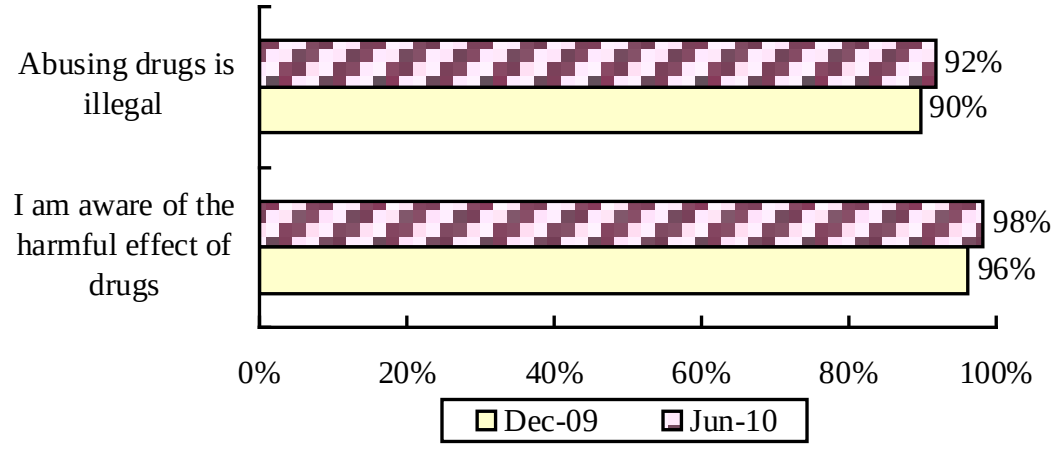
Awareness of drugs

Changes between December 2009 and June 2010

Students attending schools in Tai Po

16. The great majority of students in Tai Po were aware of the harmful effects of drugs and that abusing drugs was illegal. A slightly higher proportion of students agreed with the two statements in June 2010, as compared with December 2009. The differences are not subject to sampling fluctuations, given that the two surveys are 100% full enumeration.

Percentage of students in Tai Po by knowledge of drugs

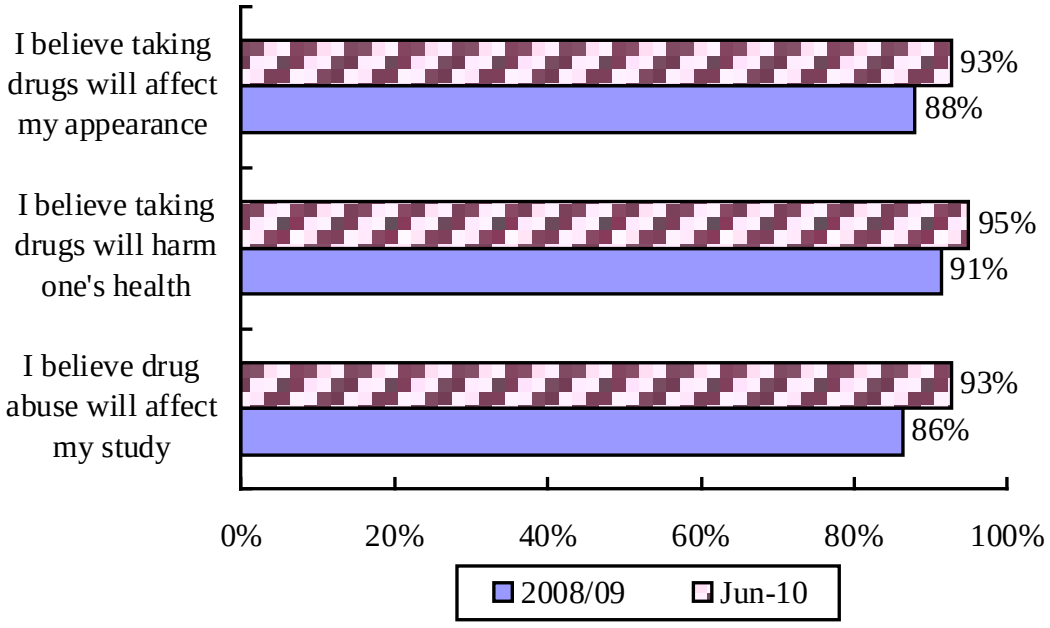


Changes between 2008/09 and June 2010

Students attending schools in Tai Po

17. As discussed above, three questions were asked in the 2008/09 survey and the June 2010 survey 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.

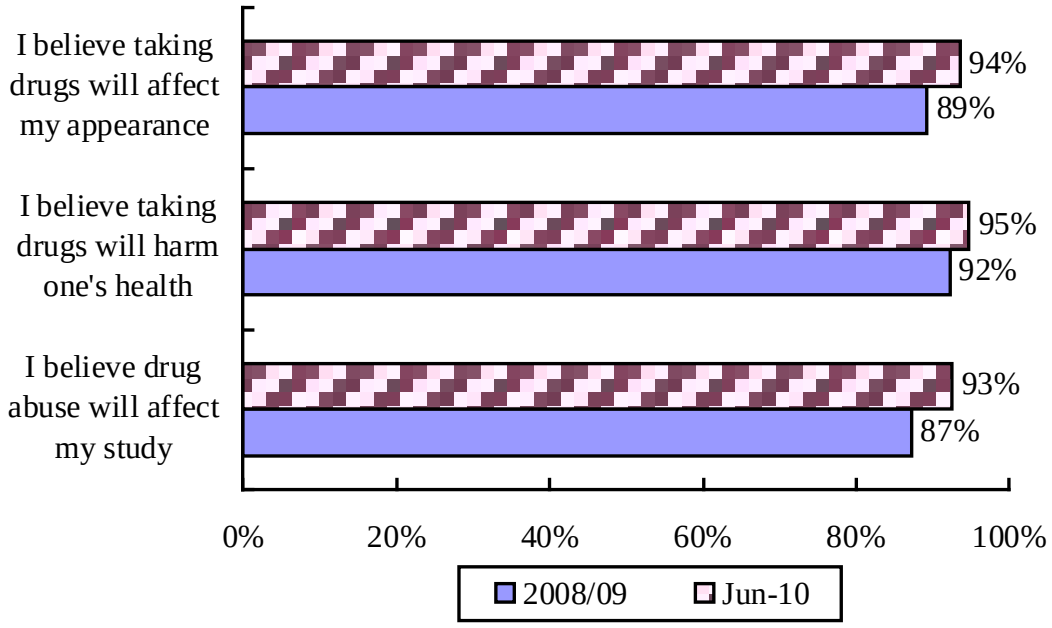
Percentage of students in Tai Po by knowledge of drugs



Students attending schools outside Tai Po

18. The great majority of students attending schools outside Tai Po 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 agreed with the three statements was higher in June 2010.

Percentage of students outsideTai Po by knowledge of drugs



Index on students' awareness of drugs

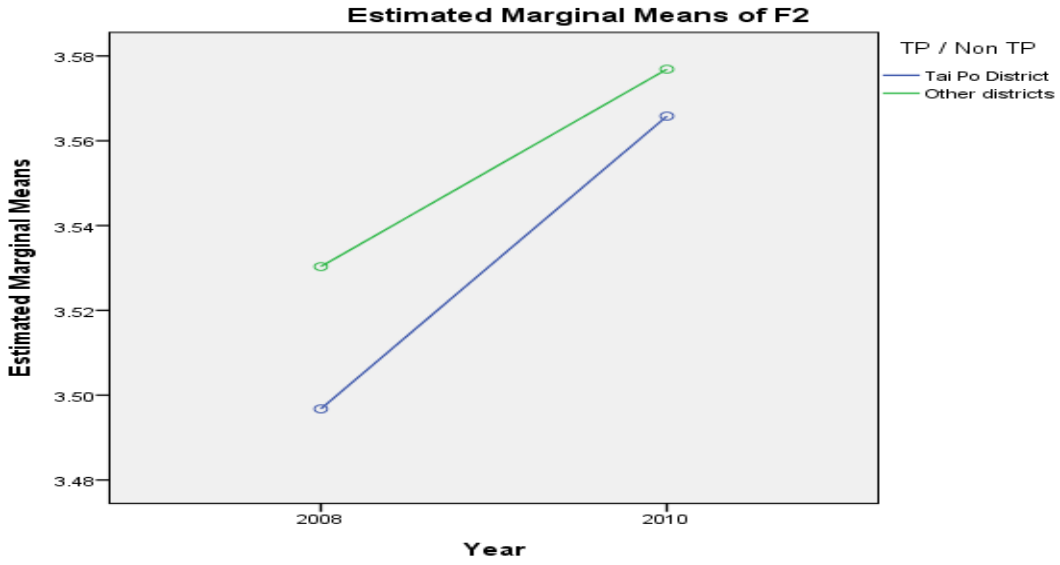
19. An index on students' awareness of drugs was compiled from data obtained in the 2008/09 survey and the June 2010 survey for the three questions presented above. The index ranges from 1 to 4, with higher scores indicating greater awareness of the harmful effects of drugs. An analysis of variance was performed on the survey data in 2008/09 and June 2010 and the results are shown in the table and chart below. It may be noted that "year" (i.e. 2008/09 and June 2010) and "district" (i.e. Tai Po and outside Tai Po) had an impact on the index on awareness of drug. The interaction between "district" and "year" however was not 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.

Tests of Between-Subjects Effects

Dependent Variable: Index on awareness of drugs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	27.058[a]	3	9.019	25.099	.000
Intercept	248210.522	1	248210.522	690706.877	.000
Year	16.525	1	16.525	45.984	.000
District	2.462	1	2.462	6.851	.009
year * district	.626	1	.626	1.743	.187
Error	29682.549	82599	.359		
Total	1064360.972	82603			
Corrected Total	29709.607	82602			

a. R Squared = .001 (Adjusted R Squared = .001)



20. 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. It may be noted that age had an impact on the index in addition to district (i.e. Tai Po and outside Tai Po).

Tests of Between-Subjects Effects

Dependent Variable: Index on awareness of drugs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	9.805[a]	13	.754	2.687	.001
Intercept	191326.832	1	191326.832	681608.275	.000
Age	5.474	6	.912	3.250	.003
District	1.242	1	1.242	4.424	.035
District * age	4.003	6	.667	2.377	.027
Error	5545.772	19757	.281		
Total	257812.556	19771			
Corrected Total	5555.577	19770			

a. R Squared = .002 (Adjusted R Squared = .001)

21. To control for age and sex, an analysis of covariance was conducted using age and sex as the covariates. As shown in the two tables below, 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 Tai Po and outside Tai Po.

Tests of Between-Subjects Effects for students in Tai Po

Dependent Variable: Index on awareness of drugs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	23.565[a]	7	3.366	11.512	.000
Intercept	1452.541	1	1452.541	4967.152	.000
Year	.099	1	.099	.340	.560
Sex	.233	1	.233	.797	.372
Age	3.508	1	3.508	11.996	.001
year * Sex	.005	1	.005	.018	.893
year * Age	.215	1	.215	.735	.391
Sex * Age	2.856	1	2.856	9.766	.002
year * Sex * Age	.286	1	.286	.979	.322
Error	4259.233	14565	.292		
Total	189193.250	14573			
Corrected Total	4282.798	14572			

a. R Squared = .006 (Adjusted R Squared = .005)

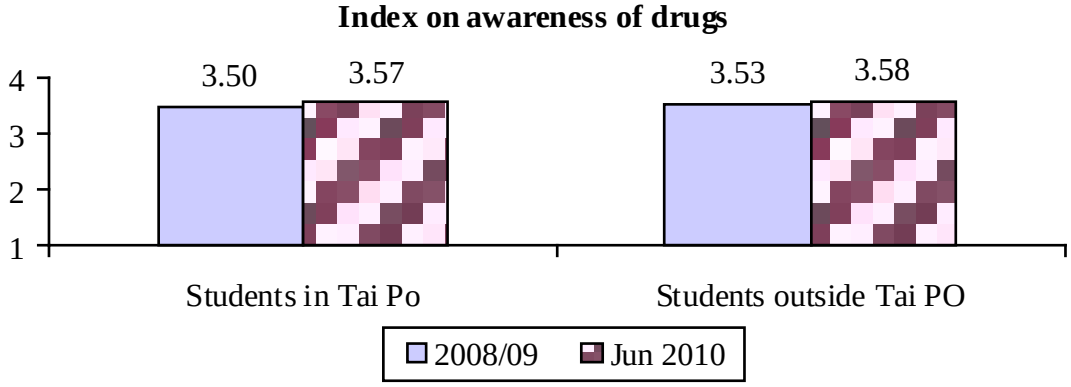
Tests of Between-Subjects Effects for students outside Tai Po

Dependent Variable: Index on awareness of drugs

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	136.048[a]	7	19.435	53.405	.000
Intercept	5280.903	1	5280.903	14511.064	.000
Year	.264	1	.264	.725	.394
Sex	1.094	1	1.094	3.007	.083
Age	1.960	1	1.960	5.386	.020
year * Sex	.331	1	.331	.909	.340
year * Age	3.812	1	3.812	10.474	.001
Sex * Age	1.983	1	1.983	5.449	.020
year * Sex * Age	2.407	1	2.407	6.615	.010
Error	24106.230	66240	.364		
Total	853859.361	66248			
Corrected Total	24242.278	66247			

a. R Squared = .006 (Adjusted R Squared = .006)

22. 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. For students outside Tai Po, the index was 3.58 in June 2010, which was also higher than that in 2008/09 (at 3.53) by 0.05. 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, as the change was greater than what would be expected as a result of sampling fluctuations.

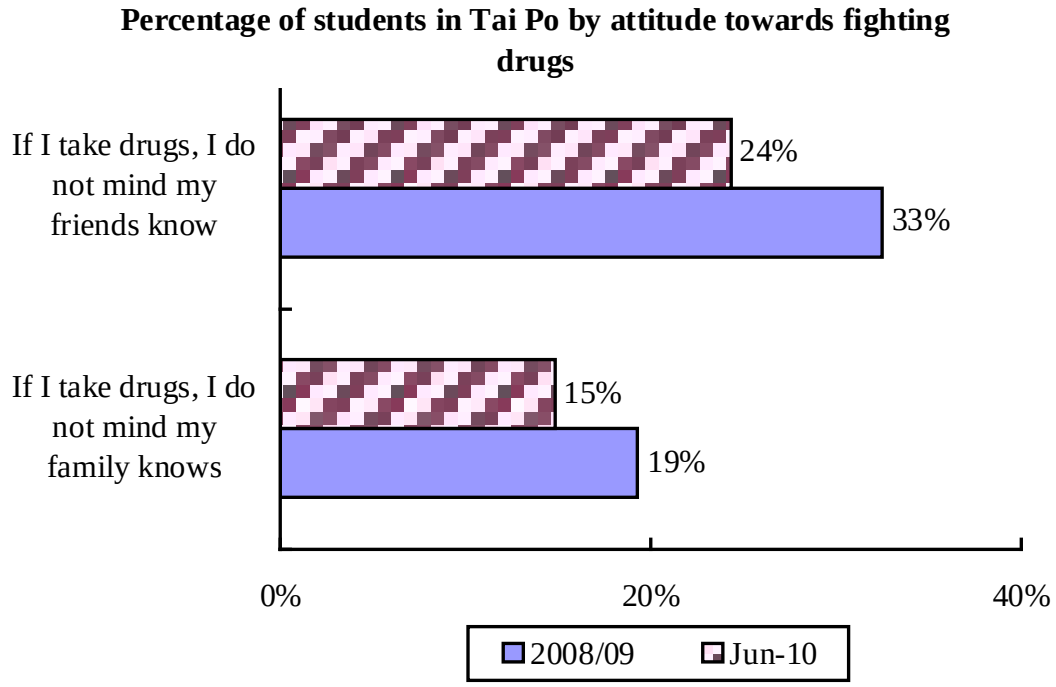


Attitude towards fighting drugs

Changes between 2008/09 and June 2010

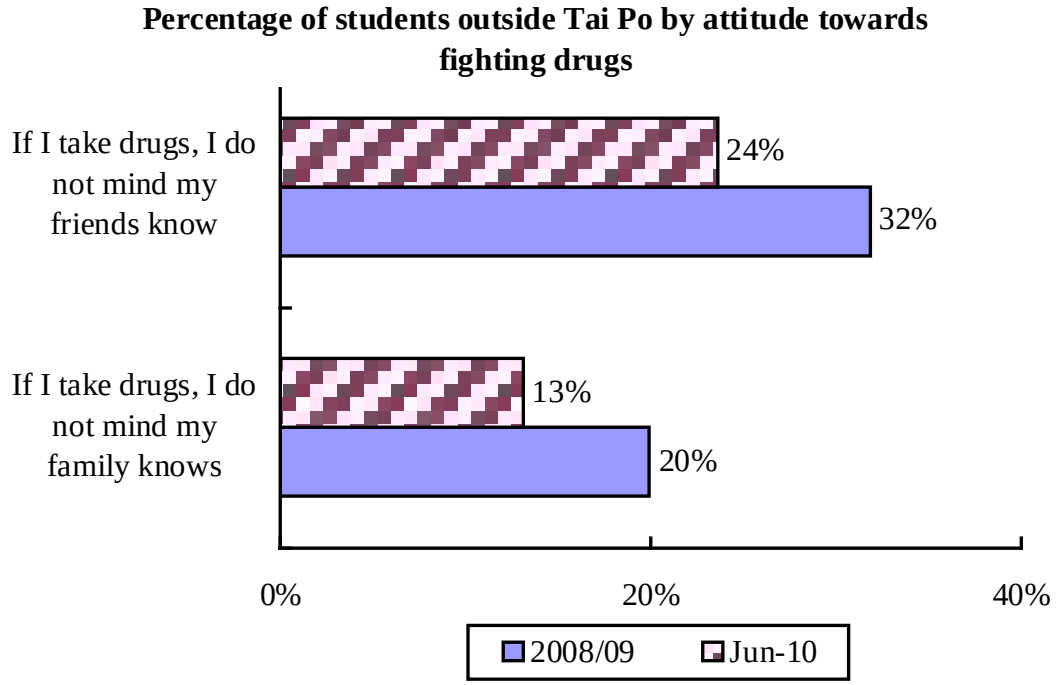
Students attending schools in Tai Po

23. As discussed above, two questions were asked in the 2008/09 survey and the June 2010 survey, purporting to measure the underlying factor on students' attitude towards fighting drugs. For students in Tai Po, as shown in the chart below, a much lower proportion of students in June 2010 did not mind their family or friends knew that they had taken drugs, as compared with that in 2008/2009. The findings indicate that a higher proportion of students considered taking drugs was not good and was unlikely to be well received by friends and family members.



Students attending schools outside Tai Po

24. Similar to findings for students in Tai Po, in June 2010 a much lower proportion of students attending schools outside Tai Po did not mind their family or friends knew that they had taken drugs, as compared with that in 2008/2009.



Index on students' attitude towards fighting drugs

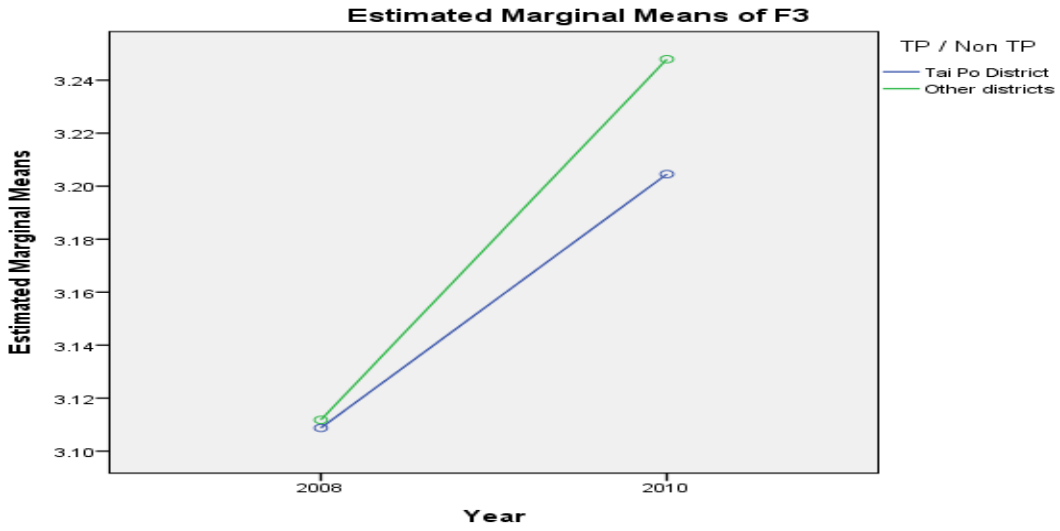
25. An index on students' attitude towards fighting drugs was compiled from data obtained in the 2008/09 survey and the June 2010 survey for the two questions presented above. The index ranges from 1 to 4, with higher scores indicating greater reluctance to let their family and friends know that they had taken drugs and hence reflecting a more positive attitude towards fighting drugs. An analysis of variance was performed on the survey data in 2008/09 and June 2010 and the results are shown in the table and chart below. It may be noted 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 attitude towards fighting drugs. The interaction between "district" and "year" however was not significant. In other words, there was no significant difference between students in Tai Po and outside Tai Po, as regards the change in attitude towards fighting drugs between 2008/09 and June 2010.

Tests of Between-Subjects Effects

Dependent Variable: Index on attitude towards fighting drugs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	184.507[a]	3	61.502	79.467	.000
Intercept	197502.088	1	197502.088	255192.607	.000
Year	66.171	1	66.171	85.500	.000
District	2.649	1	2.649	3.423	.064
year * district	2.000	1	2.000	2.584	.108
Error	63705.556	82314	.774		
Total	874417.000	82318			
Corrected Total	63890.063	82317			

a. R Squared = .003 (Adjusted R Squared = .003)



26. 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. It may be noted that age had an impact on the index in addition to district (i.e. Tai Po and outside Tai Po).

Tests of Between-Subjects Effects

Dependent Variable: Index on attitude towards fighting drugs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	30.878[a]	13	2.375	3.551	.000
Intercept	155522.229	1	155522.229	232539.737	.000
Age	19.853	6	3.309	4.947	.000
District	6.929	1	6.929	10.361	.001
District* age	5.515	6	.919	1.374	.221
Error	13180.012	19707	.669		
Total	217859.250	19721			
Corrected Total	13210.890	19720			

a. R Squared = .002 (Adjusted R Squared = .002)

27. To control for age and sex, an analysis of covariance was conducted using age and sex as the covariates. As shown in the two tables below, 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' attitude towards fighting drugs between 2008/09 and June 2010, after controlling for age and sex, was not statistically significant, for students in Tai Po and outside Tai Po.

Tests of Between-Subjects Effects for students in Tai Po

Dependent Variable: Index on attitude towards fighting drugs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	62.011[a]	7	8.859	12.773	.000
Intercept	1025.649	1	1025.649	1478.796	.000
Year	.608	1	.608	.877	.349
Sex	.809	1	.809	1.167	.280
Age	.032	1	.032	.045	.831
year * Sex	.032	1	.032	.046	.831
year * Age	.217	1	.217	.313	.576
Sex * Age	.508	1	.508	.733	.392
year * Sex * Age	.121	1	.121	.175	.676
Error	10074.106	14525	.694		
Total	158652.750	14533			
Corrected Total	10136.117	14532			

a. R Squared = .006 (Adjusted R Squared = .006)

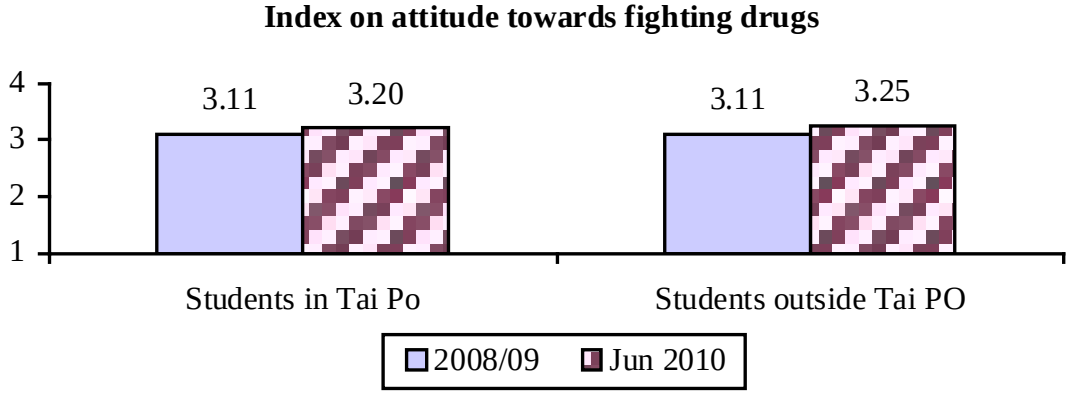
Tests of Between-Subjects Effects for students outside Tai Po

Dependent Variable: Index on attitude towards fighting drugs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	455.109[a]	7	65.016	83.175	.000
Intercept	3836.184	1	3836.184	4907.635	.000
Year	2.790	1	2.790	3.570	.059
Sex	3.115	1	3.115	3.984	.046
Age	2.198	1	2.198	2.812	.094
year * Sex	.000	1	.000	.000	.984
year * Age	.495	1	.495	.634	.426
Sex * Age	1.532	1	1.532	1.960	.161
year * Sex * Age	.007	1	.007	.009	.923
Error	51605.509	66019	.782		
Total	697741.000	66027			
Corrected Total	52060.618	66026			

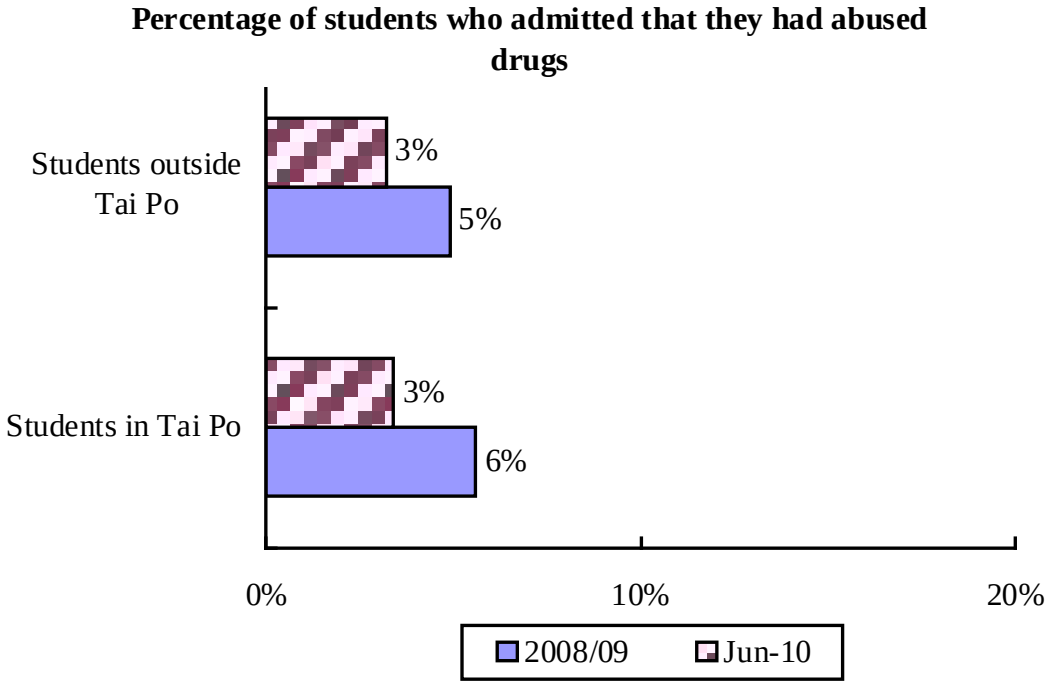
a. R Squared = .009 (Adjusted R Squared = .009)

28. The index on students' attitude towards fighting drugs is shown in the chart below. For students in Tai Po, the index was 3.20 in June 2010, which was higher than that in 2008/09 (at 3.11) by 0.09. 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 0.04, at 95% confidence. For students outside Tai Po, the index was 3.25 in June 2010, which was higher than that in 2008/09 (at 3.11) by 0.14. 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 0.03, at 95% confidence. In other words, the increase in the index on attitude towards fighting drugs was statistically significant, as the change was greater than what would be expected as a result of sampling fluctuations.



Drug taking behaviour

29. Based on students' self-reports, in June 2010 a lower proportion of students in Tai Po indicated that they had abused drugs (3.4%) as compared to the corresponding percentage in 2008/09 (at 5.6%), representing a decrease of 2.2%. The margin of errors arising from sampling for the estimate of difference between the percentage in 2008/09 and June 2010 was plus or minus 0.78 percentage point, at 95% confidence. For students outside Tai Po, a lower proportion of them admitted to have abused drugs in June 2010 (3.2%) as compared with the corresponding percentage of 4.9% in 2008/09, representing a reduction of 1.7%. The margin of errors arising from sampling for the estimate of difference between the percentage in 2008/09 and June 2010 was plus or minus 0.60 percentage point, at 95% confidence. In other words, the reduction in the proportion of students admitted to have taken drugs was statistically significant, as the reduction was greater than what would be expected as a result of sampling fluctuations.



Cautionary remarks

30. As already noted in para. 1 above, readers are cautioned not to read too much into the comparative analysis above. There are limitations in comparing the findings of the 2008/09, December 2009 and June 2010 surveys as the survey designs, including questionnaire designs, for the three surveys were not the same, as pointed out in para. 22 of the report. Besides, the three surveys did not cover the same group of students. In addition, the time for the research is too short for the research to capture the full and sustained impact of the Scheme. Thus, definitive conclusion should not be drawn from the comparative analysis presented above.