



2016 Bias Analysis

**Sponsoring Washington State Agencies:
Department of Social and Health Services'
Division of Behavioral Health and Recovery,
Department of Health,
Office of Superintendent of Public Instruction,
Liquor and Cannabis Board**

Prepared by:
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Washington State Healthy Youth Survey 2016

Bias Analysis

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Background

The Healthy Youth Survey (HYS) is Washington State's biennial survey of public school students in grades 6, 8, 10 and 12. Since 2002, HYS has been administered in the fall of even numbered years. Schools are randomly selected into a state sample, but all schools with grades 6, 8, 10 or 12 can volunteer to participate, except for those operated in correctional facilities. Because a random sample cannot guarantee a representative sample and because not all schools and students invited to participate in the state sample take the survey, we need to check if the participants do in fact represent the larger group.

This bias analysis aims to find out how well the students who participated in the 2016 Healthy Youth Survey represent Washington State public school students as a whole, in both the state sample and the census results. For 2016, we also looked at differences among race/ethnic groups to see if the results for the state sample schools and census schools were similar.

Methods

To assess possible bias related to differences among respondents at the school level, we compared the characteristics of:

- Participating and non-participating schools
- Schools that did and did not administer the optional questions.

To assess possible bias at the individual student level, we compared the characteristics of:

- Respondents who finished the survey and those who did not
- Respondents who answered the optional questions and those who did not

We assessed school-level and student-level characteristics for the state sample schools alone and for all participating schools (census). We also looked at the race groups in sample schools and census schools and compared them to OSPI enrollment. Then we looked at characteristics of state sample respondents compared to characteristics of census respondents to assess bias if using the responses from the census instead of the state sample.

Analyses were done using t-tests, Fisher's exact test, Chi-square tests, and logistic regression. Each section of this report includes its own detailed method section. Any finding described as being different, higher, lower, more likely or less likely is significant and has a p-value less than 0.05.

Conclusions

These findings are limited, generalizing only to Washington State as a whole. They do not apply to smaller geographic areas such as counties or school districts. The smaller sample sizes for smaller geographic areas may be subject to different bias due to nonparticipating schools and students.

Findings on Participation

Participation in the 2016 HYS was extremely high among schools in the state sample and the census (above 82%). Generally, there were very few differences among state sampled schools and non-participants. However, some differences between census schools and non-participating schools were identified.

- Schools in the state sample may underrepresent students attending small public schools.

- Schools in the census may underrepresent small public schools, alternative schools, schools with lower percent minority enrollment, and secondary schools with higher free/reduced lunch rates and lower on-time graduation rates. They also may underrepresent schools in non-urban areas.

Findings on Completion

Not all students finished the 2016 HYS. In the state sample, results from questions asked at the end of the survey may underrepresent students:

- With lower grades (grades 6, 8 and 10)
- With low socio-economic status (mother didn't graduate high school, grade 10; haven't seen a dentist, grade 8)
- Who smoke cigarettes (grades 6 and 12)
- Who live in non-English speaking homes (grades 6, 8 and 10)
- Who are Hispanic (all grades) or Black/African American (grade 8)

Caution should be exercised when interpreting the results from these questions for these groups of students.

For the census, questions asked at the end of the survey may underrepresent students:

- With lower grades (grades 6 and 10)
- With low socio-economic status (haven't seen a dentist grade 8)
- Who currently smoke cigarettes (grades 6 and 10), currently drink alcohol (grade 6), or binge drink (grade 6)
- Who live in non-English speaking homes (grades 6, 8, 10, and 12)
- Who are Hispanic (grades 6 and 10), who are Asian (grade 12), who are Black/African American (grades 6 and 12), or Pacific Islander (grade 12)

Summary of Differences between Non-Completers and Completers in the State Sample and in Census schools

NC Non-Completers w/higher rate
 C Completers w/higher rate
 No difference
 - Not measured

Student Responses	State Sample				Census			
	Grade 6	Grade 8	Grade 10	Grade 12	Grade 6	Grade 8	Grade 10	Grade 12
Low grades	NC	NC	NC		NC		NC	
Feeling unsafe at school								
Mother didn't graduate high school	-		NC		-			
Living situation due to finances	-				-			
Food insecurity	-				-			
No dental visit in last year	-	NC			-		NC	
Receive free/reduced price lunch	-				-			
Current cigarette smoking					NC		NC	
Current marijuana use								
Binge drinking					NC			
Current alcohol drinking					NC			
Non-English spoken at home	NC	NC	NC		NC	NC	NC	NC
White	C	C	C	C	C	C	C	C
Hispanic	NC	NC	NC	NC	NC		NC	C
American Indian/Alaska Native								
Asian					C			NC
Black/African American		NC			NC			NC
Pacific Islander								NC

Significant differences are based on 95% confidence intervals; highlighted squares are statistically significant at the p < 0.05 level

Findings on Optional Questions

Questions about sexual behavior, orientation and abuse were optional in 2016. Over two-thirds of schools administered the optional questions, which was much higher than in previous administrations (around 40%). Schools that administered the optional questions were similar to schools that did not. Schools that administered the optional questions in the state sample may underrepresent schools with higher enrollment. Schools in the census may underrepresent schools with lower percent minority enrollment and schools in sub-urban areas.

Generally, student characteristics and responses in schools that administered the optional questions and answered at least one optional question* were similar to characteristics and responses of students in schools that did not administer them.

Summary of Differences Between Non-Optional Takers and Optional Takers in the State Sample and in Census schools

Non Non-Optional w/higher rate
 Opt Optional w/higher rate
 No difference

Student Response	State Sample			Census		
	Grade 8	Grade 10	Grade 12	Grade 8	Grade 10	Grade 12
Low grades		Non		Non	Non	Non
Feeling unsafe at school					Non	
Mother didn't graduate high school		Non		Non		
Living situation due to finances						
Food insecurity						
No dental visit in last year				Non	Non	
Receive free/reduced price lunch		Non		Non		
Current cigarette smoking						
Current marijuana use						
Binge drinking						
Current alcohol drinking						
Non-English spoken at home		Non	Non	Non		
White		Opt	Opt	Opt	Opt	Opt
Hispanic		Non	Non	Non	Non	
American Indian/Alaska Native				Opt	Non	
Asian				Non		
Black/African American			Non			Non
Pacific Islander						

Significant differences are based on 95% confidence intervals; highlighted squares are statistically significant at the p < 0.05 level

* Comparisons do not include students from schools that administered the optional questions but did not answer any of the optional questions.

Racial/Ethnic Comparability Findings Between the State Sample and The Census

For the 2016 Healthy Youth Survey, students and schools reported different percentages of race/ethnicity groups, but there were minimal differences in how students reported race/ethnicity in the state sample schools compared to the census. The census results appear to be as representative of the state overall and of race/ethnicity groups as the state sample schools, and both could be used for statewide analysis

While mostly similar, some differences were identified between the state sample and census results among racial/ethnic groups:

- White students in the census were more likely to report living in non-English speaking homes (grades 8, 10 and 12) and were more likely to describe themselves as gay, lesbian, bisexual or not sure of their sexual orientation (grade 8).
- Hispanic 12th graders in the census were more likely to describe themselves as gay, lesbian, bisexual or not sure of their sexual orientation (grade 12). Hispanic students in the state sample were more likely to report carrying a weapon at school (grade 6) and to get lower grades in school (grade 8).
- American Indian/Alaska Native 6th graders in the census were more likely to report living in a non-English speaking home, and 10th graders in the state sample were more likely to report getting lower grades in school or ever had sex in their lifetime.
- Asian students in the census were more likely to report living in a non-English speaking home (grades 10 and 12). Asian students in the state sample were more likely to report getting lower grades in school (grades 8 and 12), to feel unsafe at school (grades 10 and 12), to smoke cigarettes (grade 12), and to have ever had sex in their lifetime (grade 12).
- Black/African American 12th graders in the state sample were more likely to report carrying a weapon at school.
- Pacific Islander students in the census were more likely to report having a mother that didn't graduate from high school (grade 10) and to be bullied at school (grade 8).
- Students who report they were "Other" race in the census were more likely to live in non-English speaking homes (grade 6). Other race students in the state sample were more likely to report having a mother who didn't graduate high school (grade 8), to smoke cigarettes (grade 10), and to binge drink (grade 10).
- 8th grade students who selected more than one race in the state sample were more likely to report living in a non-English speaking home, to have a mother who didn't graduate from high school, and to feel unsafe at school. 10th grade students in the state sample were more likely to report cigarette smoking and binge drinking.

Comparing percentages of students in racial/ethnic groups in the census and state sample to enrollment percentages of students reported by OSPI reveals only very small differences (0.2% at most in any race/ethnic group). We do see some differences in student reported results in certain race/grade subgroups when comparing the census to the state sample, with those differences limited mostly to living in a non-English speaking home and getting lower grades in school. The census and state sample results appear to be comparable, with the possible exceptions of those two measures. Caution may need to be exercised when looking at Asian 12th graders, as they have the greatest number of differences.

Summary of Differences by Racial/Ethnic Groups when Comparing State Sample Results to Census Results

S State Sample w/higher rate **C** Census w/higher rate No difference **-** Not measured

Student Response	Grade 6									Grade 8								Grade 10								Grade 12								Total													
	All	White	Hispanic	Ai/AN	Asian	Black	Island	Other	Multi	All	White	Hispanic	Ai/AN	Asian	Black	Island	Other	Multi	All	White	Hispanic	Ai/AN	Asian	Black	Island	Other	Multi	All	White	Hispanic	Ai/AN	Asian	Black		Island	Other	Multi										
Non-English spoken at home				C				C										S	S		C			C														C				C					8
Mother didn't graduate high school	-	-	-	-	-	-	-	-	-									S	S								C																				3
Living situation due to finances	-	-	-	-	-	-	-	-	-																																						0
Food insecurity	-	-	-	-	-	-	-	-	-																																						0
No dental visit in last year	-	-	-	-	-	-	-	-	-																																						0
Receive free/reduced price lunch	-	-	-	-	-	-	-	-	-																																						0
Low grades												S		S									S																		S					4	
Feeling unsafe at school																		S																							S					3	
Bullied at school																	C																													1	
Carried weapon at school			S																																							S				2	
Current cigarette smoking																																				S					S					2	
Current marijuana use																																				S										1	
Current alcohol drinking	C																																			S										2	
Binge drinking	C																																			S										2	
Ever had sex	-	-	-	-	-	-	-	-	-														S																		S					2	
Gay, lesbian, bisexual, not sure	-	-	-	-	-	-	-	-	-			C																														C				2	
Total Differences	2	0	1	1	0	0	0	1	0	0	2	1	0	1	0	1	1	3	0	1	0	2	2	0	1	2	2	0	1	1	0	5	1	0	0	0	0	0	0	32							

Significant differences are based on 95% confidence intervals; highlighted squares are statistically significant at the p <0.05 level

1. Introduction

This bias analysis was conducted to determine if the 2016 Healthy Youth Survey results can be generalized to Washington State Public School students.

The 2016 administration of the Healthy Youth Survey (2016 HYS) represents a collaborative effort among the Department of Health; the Office of Superintendent of Public Instruction; the Department of Social and Health Services' Division of Behavioral Health and Recovery; the Liquor and Cannabis Board, and the contractor, Looking Glass Analytics, Inc. Representatives of these agencies served as members of the Healthy Youth Survey Planning Committee, which guided every aspect of the survey development and implementation.

Since 2002, it has been administered in the fall of even numbered years. All Washington State public schools with grades 6, 8, 10 or 12 that were not based in a correctional institution and were able to administer the survey in a classroom setting were eligible to participate in the HYS (e.g., schools where students don't attend classes like online schools or home school support programs were not included). A simple random sample of schools is selected into a state sample. Schools that were not selected for the state sample are termed "not drawn for the state sample." Schools that participate but were not selected into the state sample are termed "volunteer" schools. The combination of the state sampled schools and the volunteer non-sampled schools that participated are termed the "census".

The Washington State Department of Health mailed a letter in January 2016 inviting all eligible schools to participate in the 2016 HYS. Schools registered for the survey online. Sponsoring agencies called state sample schools that did not register to solicit participation. Schools not drawn for the state sample were not called.

For the state sample, the Washington State Department of Health drew three random samples: schools with grade 6, schools with grade 8, and schools with grades 10, 12 or both. Within selected schools, all of the students in the target grades were invited to participate. This method assured that each eligible student in Washington State had an equal chance of being asked to participate in the state sample. These selection methods maximize the likelihood that students taking the survey as part of the state sample represent students in the specified grades as a whole. However, because a random sample cannot guarantee a representative sample and because not all schools and students invited to participate in the state sample took the survey, we need to check if the participants do in fact represent the larger group.

The 2016 HYS included three survey forms. Schools with students in grade 6 received Form C; schools with students in grades 8, 10 and 12 received both Form A and Form B. Forms A were interleaved or collated with Form B, such that half of students would receive a Form A survey and half would receive Form B survey. Schools that did not want to ask the optional questions on survey forms A and B, could remove them by tearing off the survey page with those questions. The optional questions asked about sexual orientation, behavior and abuse.

Schools, parents and students could each choose not to participate in the survey. School participation in the survey is voluntary. Schools not wanting to ask students about sexual orientation, behavior or abuse registered to receive survey forms without those questions. Parents could opt their students out of the survey by notifying the school. Students could also opt out of the survey before it was administered and they could skip any question they did not want to answer. Apart from those optional exclusions, some students did not finish the survey in the allotted time.

The factors outlined—non-participation, schools opting out of optional questions, and students not finishing the survey—can introduce bias into the survey such that the findings would not represent public school students in grades 6, 8, 10 and 12 in Washington. Bias occurs if findings are affected by differences between students who answered survey questions and those who did not. This bias analysis aims to assess bias by describing differences between participating and non-participating schools and students that might affect overall findings, and testing whether any such differences would impact results.

Sources of Bias

Potential sources of bias include:

- **School participation bias:** School participation bias could occur if findings were affected by differences between students in schools that participated and students in schools that chose not to participate in the HYS.
- **Optional question administration bias:** Some schools opted to remove the optional survey questions about sexual orientation, behaviors and abuse. Bias for the optional questions could occur if findings were affected by differences between students who answered the optional questions and those who did not. The two most likely sources of differences are:
 - Differences among students in schools that administered the optional questions, and students in schools that removed them.
 - Differences among students who finished the survey and students who did not, since the optional questions are at the end of the survey.
- **Survey completion bias:** Some students did not complete the survey in the allotted amount of time. Bias could occur for questions toward the end of the survey if students who did not complete the survey would have given different answers than students who completed the survey.

In addition to bias, we'd like to know about the differences between the results students in the state sample and results from students in census schools to determine if the census results can be used instead of the state sample results. Using the census provides more power to look at measures with low rates (i.e., heroin use) and small subpopulations (i.e., Pacific Islanders).

2. Methods

Bias must be assessed indirectly. We cannot simply look to see if participating and non-participating schools and students gave different survey responses, because we do not have responses from non-participants. Instead, we first assessed student characteristics that might affect how respondents answer questions by comparing characteristics of schools that participated in all or parts of the survey and schools that did not. For this comparison, we assessed school-level information provided by the Office of Superintendent of Public Instruction.

To assess possible bias related to differences among respondents at the **school level**, we compared the characteristics of:

- Participating and non-participating schools.
- Schools that did and did not administer the optional questions. Schools that did not participate in HYS were categorized as not administering optional questions.

To assess possible bias at the **individual student level**, we compared the characteristics of:

- Respondents who finished the survey and those who did not.
- Respondents who answered the optional questions and those who did not.

To compare characteristics among race/ethnic groups in the census to the state sample:

- Percentage of race/ethnic groups reported by students in HYS to those reported by schools.
- Respondents in the census and those in the state sample.

Table 1 summarizes the analysis conducted to assess potential bias at the school level and individual student level.

Table 1: Sources of potential bias and the level of analysis at which they were assessed

Source of potential bias	Description	Base population*	Level of Analysis	
			School	Student
School participation	Participating schools compared to non-participating schools	State sample	X	
		Census	X	
School-level optional question administration	Schools administering questions compared to schools not administering questions	State sample	X	
		Census	X	
Student-level survey completion	Respondents who finish the survey compared to respondents who did not finish the survey	State sample		X
		Census		X
Student-level optional behavior question completion	Respondents who answered the questions compared to respondents who did not. Students from schools that administered optional questions but did not answer an optional question were excluded from the analysis	State sample		X
		Census		X
Student-level race/ethnicity	Respondents characteristics in specific race/ethnic groups in the census are compared to the state sample	State sample		X
		Census		X

* Base population for the comparison:

“State sample” means schools that were randomly selected for the representative state sample.

“Census” means all schools that participated in the 2016 HYS (state sample schools plus non-sampled schools).

We conducted further analyses to assess the degree to which non-completion bias may have affected survey results. First, we looked at the extent of survey non-completion for each grade. Then, by simulating the effect of non-completion bias on questions found early in the survey, we estimated how much questions at the end of the survey might be affected.

Finally, we looked at differences in student responses between the state sample and the census to determine if the census results could be used among racial/ethnic populations.

All analyses were conducted using STATA statistical software package, version 15.1.

3. Overview of HYS Eligible and Participating Schools

HYS Eligibility and Sampling

Figure 1: Eligibility to Participate in HYS

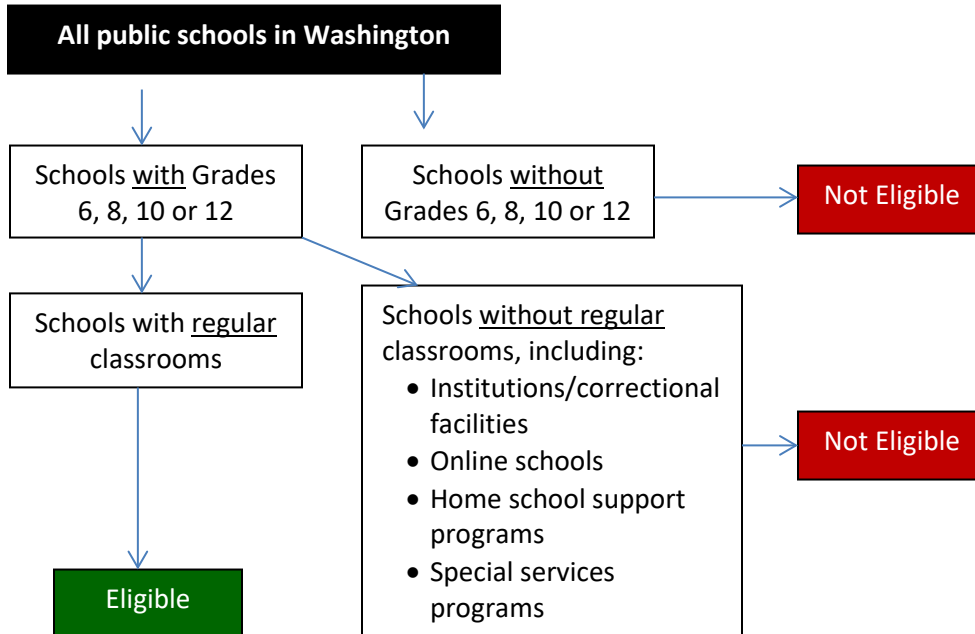
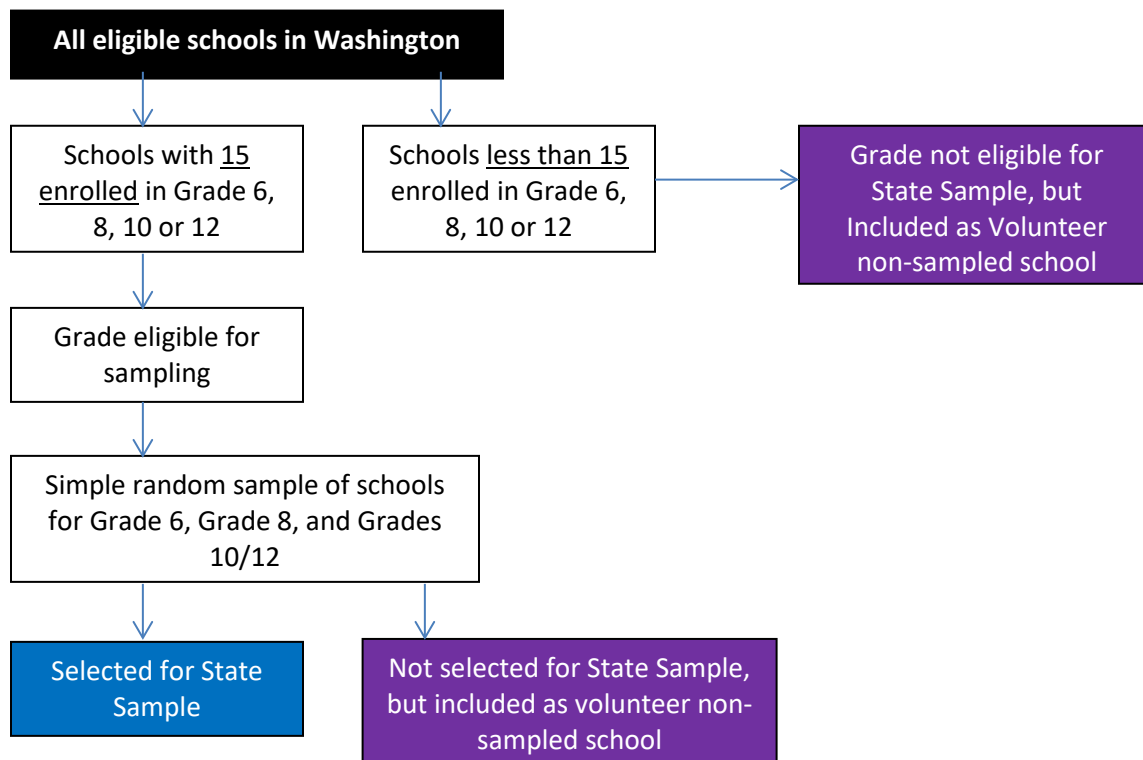
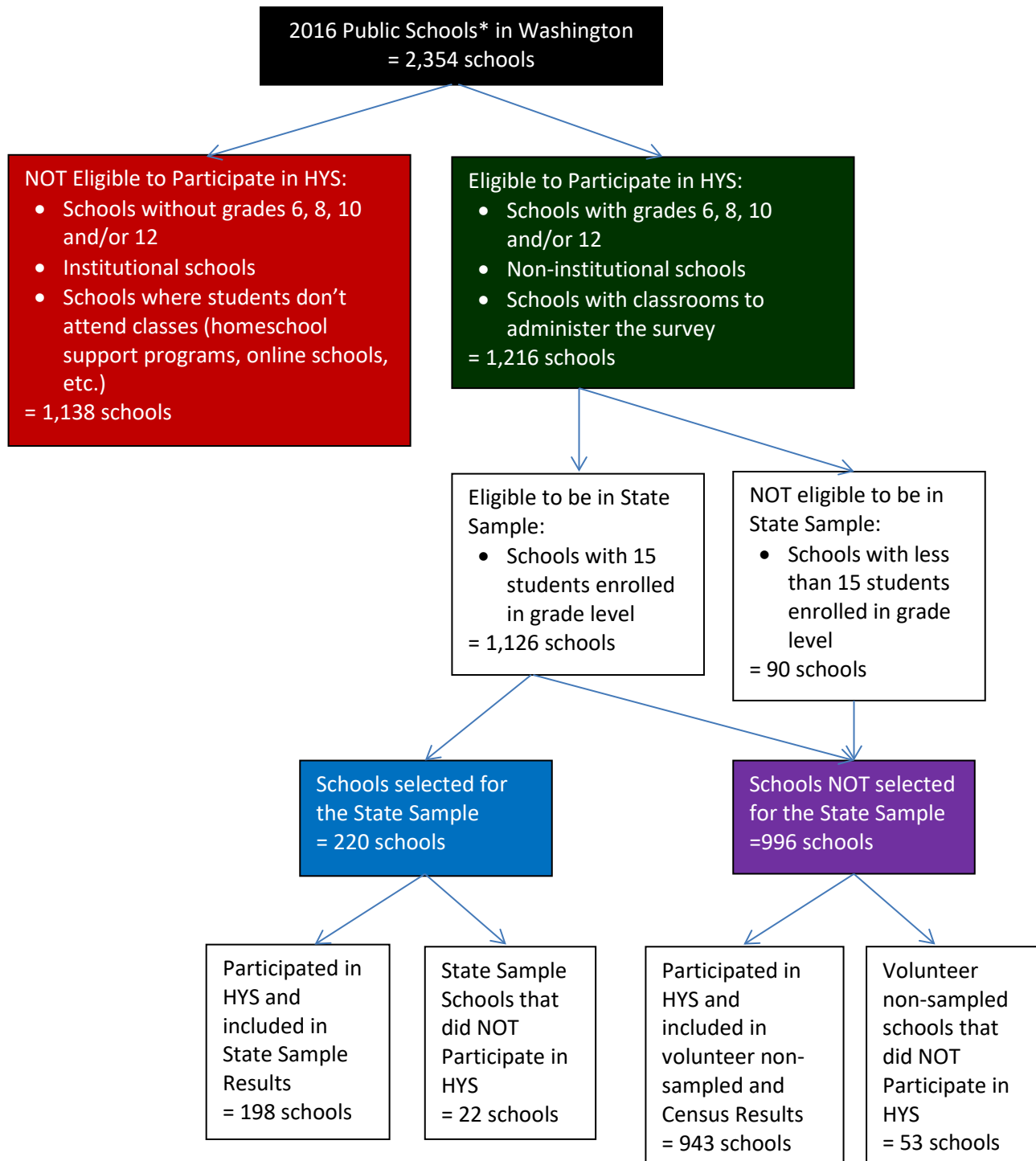


Figure 2: Eligibility and Selection of State Sample



HYS Participation by Eligibility and Sampling Results

Figure 3: Description of schools included in the 2016 HYS and status as sample or volunteer non-sampled schools



*Note: Private schools in Washington can participate in HYS, but they are not actively recruited, and their results are not aggregated into district, county, ESD or state results. In 2016, one private school participated in HYS. Neither that school nor their results are included in this bias analysis.

The grade levels of public schools in Washington vary across the state. Some districts have elementary schools that are grades kindergarten through 6th, so that district's 6th graders are elementary students. Other districts have elementary schools that are kindergarten through 5th and their 6th graders are at a middle school, so that district's 6th graders are middle school students. The following figures (Figures 4a-c) show how grade levels in schools are configured for all schools eligible to participate in the 2016 HYS, any schools that participated (census), and those in the state sample that participated.

Figure 4a: Grade levels of all schools eligible for 2016 HYS

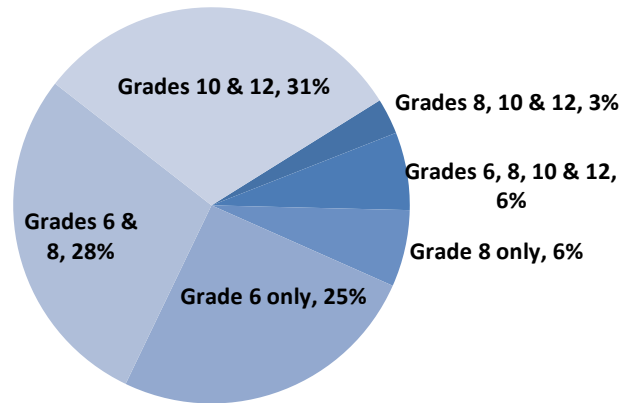


Figure 4b: Grade levels in census schools that participated in 2016 HYS

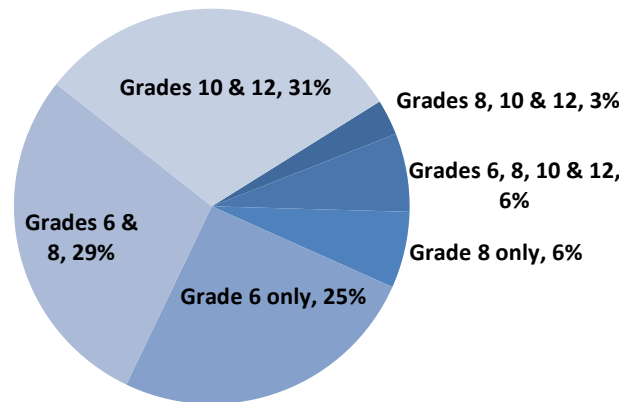
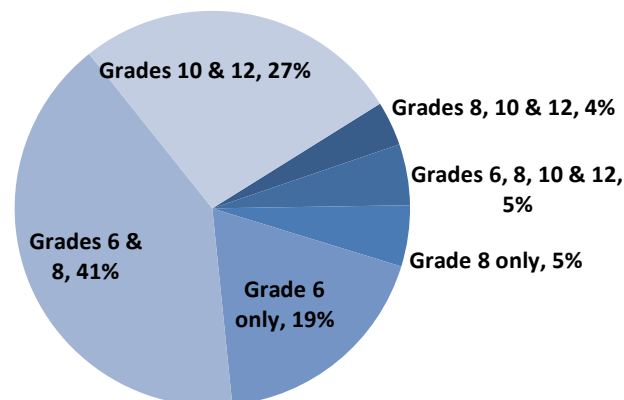


Figure 4c: Grade levels in schools in the state sample that participated in 2016 HYS



4. School-Level Participation Bias

Questions

Were certain types of schools more likely to participate?

1. What are the participation rates for the state sample and for all eligible schools?
2. Are participation rates for alternative schools different from non-alternative schools?
3. Do schools that participated have different school demographic characteristics compared to schools that did not participate?
4. Do schools that participated have different community demographic characteristics compared to schools that did not participate?
5. Are certain types of schools causing more bias?

Methods

To assess bias related to differences among schools that participated or did not participate in the survey, we assessed the following school characteristics, available from the Office of Superintendent of Public Instruction: www.k12.wa.us/dataadmin:

- School participation rates by sampling status
- School type - Alternative school status
- School Demographics
 - Percent minority enrollment
 - Percent of students receiving free or reduced-price lunch
 - School enrollment by grade
 - Percent meeting English Assessment (grades 6 and 8), meeting Math Assessment (grades 6 and 8), meeting Science Assessment (grade 8), and meeting Biology Assessment (grade 10)
 - On-time graduation rate (for schools with grades 10 and 12)
 - School rural or urban designation based on geographic setting codes

We compared the above characteristics for schools that participated in HYS and schools that did not participate. We conducted separate analyses by grade comparing participating schools drawn for the state sample, comparing participating schools not drawn for the state sample, and comparing all eligible participating schools – census schools (state sample plus volunteer non-sampled schools).

For these analyses, we used t-test, Fisher's exact and Chi-square to compare schools by participation status. We used Chi-square and Fisher's exact test to compare schools by alternative status. Fisher's exact was used if cell sizes were five or fewer and Chi-square used otherwise. We used t-test to compare schools on percent minority enrollment, percent of students receiving free or reduced-price lunch, meeting school assessment requirements (English, math, science, and biology), on-time graduation rate, and grade-level school enrollment. Comparisons were considered statistically significant if the p-value was less than 0.05 (that is, a difference of the size found would be expected to occur by chance less than 5 times in 100.).

Results

1. School Participation Rates by Sampling Status

A total of 198 schools and 36,809 students contributed data to the statewide sample. In addition, 195,203 students in 943 schools participated in the survey as volunteer non-sampled schools

Sixth grade schools in the state sample were less likely to participate than 8th, 10th and 12th grade schools that were not sampled (Tables 2a-b). State sample participation rates were higher than census. Higher participation rates for state sampled schools are expected, because state sample schools received additional phone calls to recruit their participation. In addition, schools with less than 15 students per grade are not eligible for the sample but can participate in HYS, so schools that are too small to receive results may choose not participate in HYS. Table 2b shows participation rate for all census schools (state sample plus volunteer non-sampled schools).

Among schools drawn for the state sample, participation rates varied from 87% among 6th grades to 94% among 12th grades (Table 2a).

Table 2a: Participation rate by grade for schools drawn for the state sample.

Grade	Participated	Eligible	Participation Rate (%)
6	83	96	86.5%
8	64	68	94.1%
10	55	59	93.2%
12	60	64	93.8%

Table 2b provides participation rates by grade for census schools. Participation ranged from 82% among 6th grades to 84% among 8th, 10th, and 12th.

Table 2b: Participation rate by grade for the census.

Grade	Participated	Eligible	Participation Rate (%)
6	595	722	82.4%
8	448	530	84.5%
10	409	485	84.3%
12	403	480	84.0%

2. School Participation Rates by School Type– Alternative and Non-Alternative Schools

OSPI assigns each public school a school type code. For this analysis schools were considered to be alternative schools if they had a school type code of “A”, “C”, “I”, “Q”, “R”, “5”, “T”, “V”, or “Z”. Some of these alternative schools were not considered eligible for participation in HYS because they do not have an environment where students can anonymously take the survey, e.g., online schools. Alternative schools in this analysis included 130 type “A”, 2 type “C”, 1 type “I”, 3 type “Q”, 2 type “R”, 12 type “5”, 5 type “T”, and 1 type “V”. Schools were considered to be non-alternative schools if they had the school type “P”, this analysis included 1,057 type “P” schools. A Demographic Information by School file with these codes is available on OSPI’s website at: <http://reportcard.ospi.k12.wa.us/DataDownload.aspx>.

Schools with less than 15 students per grade were not included in the state sampling frame but were considered eligible to participate in the survey. Often alternative schools have small school enrollments, so they may be less likely to be included in the state sample.

Alternative schools in the state sample were just as likely to participate as traditional schools (Table 3a). Bias analyses from previous survey administrations found alternative schools were less likely to participate. In 2016, very few alternative schools were selected for the state sample, possibly making it difficult to detect a difference in participation.

Table 3a: Participation by alternative school status for schools in the state sample.

Grade	School Type	Did Not Participate %, (n)	Participated %, (n)	Difference (p-value)*
6	Non-Alternative	13.8% (n=13)	86.2% (n=81)	1.0000
	Alternative	0.0% (n=0)	100.0% (n=2)	
8	Non-Alternative	4.8% (n=3)	95.2% (n=60)	0.2690
	Alternative	20.0% (n=1)	80.0% (n=4)	
10	Non-Alternative	3.8% (n=2)	96.2% (n=50)	0.0650
	Alternative	28.6% (n=2)	71.4% (n=5)	
12	Non-Alternative	3.9% (n=2)	96.1% (n=49)	0.1810
	Alternative	15.4% (n=2)	84.6% (n=11)	

*Fisher exact

Among the census, alternative schools were significantly less likely to participate in HYS for all grades (Table 3b). Some alternative schools may be less likely to participate because students are in the classroom less often or at different times, making it harder to administer the survey. They might also be less likely to participate if they aren’t eligible to receive survey results due to having less than 15 students per grade.

Table 3b: Participation by alternative school status for the census.

Grade	School Type	Did Not Participate %, (n)	Participated %, (n)	Difference (p-value)
6	Non-Alternative	16.6% (n=112)	83.4% (n=562)	0.0060
	Alternative	31.3% (n=15)	68.8% (n=33)	
8	Non-Alternative	13.1% (n=62)	86.9% (n=411)	0.0000
	Alternative	35.1% (n=20)	64.9% (n=37)	
10	Non-Alternative	9.6% (n=34)	90.4% (n=320)	0.0000
	Alternative	32.1% (n=42)	67.9% (n=89)	
12	Non-Alternative	10.5% (n=37)	89.5% (n=315)	0.0000
	Alternative	31.3% (n=40)	68.8% (n=88)	

3. School Participation Rates by School Demographics

For a breakdown of school types and the grade levels they include, see the charts on page 6, for state sampled schools and for all participating schools (state sample and volunteer non-sampled schools combined).

Grade 6

Among 6th grades drawn for the state sample, school and grade-level characteristics did not vary significantly by participation status, except the percentage of free or reduced-price lunch. Participating schools had lower free or reduced-price lunch rates than schools that did not participate (Table 4a).

Table 4a: Mean school and grade-level variables by participation for 6th grade state sample schools.

School/Grade-level Variables	Participated Mean, ±95% CI, (n)	Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p</i> -value)
% Minority enrollment	39.8 ±5.0 (n=83)	43.7 ±15.5 (n=13)	40.3 ±4.8 (n=96)	0.580
% Free/reduced lunch	42.1 ±4.8 (n=83)	58.7 ±10.5 (n=13)	44.3 ±4.5 (n=96)	0.012
Grade-level enrollment	137.3 ±20.2 (n=83)	91.9 ±46.0 (n=13)	131.2 ±18.7 (n=96)	0.105
Met English Assessment	57.6 ±3.9 (n=74)	50.5 ±6.8 (n=12)	56.6 ±3.5 (n=86)	0.177
Met Math Assessment	50.6 ±4.2 (n=74)	42.4 ±6.8 (n=12)	49.5 ±3.8 (n=86)	0.139

Among census schools, participating schools had a significantly higher percentage of minority enrollment, higher grade-level enrollment, and higher percentage of students meeting the English and Math Assessments than schools that did not participate (Table 4b).

Table 4b: Mean school and grade-level variables by participation for census 6th grade schools.

School/Grade-level Variables	Participated Mean, ±95% CI, (n)	Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p</i> -value)
% Minority enrollment	43.3 ±1.9 (n=587)	37.0 ±5.7 (n=113)	42.3 ±1.9 (n=700)	0.015
% Free/reduced lunch	45.8 ±1.8 (n=595)	49.5 ±4.8 (n=121)	46.5 ±1.7 (n=716)	0.119
Grade-level enrollment	127.3 ±7.9 (n=589)	39.3 ±8.3 (n=118)	112.6 ±7.1 (n=707)	0.000
Met English Assessment	55.8 ±1.5 (n=522)	50.2 ±4.0 (n=70)	55.1 ±1.4 (n=592)	0.011
Met Math Assessment	48.8 ±1.6 (n=521)	42.6 ±3.9 (n=70)	48.0 ±1.5 (n=591)	0.008

Grade 8

Among 8th grades drawn for the state sample, there were no differences between participation and non-participating schools (Table 5a).

Table 5a: Mean school and grade-level variables by participation for the 8th grade state sample schools.

School/Grade-level Variables	Participated Mean, ±95% CI, (n)	Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p</i> -value)
% Minority enrollment	41.1 ±5.9 (n=64)	24.7 ±11.6 (n=3)	40.3 ±5.7 (n=67)	0.249
% Free/reduced lunch	47.8 ±5.2 (n=64)	41.8 ±8.8 (n=3)	47.6 ±5.0 (n=67)	0.625
Grade-level enrollment	165.3 ±29.9 (n=64)	83.0 ±102.6 (n=4)	160.5 ±29.0 (n=68)	0.193
Met English Assessment	57.6 ±4.1 (n=59)	63.0 ±4.9 (n=3)	57.9 ±3.9 (n=62)	0.566
Met Science Assessment	63.4 ±3.9 (n=59)	73.3 ±8.6 (n=3)	63.9 ±3.7 (n=62)	0.270
Met Math Assessment	44.7 ±4.1 (n=59)	45.4 ±7.9 (n=3)	44.7 ±3.9 (n=62)	0.939

Census 8th grade participating schools had a significantly higher percentage of minority enrollment and higher grade-level enrollment than schools that did not participate (Table 5b).

Table 5b: Mean school and grade-level variables by participation for census 8th grade schools.

School/Grade-level Variables	Participated Mean, ±95% CI, (n)	Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p</i> -value)
% Minority enrollment	41.2 ±2.2 (n=445)	29.5 ±8.3 (n=60)	39.8 ±2.2 (n=505)	0.001
% Free/reduced lunch	45.6 ±2.1 (n=447)	47.8 ±6.3 (n=76)	46.0 ±2.0 (n=523)	0.449
Grade-level enrollment	172.6 ±11.3 (n=446)	31.2 ±13.7 (n=66)	154.4 ±10.8 (n=512)	0.000
Met English Assessment	58.1 ±1.6 (n=375)	54.6 ±7.8 (n=31)	57.9 ±1.6 (n=406)	0.261
Met Science Assessment	64.7 ±1.7 (n=374)	61.6 ±8.0 (n=32)	64.4 ±1.7 (n=406)	0.336
Met Math Assessment	46.5 ±1.8 (n=377)	43.1 ±6.7 (n=28)	46.2 ±1.7 (n=405)	0.326

Grade 10

Among 10th grades drawn for the state sample, participating schools had significantly higher on-time graduation rates than schools that did not participate (Table 6a).

Table 6a: Mean school and grade-level variables by participation for 10th grade state sample schools.

School/Grade-level Variables	Participated Mean, ±95% CI, (n)	Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p</i> -value)
% Minority enrollment	38.0 ±6.0 (n=55)	43.3 ±29.4 (n=4)	38.3 ±5.8 (n=59)	0.654
% Free/reduced lunch	40.1 ±4.9 (n=55)	51.3 ±14.6 (n=4)	40.8 ±4.7 (n=59)	0.247
Grade-level enrollment	271.7 ±54.7 (n=55)	156.5 ±215.6 (n=4)	263.9 ±53.1 (n=59)	0.289
Met Biology Assessment	75.0 ±6.4 (n=17)	79.6 ± (n=1)	75.3 ± (n=18)	na
On-time Graduation	87.3 ±4.0 (n=54)	64.6 ±36.0 (n=3)	86.1 ±4.3 (n=57)	0.020

Census 10th grade participating schools had a significantly lower percentage of free or reduced-price lunch, higher grade-level enrollment, and higher on-time graduation rates than schools that did not participate (Table 6b).

Table 6b: Mean school and grade-level variables by participation for census 10th grade schools.

School/Grade-level Variables	Participated Mean, ±95% CI, (n)	Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p-value</i>)
% Minority enrollment	39.5 ±2.4 (n=403)	40.2 ±7.9 (n=66)	39.6 ±2.4 (n=469)	0.850
% Free/reduced lunch	44.1 ±2.0 (n=407)	52.5 ±5.8 (n=69)	45.3 ±1.9 (n=476)	0.002
Grade-level enrollment	193.1 ±18.1 (n=404)	48.3 ±24.7 (n=71)	171.5 ±16.5 (n=475)	0.000
Met Biology Assessment	66.3 ±4.3 (n=95)	56.5 ±16.6 (n=11)	65.3 ±4.2 (n=106)	0.166
On-time Graduation	81.8 ±2.0 (n=386)	63.2 ±8.3 (n=51)	79.7 ±2.1 (n=437)	0.000

Grade 12

Among 12th grades drawn for the state sample, there were no differences between participation and non-participating schools (Table 7a).

Table 7a: Mean school and grade-level variables by participation for 12th grade state sample schools.

School/Grade-level Variables	Participated Mean, ±95% CI, (n)	Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p-value</i>)
% Minority enrollment	37.5 ±6.4 (n=60)	44.7 ±38.7 (n=3)	37.8 ±6.3 (n=3)	0.636
% Free/reduced lunch	42.3 ±5.0 (n=60)	52.8 ±20.2 (n=3)	42.8 ±4.9 (n=63)	0.371
Grade-level enrollment	244.9 ±45.6 (n=60)	176.8 ±176.2 (n=4)	240.6 ±44.0 (n=64)	0.467
On-time Graduation	82.1 ±5.8 (n=59)	60.1 ±26.9 (n=4)	80.7 ±5.8 (n=63)	0.068

Census 12th grade participating schools had a significantly lower percentage of free or reduced-price lunch, a higher grade-level enrollment, and higher on-time graduation rates than schools that did not participate (Table 7b).

Table 7b: Mean school and grade-level variables by participation for census 12th grade schools.

School/Grade-level Variables	Participated Mean, ±95% CI, (n)	Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p-value</i>)
% Minority enrollment	39.4 ±2.4 (n=400)	36.6 ±7.3 (n=71)	39.0 ±2.3 (n=471)	0.399
% Free/reduced lunch	44.3 ±2.0 (n=401)	52.4 ±5.8 (n=72)	45.5 ±1.9 (n=473)	0.003
Grade-level enrollment	196.5 ±16.5 (n=401)	53.3 ±21.6 (n=75)	173.9 ±15.1 (n=476)	0.000
On-time Graduation	81.5 ±2.0 (n=386)	66.1 ±7.9 (n=53)	79.6 ±2.1 (n=439)	0.000

4. School Participation Rates by Community Demographics

Schools were designated as urban and non-urban based on the school building zip code and the associated rural-urban commuting area codes (RUCA), provided by the Washington State Department of Social and Health Services' Research and Data Analysis Division. This bias analysis looked at four rural-urban classifications:

- Urban
- Sub-urban
- Small Town
- Isolated/Rural

For more information on how these classifications are defined, please see the Washington State Department of Health's Rural-Urban Classification Guidelines:

<https://www.doh.wa.gov/Portals/1/Documents/1500/RUCAGuide.pdf>

Among schools drawn for the state sample, 6th isolated/rural schools were also less likely to participate than urban schools (Table 8a).

Table 8a: Participation by rural/urban designation state sample schools.

Grade	School Type	Did Not Participate	Participated	Difference
		%, (n)	%, (n)	(p-value)*
6	Urban	10.4% (n=7)	89.6% (n=60)	-
	Sub-Urban	11.1% (n=2)	88.9% (n=16)	0.9350
	Small Town	28.6% (n=2)	71.4% (n=5)	0.1840
	Isolated/Rural	50.0% (n=2)	50.0% (n=2)	0.0460
8	Urban	2.4% (n=1)	97.6% (n=40)	-
	Sub-Urban	16.7% (n=2)	83.3% (n=10)	0.1030
	Small Town	0.0% (n=0)	100.0% (n=4)	omit
	Isolated/Rural	8.3% (n=1)	91.7% (n=11)	0.3750
10	Urban	8.6% (n=3)	91.4% (n=32)	-
	Sub-Urban	0.0% (n=0)	100.0% (n=10)	omit
	Small Town	0.0% (n=0)	100.0% (n=4)	omit
	Isolated/Rural	10.0% (n=1)	90.0% (n=9)	0.8890
12	Urban	9.8% (n=4)	90.2% (n=37)	-
	Sub-Urban	0.0% (n=0)	100.0% (n=10)	omit
	Small Town	0.0% (n=0)	100.0% (n=4)	omit
	Isolated/Rural	0.0% (n=0)	100.0% (n=9)	omit

*Fisher exact

Among census 6th, 8th, 10th and 12th grade schools, isolated rural schools were less likely to participate than urban schools. Sixth and 8th grade small town schools were less likely than urban schools. Sixth, 8th and 12th grade sub-urban schools were also less likely to participate than urban schools (Table 8b).

Table 8b: Participation by rural/urban designation for the census.

Grade	School Type	Did Not Participate %, (n)	Participated %, (n)	Difference (<i>p-value</i>)*
6	Urban	9.3% (n=42)	90.7% (n=408)	-
	Sub-Urban	23.9% (n=28)	76.1% (n=89)	0.0000
	Small Town	28.6% (n=14)	71.4% (n=35)	0.0000
	Isolated/Rural	36.4% (n=40)	63.6% (n=70)	0.0000
8	Urban	6.1% (n=18)	93.9% (n=276)	-
	Sub-Urban	21.4% (n=21)	78.6% (n=77)	0.0000
	Small Town	27.5% (n=11)	72.5% (n=29)	0.0000
	Isolated/Rural	28.8% (n=30)	71.2% (n=74)	0.0000
10	Urban	11.1% (n=28)	88.9% (n=224)	-
	Sub-Urban	17.8% (n=16)	82.2% (n=74)	0.1080
	Small Town	17.9% (n=7)	82.1% (n=32)	0.2270
	Isolated/Rural	22.8% (n=23)	77.2% (n=78)	0.0060
12	Urban	10.5% (n=26)	89.5% (n=222)	-
	Sub-Urban	19.3% (n=17)	80.7% (n=71)	0.0360
	Small Town	15.4% (n=6)	84.6% (n=33)	0.3690
	Isolated/Rural	26.2% (n=27)	73.8% (n=76)	0.0000

Findings

Yes, certain types of schools were more likely to participate.

1. Participation rates were slightly lower for 6th grade schools in both the state sample and all eligible schools (census).
2. For state sample schools, alternative schools were just as likely to participate as non-alternative schools.

For all eligible schools (census), 6th, 8th, 10th and 12th grade alternative schools were less likely to participate than non-alternative schools.

3. For state sample schools that did not participate, 6th grade schools had higher percentages of students receiving free/reduced lunch; and 10th grade schools had lower on-time graduation rates.

For all eligible schools (census) that did not participate, 6th and 8th grade schools had smaller percent of minority enrollment; 6th, 8th, 10th and 12th grade schools had smaller grade-level enrollments; 10th and 12th grade schools had higher percentages of students receiving free/reduced lunch; and 6th grade schools had lower percentages of students meeting English and Math assessments. Tenth and 12th grade schools had lower on-time graduation rates.

4. For state sample schools, 6th grade isolated/rural schools were less likely to participate than urban schools.

For all eligible schools (census), 6th, 8th, and 12th grade sub-urban schools were less likely to participate than urban schools; 6th and 8th grade small town schools were less likely to participate than urban schools; and 6th, 8th, 10th and 12th isolated/rural schools were less likely to participate than urban schools.

Very little school and community bias was found among state sample schools. More bias was found among all eligible schools (census). Some of this increased bias may be due to the larger number of schools in the census which makes it easier to detect differences.

Note that some differences in school characteristics may be redundant and/or logical, i.e., isolated/rural schools are in areas with small populations and inherently have smaller grade-level enrollments. The following groups are highly correlated:

- Urban/rural designation and enrollment size (grades 8, 10, and 12)
- Percent minority and percent free/reduced lunch (grades 6, 8, 10, and 12)
- Meeting assessment scores (English/math grade 6, English/math/science grade 8)
- Meeting assessment scores and percent free/reduced lunch (grades 6, 8, and 10)
- Meeting assessment scores and on-time graduation (grade 10)
- On-time graduation and percent free/reduced lunch (grade 10)

5. School-Level Optional Question Bias

Questions

Were certain types of schools more likely to ask the optional questions?

1. What are the optional question participation rates for the state sample and for all participating schools (census)?
2. Was asking optional questions different for alternative schools different from non-alternative schools?
3. Do schools that asked the optional questions have different school demographic characteristics compared to schools that did not ask them?
4. Do schools that asked the optional questions have different community demographic characteristics compared to schools that did not ask them?

Methods

To assess bias related to differences among secondary schools that administered the optional survey questions, we assessed the following school characteristics, available from the Office of Superintendent of Public Instruction at www.k12.wa.us/dataadmin and <http://reportcard.ospi.k12.wa.us/DataDownload.aspx>:

- School participation rates by sampling status
- School type - Alternative school status
- School Demographics
 - Percent minority enrollment
 - Percent of students receiving free or reduced-price lunch
 - School enrollment by grade
 - Percent meeting English Assessment (grades 6 and 8), meeting Math Assessment (grades 6 and 8), meeting Science Assessment (grade 8), and meeting Biology Assessment (grade 10)
 - On-time graduation rate (for schools with grades 10 and 12)
 - School rural or urban designation based on geographic setting codes

We compared the above characteristics for schools that administered the optional questions and those that did not. We conducted separate analyses by grade comparing optional administration schools drawn for the state sample, comparing optional administration schools not drawn for the state sample, and comparing all eligible schools – census schools (state sample plus volunteer non-sampled schools).

For these analyses we used t-test, Fisher's exact and Chi-square to compare schools by participation status. We used Chi-square and Fisher's exact test to compare schools by alternative status. Fisher's exact was used if cell sizes were five or fewer and Chi-square used otherwise. We used t-test to compare schools on percent minority enrollment, percent of students receiving free or reduced-price lunch, school assessment requirements (English, math, science, and biology), on-time graduation rate, and grade-level school enrollment. Comparisons were considered statistically significant if the p-value was less than 0.05 (that is, a difference of the size found would be expected to occur by chance less than 5 times in 100).

Secondary schools were considered to have administered the optional questions if their students completed responses from the optional survey questions.

Results

1. Optional Question Participation Rates by Sampling Status

Among state sample schools, approximately two-thirds (67%) of 8th grade participating schools administered the optional questions, while for grades 10 and 12 approximately 70% of participating schools administered these questions (Table 9a). The percent of state sample schools was similar to the percent and census schools administering optional questions (Table 9b).

Table 9a: Optional question administration status by grade for participating state sample schools.

Grade	Participated	Optional Questions Administered (n)	Optional Questions Administered (%)
8	64	43	67.2%
10	55	39	70.9%
12	60	42	70.0%

Table 9b: Optional question administration status by grade for all participating census schools.

Grade	Participated	Optional Questions Administered (n)	Optional Questions Administered (%)
8	448	307	68.5%
10	409	306	74.8%
12	403	300	74.4%

2. Optional Questions by School Type– Alternative and Non-Alternative Schools

Alternative schools in the state sample were just as likely to administer the optional questions (Table 10a). In 2016, very few alternative schools were selected for the state sample, possibly making it difficult to determine if there is a real difference.

Table 10a: Optional question administration by alternative school status for participating state sample schools.

Grade	School Type	Did Not Administer Optional Questions %, (n)	Administered Optional Questions %, (n)	Difference (<i>p-value</i>)*
8	Non-Alternative	68.3% (n=41)	31.7% (n=19)	0.5920
	Alternative	50.0% (n=2)	50.0% (n=2)	
10	Non-Alternative	74.0% (n=37)	26.0% (n=13)	0.1410
	Alternative	40.0% (n=2)	60.0% (n=3)	
12	Non-Alternative	73.5% (n=36)	26.5% (n=13)	0.2790
	Alternative	54.5% (n=6)	45.5% (n=5)	

*Fisher exact

Among census schools, alternative schools were just as likely to administer the optional questions (Table 10b).

Table 10b: Optional question administration by alternative school status for census schools.

Grade	School Type	Did Not Administer Optional Questions %, (n)	Administered Optional Questions %, (n)	Difference (<i>p-value</i>)*
8	Non-Alternative	68.4% (n=281)	31.6% (n=130)	0.4500
	Alternative	70.3% (n=26)	29.7% (n=11)	
10	Non-Alternative	75.6% (n=242)	24.4% (n=78)	0.1100
	Alternative	71.9% (n=64)	28.1% (n=25)	
12	Non-Alternative	75.2% (n=237)	24.8% (n=78)	0.2160
	Alternative	71.6% (n=63)	28.4% (n=25)	

3. Optional Questions by School Demographics

Among schools selected for the state sample, schools that administered the optional questions were similar to schools that did not administer them on most variables assessed, except optional taking 8th grade schools had lower grade-level enrollment (Tables 11a, 12a, and 13a).

Among census schools, schools with grades 8, 10 or 12 that administered the optional questions had higher minority enrollment than non-administering schools (Tables 11c, 12a, and 13a). Schools that administer the optional questions were less likely to meet the math assessment (grade 8) and more likely to meet the biology assessment (grade 10).

Grade 8

Among schools drawn for the state sample, 8th grade schools administering the optional surveys had lower school grade-level enrollment and lower percentages of students who met the Math Assessment than schools that did not (Table 11a).

Table 11a: Mean school and grade-level variables by optional question participation for 8th grade state sample schools.

School/Grade-level Variables	Administered Optional Questions Mean, ±95% CI, (n)	Did Not Administer Optional Questions Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p-value</i>)
% Minority enrollment	42.7 ±7.2 (n=43)	37.7 ±10.4 (n=21)	41.1 ±5.9 (n=64)	0.445
% Free/reduced lunch	50.8 ±5.9 (n=43)	44.1 ±9.5 (n=21)	47.8 ±5.2 (n=64)	0.151
Grade-level enrollment	144.0 ±31.2 (n=43)	208.9 ±62.0 (n=21)	165.3 ±29.9 (n=64)	0.045
Met English Assessment	55.5 ±4.9 (n=40)	62.5 ±7.6 (n=18)	57.7 ±4.2 (n=58)	0.132
Met Science Assessment	68.3 ±7.3 (n=18)	61.4 ±4.6 (n=40)	63.6 ±3.9 (n=58)	0.113
Met Math Assessment	32.2 ±6.9 (n=8)	58.4 ±28.6 (n=3)	39.3 ±11.0 (n=11)	0.028

Among census grades, schools administering the optional surveys had a higher percentage of minority enrollment than schools that did not (Table 11b).

Table 11b: Mean school and grade-level variables by optional question participation for census 8th grade schools.

School/Grade-level Variables	Administered Optional Questions Mean, ±95% CI, (n)	Did Not Administer Optional Questions Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p-value</i>)
% Minority enrollment	43.4 ±2.7 (n=304)	36.6 ±3.9 (n=141)	41.2 ±2.2 (n=445)	0.006
% Free/reduced lunch	46.0 ±2.4 (n=305)	45.3 ±3.4 (n=141)	45.7 ±2.0 (n=446)	0.316
Grade-level enrollment	171.6 ±13.9 (n=304)	175.9 ±19.2 (n=141)	173.0 ±11.3 (n=445)	0.728
Met English Assessment	57.6 ±2.0 (n=244)	58.9 ±2.9 (n=122)	58.1 ±1.6 (n=366)	0.481
Met Science Assessment	64.2 ±2.1 (n=244)	66.8 ±2.9 (n=120)	65.1 ±1.7 (n=364)	0.166
Met Math Assessment	40.5 ±6.3 (n=32)	48.4 ±8.7 (n=17)	43.3 ±5.1 (n=49)	0.155

Grade 10

Among 10th grades drawn for the state sample, schools administering the optional surveys had a higher percentage of students who met the Biology Assessment than schools that did not (Table 12a).

Table 12a: Mean school and grade-level variables by optional question participation for 10th grade state sample schools.

School/Grade-level Variables	Administered Optional Questions Mean, ±95% CI, (n)	Did Not Administer Optional Questions Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p-value</i>)
% Minority enrollment	38.0 ±6.0 (n=39)	37.8 ±14.8 (n=16)	38.0 ±6.0 (n=55)	0.982
% Free/reduced lunch	39.1 ±5.3 (n=39)	42.5 ±11.2 (n=16)	40.1 ±4.9 (n=55)	0.546
Grade-level enrollment	285.0 ±66.6 (n=39)	239.4 ±96.4 (n=16)	271.7 ±54.7 (n=55)	0.232
Met Biology Assessment	78.0 ±5.0 (n=14)	61.0 ±25.8 (n=3)	75.0 ±6.4 (n=17)	0.044
On-time Graduation	89.3 ±2.4 (n=38)	82.7 ±12.3 (n=16)	87.3 ±4.0 (n=54)	0.146

Among census 10th grade schools, schools administering the optional surveys had a higher percentage of minority enrollment than schools that did not (Table 12b).

Table 12b: Mean school and grade-level variables by optional question participation for census 10th grade schools.

School/Grade-level Variables	Administered Optional Questions Mean, ±95% CI, (n)	Did Not Administer Optional Questions Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p-value</i>)
% Minority enrollment	41.3 ±2.8 (n=302)	34.2 ±4.8 (n=101)	39.5 ±2.4 (n=403)	0.014
% Free/reduced lunch	45.2 ±2.4 (n=303)	40.8 ±3.6 (n=103)	44.1 ±2.0 (n=406)	0.066
Grade-level enrollment	196.7 ±20.8 (n=302)	184.3 ±37.1 (n=101)	193.6 ±18.1 (n=403)	0.508
Met Biology Assessment	65.7 ±4.8 (n=79)	69.0 ±8.7 (n=16)	66.3 ±4.3 (n=95)	0.582
On-time Graduation	82.1 ±2.2 (n=288)	81.0 ±4.4 (n=98)	81.8 ±2.0 (n=386)	0.608

Grade 12

Among 12th grades drawn for the state sample, schools administering the optional questions were similar to schools that did not (Table 13a).

Table 13a: Mean school and grade-level variables by optional question participation for 12th grade state sample schools.

School/Grade-level Variables	Administered Optional Questions Mean, ±95% CI, (n)	Did Not Administer Optional Questions Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p</i> -value)
% Minority enrollment	38.1 ±7.1 (n=42)	36.0 ±13.7 (n=18)	37.5 ±6.4 (n=60)	0.772
% Free/reduced lunch	42.0 ±5.8 (n=42)	42.9 ±10.0 (n=18)	42.3 ±5.0 (n=60)	0.439
Grade-level enrollment	260.1 ±56.0 (n=42)	209.3 ±77.6 (n=18)	244.9 ±45.6 (n=60)	0.321
On-time Graduation	85.2 ±4.9 (n=41)	75.1 ±15.1 (n=18)	82.1 ±5.8 (n=59)	0.114

Among 12th grades census schools, schools administering the optional surveys had a higher percentage of minority enrollment than schools that did not (Table 13b).

Table 13b: Mean school and grade-level variables by optional question participation census 12th grade schools.

School/Grade-level Variables	Administered Optional Questions Mean, ±95% CI, (n)	Did Not Administer Optional Questions Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference (<i>p</i> -value)
% Minority enrollment	41.3 ±2.7 (n=297)	34.3 ±4.6 (n=103)	39.4 ±2.4 (n=400)	0.012
% Free/reduced lunch	45.2 ±2.4 (n=297)	41.7 ±3.5 (n=103)	44.3 ±2.0 (n=400)	0.131
Grade-level enrollment	202.6 ±19.1 (n=297)	180.2 ±33.2 (n=103)	196.9 ±16.5 (n=400)	0.245
On-time Graduation	81.8 ±2.2 (n=287)	80.4 ±4.5 (n=99)	81.5 ±2.0 (n=386)	0.532

4. Optional Questions by Community Demographics

Among schools drawn for the state sample, there were no differences in administering the optional questions by urban and non-urban locations (Table 14a).

Table 14a: Optional question participation by rural/urban designation for participating schools in the state sample.

Grade	School Type	Administered Optional Questions %, (n)	Did Not Administer Optional Questions %, (n)	Difference (<i>p</i> -value)*
8	Urban	59.0% (n=23)	41.0% (n=16)	-
	Sub-Urban	70.0% (n=7)	30.0% (n=3)	0.5260
	Small Town	100.0% (n=4)	0.0% (n=0)	-
	Isolated/Rural	81.8% (n=9)	18.2% (n=2)	0.1780
10	Urban	71.9% (n=23)	28.1% (n=9)	-
	Sub-Urban	50.0% (n=5)	50.0% (n=5)	0.2080
	Small Town	75.0% (n=3)	25.0% (n=1)	-
	Isolated/Rural	88.9% (n=8)	11.1% (n=1)	0.3130
12	Urban	72.2% (n=26)	27.8% (n=10)	-
	Sub-Urban	50.0% (n=5)	50.0% (n=5)	0.1930
	Small Town	75.0% (n=3)	25.0% (n=1)	0.9060
	Isolated/Rural	88.9% (n=8)	11.1% (n=1)	0.3170

*Fisher exact

Among 12th grade census schools, sub-urban schools were more likely to ask the optional questions than urban schools (Table 8c).

Table 14b: Optional question participation by rural/urban designation for census schools.

Grade	School Type	Administered Optional Questions %, (n)	Did Not Administer Optional Questions %, (n)	Difference (<i>p-value</i>)*
8	Urban	68.1% (n=179)	31.9% (n=84)	-
	Sub-Urban	64.9% (n=48)	35.1% (n=26)	0.6050
	Small Town	75.9% (n=22)	24.1% (n=7)	0.3920
	Isolated/Rural	71.6% (n=53)	28.4% (n=21)	0.5590
10	Urban	77.3% (n=170)	22.7% (n=50)	-
	Sub-Urban	64.8% (n=46)	35.2% (n=25)	0.6050
	Small Town	78.1% (n=25)	21.9% (n=7)	0.3920
	Isolated/Rural	75.6% (n=59)	24.4% (n=19)	0.5590
12	Urban	77.2% (n=169)	22.8% (n=50)	-
	Sub-Urban	65.2% (n=45)	34.8% (n=24)	0.0490
	Small Town	75.8% (n=25)	24.2% (n=8)	0.8580
	Isolated/Rural	75.0% (n=57)	25.0% (n=19)	0.7000

Findings

Yes, certain types of schools were more likely to ask the optional questions.

1. Eighth grade schools in both the state sample and all eligible schools (census) were slightly less likely to ask the optional questions.
2. For the state sample and all eligible schools (census), 8th, 10th, and 12th grade alternative schools were just as likely to ask the optional questions compared to non-alternative schools.
3. For state sample schools, 8th grade schools with lower grade-level enrollments and lower percentages of students meeting the Math assessment were more likely to ask the optional questions. Tenth and 12th grade schools with a higher percentage of student meeting the Biology assessment were more likely to ask the optional questions.

All eligible schools (census), 8th, 10th and 12th grade schools with a higher percentage of minority enrollment were more likely to ask the optional questions.

4. For state sample schools, asking optional questions was similar for schools from different urban/rural classifications.

For all eligible schools (census), 12th grade suburban schools were less likely to ask the optional questions than urban schools.

Very little school and community bias was found among state sample schools. More bias was found among all eligible schools (census). Some of this increased bias may be due to the larger number of schools in the census which makes it easier to detect differences.

6. Student-level Completion Bias

Questions

Are results for questions at the end of the survey biased due to non-completion?

For the state sample:

1. What percent of respondents completed the survey?
2. Are respondents who did not complete the survey different from those who completed the survey?
3. Are all respondents different from those that completed the survey?

For all participating schools (census):

4. What percent of respondents completed the survey?
5. Are respondents who did not complete the survey different from those who completed the survey?
6. Are all respondents different from those that completed the survey?

Methods

For our first set of analyses, survey completion was categorized as:

- “Completers” – answered all of the last 30 questions, or all of the last 20 questions for respondents in grade 6.
- “Non-completers” – did not answer 3 or more of the last 30 or 20 questions (between 4% and 8% of students)

The last 30 questions were selected because a student might try to finish by skipping items; we reasoned that missing 3 or more items would be more likely to reflect non-completion than missing 1 or 2 items, which might be skipped for other reasons such as unwillingness to report. A description of the last questions on each survey form are provided in Appendix B.

We developed risk ratios to assess differences between categories of participants – comparing survey completers to non-completers. A risk ratio compares rates among groups. For example, if 15% of survey completers and 30% of survey non-completers reported getting low grades, we would report a risk ratio of 0.5, meaning that completers were half as likely as non-completers to have low grades. For every risk ratio, we also provide a “95% confidence interval,” which gives the range that should contain the true population value 95% of the time. The confidence interval is not a measure of how “confident” we are in the estimate; instead, it describes the range of values that we might reasonably expect to include the actual risk ratio among all Washington State students. If the confidence interval includes 1, the two groups are not statistically significantly different.

We compared respondents based on questions assessing personal characteristics found early in the survey according to their completion status by grade. Systematic differences in responses to these questions increase the likelihood of bias for questions toward the end of the survey. The characteristics for student-level comparisons include student reports of:

- School factors
 - Low grades (mostly Cs, Ds or Fs at school)
 - Feeling unsafe at school (answers of “definitely no” or “mostly no” to a question about feeling safe at school)

- Indicators of low socioeconomic status
 - Mother not completing high school
 - Housing situation due to finances
 - Food insecurity (family cutting meal size or skipping meals in past 12 months due of lack of money)
 - No recent dental visit (not visiting dentist for a check-up in the past year)
 - Receives free or reduced price lunch at school
- Behavioral factors
 - Cigarette smoking (any cigarette smoking in the past 30 days)
 - Marijuana smoking (having ever smoked marijuana)
 - Binge drinking (drinking 5 or more drinks on any one occasion in the past two weeks)
 - Drinking alcohol (drinking any alcohol in the past 30 days)
- Race and ethnicity
 - Race and Hispanic ethnicity
 - Non-English language spoken at home

An analysis of individual survey question non-completion found that rates for 8th and 10th graders fell below the HYSPC target of 15% non-completion (see Appendix A: Non-completion by Form Type and Grade). The low completion rates for grades 8 and 10 increase concerns about biased estimates for questions near the end of the survey.

We conducted a second set of analyses to determine the potential magnitude of this bias. We took a close look at how much we might expect non-completion to influence grade-level surveys results. We compared the prevalence of responses from the full state sample to the prevalence of a subset that included only survey completers:

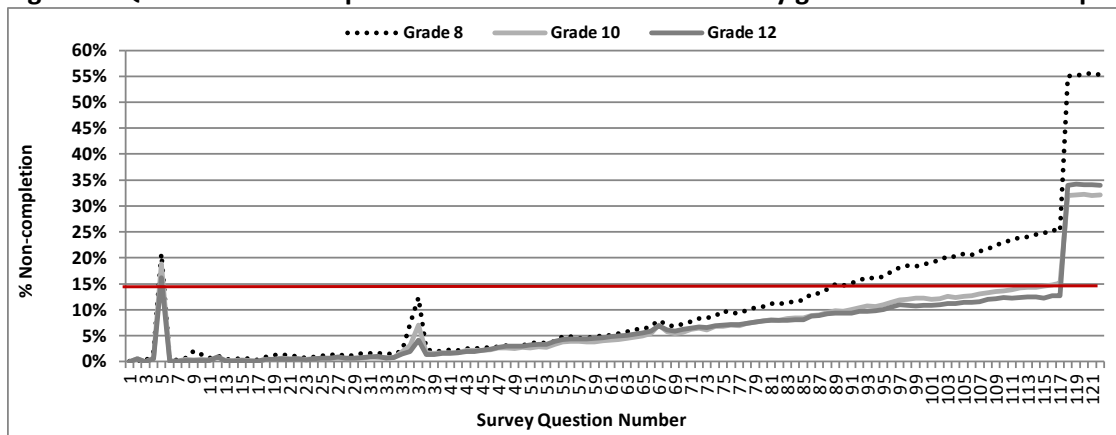
- “Completers” – answered all of the last 30 questions.
- “Full state sample” – all respondents in the state sample.

By excluding non-completers from the subset, we simulate the extent of bias that would occur if these questions were found at the end of the survey. We compared respondents from these two groups using the same personal characteristics listed above.

These same analyses were completed for census schools.

Figure 5 shows the state sample non-completion rates for each survey question on Form B by grade. Non-completion increases over the length of the survey. The jump in non-completion around question 38/39 is due to the questions on height and weight, which some students choose not to answer. Non-completion rates charts for all of the survey forms are available in Appendix A (page 57).

Figure 5: Question non-completion over the course of Form B by grade for the state sample



Results

1. Number of Completers and Non-completers in the State Sample

Table 15 shows the percent of respondents with survey completion and non-completion in each grade. Grade 8 has the highest percentage of survey non-completion (29%).

Table 15: Survey completion by grade for state sample schools, all forms

Grade	n	Survey Completion: Answered All Last Questions* (%)	Survey Non-completion: Missing more than 3 questions* (%)
6	9,722	75.8%	16.5%
8	8,662	65.2%	28.6%
10	10,835	77.4%	17.9%
12	7,590	81.7%	14.3%

**Number of respondents missing 3 or more questions among last 20 for grade 6, number of respondents missing 3 or more questions among last 30 for grades 8, 10 and 12.*

8% of 6th graders, 6% of 8th graders, 5% of 10th graders, and 4% of 12 graders did not answer 1 or 2 of the last questions. They are not included in these analyses, so the percentages of completion and non-completion do not sum to 100%.

For more information about survey non-completion for each individual survey question by grade level and form type, see Appendix A: Non-completion by Form Type and Grade.

2. Completers Compared to Non-completers in the State Sample

Table 16 gives risk ratios for characteristics listed above for respondents in the state sample who completed the survey to those who did not (didn't answer at least 3 of the last 30 questions or of the last 20 questions for respondents in grade 6). Of the 67 comparison tests conducted, 49 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents who completed the survey are different from respondents who did not complete the survey for the characteristics assessed.

Survey completers in the state sample were less likely than non-completers to report:

- Lower grades in school (all grades) and feeling unsafe in school (all grades)
- Variables indicating low economic status: mother didn't graduate high school (all grades), food insecurity (grade 10), no dental visits in past year (all grades), receive free/reduced lunch (all grades)
- Substance use: cigarettes (grades 6 and 12), marijuana (all grades), binge drinking (grades 6 and 8), and alcohol use (grade 6)
- Non-English spoken at home (all grades)
- Being Hispanic (all grades), American Indian/Alaska Native (grades 6 and 10), Black/African American (grades 8, 10, and 12), and Pacific Islander (grade 8)

Survey completers in the state sample were more likely than non-completers to report:

- Being white (all grades) and Asian (all grades)

Table 16: Survey completion and student characteristics for state sample schools, risk ratio (95% confidence interval)

Variable	Completers Compared to Non-completers by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
School factors				
Low grades	0.4 (0.4-0.5)	0.7 (0.6-0.7)	0.5 (0.4-0.5)	0.7 (0.6-0.8)
Feeling unsafe at school	0.8 (0.7-1.0)	0.8 (0.7-0.9)	0.9 (0.8-1.0)	0.8 (0.7-1.0)
Indicators of low socioeconomic status				
Mother didn't graduate high school	na	0.7 (0.6-0.8)	0.6 (0.5-0.6)	0.7 (0.5-0.8)
Living situation due to finances	na	0.9 (0.7-1.2)	0.8 (0.7-1.1)	0.8 (0.6-1.1)
Food insecurity	na	0.9 (0.7-1.0)	0.8 (0.7-1.0)	0.9 (0.7-1.1)
No dental visit in last year	na	0.6 (0.5-0.7)	0.5 (0.4-0.6)	0.7 (0.6-1.0)
Receive free/reduced price lunch	na	0.7 (0.6-0.8)	0.5 (0.4-0.6)	0.5 (0.4-0.6)
Substance use factors				
Current cigarette smoking	0.2 (0.1-0.4)	0.9 (0.7-1.2)	0.8 (0.7-1.0)	0.8 (0.6-1.0)
Current marijuana use	0.5 (0.3-1.0)	0.7 (0.5-0.8)	0.8 (0.7-0.9)	0.8 (0.7-0.9)
Binge drinking	0.4 (0.3-0.7)	0.7 (0.6-0.9)	0.9 (0.7-1.0)	0.9 (0.8-1.1)
Current alcohol drinking	0.6 (0.4-0.9)	0.9 (0.7-1.0)	0.9 (0.7-1.0)	1.0 (0.9-1.2)
Race/ethnicity** and language				
Non-English spoken at home	0.7 (0.6-0.8)	0.7 (0.7-0.8)	0.6 (0.5-0.6)	0.6 (0.5-0.7)
White	1.6 (1.4-1.8)	1.6 (1.5-1.8)	2.0 (1.8-2.3)	1.7 (1.5-1.9)
Hispanic	0.5 (0.5-0.6)	0.7 (0.6-0.8)	0.5 (0.4-0.5)	0.6 (0.5-0.7)
American Indian/Alaska Native	0.8 (0.6-1.0)	0.9 (0.7-1.1)	0.5 (0.4-0.6)	0.9 (0.5-1.4)
Asian	2.0 (1.6-2.5)	1.3 (1.1-1.6)	1.8 (1.4-2.4)	1.6 (1.1-2.3)
Black/African American	0.8 (0.6-1.1)	0.6 (0.5-0.7)	0.6 (0.5-0.8)	0.6 (0.4-0.8)
Pacific Islander	0.8 (0.5-1.1)	0.7 (0.5-0.9)	0.9 (0.6-1.4)	1.0 (0.5-1.8)

* RR: risk ratio; 95% CI: 95% confidence interval; **bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0).** A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

To see the specific percentages of the characteristics reported above by completion status and grade, see Appendix B: Student Characteristics by Completion.

3. State Sample Completers Compared to All State Sample Respondents

Table 17 shows the differences in prevalence between state sample survey completers and the prevalence of those all state sample respondents for the same student characteristic questions assessed above.

Of the 67 comparison tests conducted, 17 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents who completed the survey are different from respondents from the full state sample for some of the characteristics assessed.

Survey completers in the state sample were less likely than non-completers to report:

- Lower grades in school (grades 6, 8, and 10)
- Variables indicating low economic status: mother didn't graduate high school (grade 10) and no dental visits in past year (grade 8)
- Non-English spoken at home (grades 6, 8, and 10)

- Being Hispanic (all grades) and Black/African American (grade 8)
- Survey completers in the state sample were more likely than non-completers to report:
- Being white (all grades)

Table 17: Simulating non-completion bias with student characteristics among state sample schools, risk ratio (95% confidence interval) by grade.

Variable	Completers Compared to All State Sample Respondents by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
School factors				
Low grades	0.8 (0.8-0.9)	0.9 (0.8-1.0)	0.9 (0.8-0.9)	1.0 (0.9-1.0)
Feeling unsafe at school	1.0 (0.9-1.1)	0.9 (0.9-1.0)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Indicators of low socioeconomic status				
Mother didn't graduate high school	na	0.9 (0.8-1.0)	0.9 (0.8-1.0)	1.0 (0.9-1.1)
Living situation due to finances	na	1.0 (0.8-1.1)	1.0 (0.9-1.1)	1.0 (0.8-1.1)
Food insecurity	na	1.0 (0.9-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
No dental visit in last year	na	0.9 (0.8-1.0)	0.9 (0.8-1.0)	1.0 (0.9-1.1)
Receive free/reduced price lunch	na	0.9 (0.8-1.0)	0.9 (0.8-1.0)	1.0 (0.9-1.1)
Substance use factors				
Current cigarette smoking	0.7 (0.4-1.1)	1.0 (0.8-1.2)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Current marijuana use	0.9 (0.6-1.3)	0.9 (0.8-1.0)	1.0 (0.9-1.0)	1.0 (0.9-1.1)
Binge drinking	0.9 (0.6-1.2)	0.9 (0.8-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Current alcohol drinking	0.9 (0.7-1.2)	1.0 (0.8-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Race/ethnicity** and language				
Non-English spoken at home	0.9 (0.8-1.0)	0.9 (0.8-1.0)	0.9 (0.8-1.0)	0.9 (0.9-1.0)
White	1.1 (1.0-1.2)	1.2 (1.1-1.2)	1.1 (1.1-1.2)	1.1 (1.0-1.2)
Hispanic	0.9 (0.8-1.0)	0.9 (0.8-1.0)	0.8 (0.8-0.9)	0.9 (0.8-1.0)
American Indian/Alaska Native	1.0 (0.8-1.1)	1.0 (0.8-1.2)	0.8 (0.7-1.0)	1.0 (0.8-1.3)
Asian	1.1 (1.0-1.2)	1.1 (0.9-1.2)	1.1 (1.0-1.2)	1.1 (0.9-1.2)
Black/African American	1.0 (0.8-1.1)	0.8 (0.7-1.0)	0.9 (0.8-1.1)	0.9 (0.7-1.1)
Pacific Islander	0.9 (0.7-1.2)	0.9 (0.7-1.1)	1.0 (0.8-1.3)	1.0 (0.5-1.8)

* RR: risk ratio; 95% CI: 95% confidence interval; **bolded values** are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0). A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

4. Number of Completers and Non-completers in Census Schools

Table 18 shows the percent of respondents with survey completion and non-completion in each grade. Grade 8 has the highest percentage of survey non-completion (24%).

Table 18: Survey completion by grade for census schools, all forms

Grade	n	Survey Completion: Answered All Last Questions* (%)	Survey Non-completion: Missing more than 3 questions* (%)
6	63,336	73.4%	18.4%
8	62,474	69.3%	24.4%
10	55,601	77.8%	17.3%
12	38,982	82.4%	13.7%

**Number of respondents missing 3 or more questions among last 20 for grade 6, number of respondents missing 3 or more questions among last 30 for grades 8, 10 and 12.*

8% of 6th graders, 6% of 8th graders, 5% of 10th graders and 4% of 12 graders did not answer 1 or 2 of the last questions. They are not included in these analyses, so the percentages of completion and non-completion do not sum to 100%.

For more information about survey non-completion for each individual survey question by grade level and form type, see Appendix A: Non-completion by Form Type and Grade.

5. Completers Compared to Non-completers in Census Schools

Table 19 gives risk ratios for characteristics listed above for respondents in census schools who completed the survey to those who did not (didn't answer at least 3 of the last 30 questions or of the last 20 questions for respondents in grade 6). Of the 67 comparison tests conducted, 61 showed statistically significant differences. These results indicate that respondents who completed the survey are different from respondents who did not complete the survey for the characteristics assessed.

Survey completers in all schools were less likely than non-completers to report:

- Lower grades in school (all grades) and feeling unsafe in school (all grades)
- Variables indicating low economic status: mother didn't graduate high school (all grades), housing situation due to finances (grade 12), food insecurity (all grades), no dental visits in past year (all grades), receive free/reduced lunch (all grades)
- Substance use – current cigarettes, marijuana, alcohol, and binge drinking (all grades, except for current drinking among 12th graders)
- Non-English spoken at home (all grades)
- Being Hispanic (all grades), American Indian/Alaska Native (grades 6, 8, and 10), and Black/African American (all grades), and Pacific Islander (grades 6 and 8)

Survey completers in all schools more likely than non-completers to report:

- Being white (all grades) and Asian (all grades)

Table 19: Survey completion and student characteristics for census schools, risk ratio (95% confidence interval)

Variable	Completers Compared to Non-completers by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
School factors				
Low grades	0.5 (0.5-0.5)	0.6 (0.5-0.6)	0.6 (0.5-0.6)	0.6 (0.6-0.7)
Feeling unsafe at school	0.7 (0.7-0.8)	0.8 (0.8-0.9)	0.8 (0.7-0.8)	0.8 (0.7-0.8)
Indicators of low socioeconomic status				
Mother didn't graduate high school	na	0.7 (0.6-0.7)	0.6 (0.6-0.7)	0.7 (0.7-0.8)
Housing situation due to finances	na	1.0 (0.9-1.1)	0.9 (0.8-1.0)	0.8 (0.7-0.9)
Food insecurity	na	0.9 (0.9-1.0)	0.9 (0.8-0.9)	0.8 (0.7-0.9)
No dental visit in last year	na	0.6 (0.5-0.6)	0.6 (0.6-0.7)	0.7 (0.6-0.8)
Receive free/reduced price lunch	na	0.7 (0.6-0.7)	0.6 (0.5-0.6)	0.6 (0.5-0.6)
Substance use factors				
Current cigarette smoking	0.5 (0.4-0.6)	0.8 (0.7-0.9)	0.7 (0.7-0.8)	0.7 (0.7-0.8)
Current marijuana use	0.8 (0.6-1.0)	0.8 (0.7-0.9)	0.8 (0.7-0.8)	0.8 (0.7-0.8)
Binge drinking	0.8 (0.7-0.9)	0.8 (0.7-0.9)	0.8 (0.7-0.9)	0.8 (0.8-0.9)
Current alcohol drinking	0.9 (0.7-1.0)	0.9 (0.9-1.0)	0.9 (0.9-1.0)	0.9 (0.9-1.0)
Race/ethnicity and language				
Non-English spoken at home	0.7 (0.7-0.7)	0.7 (0.7-0.8)	0.7 (0.6-0.7)	0.7 (0.7-0.8)
White	1.6 (1.6-1.7)	1.6 (1.5-1.6)	1.6 (1.5-1.7)	1.5 (1.4-1.6)
Hispanic	0.7 (0.7-0.8)	0.7 (0.7-0.7)	0.6 (0.6-0.7)	0.8 (0.7-0.8)
American Indian/Alaska Native	0.8 (0.7-0.9)	0.7 (0.6-0.8)	0.6 (0.6-0.7)	0.8 (0.7-1.0)
Asian	1.5 (1.4-1.7)	1.5 (1.4-1.7)	1.3 (1.2-1.5)	1.4 (1.2-1.5)
Black/African American	0.6 (0.5-0.6)	0.5 (0.5-0.6)	0.6 (0.5-0.6)	0.5 (0.4-0.5)
Pacific Islander	0.9 (0.7-1.0)	0.8 (0.7-0.9)	0.9 (0.7-1.0)	0.8 (0.7-1.0)

* RR: risk ratio; 95% CI: 95% confidence interval; **bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0). A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.**

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

To see the specific percentages of the characteristics reported above by completion status and grade, see Appendix B: Student Characteristics by Completion.

6. All Completers Compared to All Respondents

Table 20 shows the differences in prevalence between all survey completers and the prevalence of all survey respondents for the same student characteristic questions assessed above.

Of the 67 comparison tests conducted, 27 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents who completed the survey are different from respondents from the full state sample for some of the characteristics assessed.

Survey completers in all schools were less likely than all respondents to report:

- Lower grades in school (grades 6 and 10)
- Variables indicating low economic status: no dental visits in past year (grade 10)
- Substance use – current cigarette smoking (grades 6 and 10), binge drinking (grade 6), and current drinking (grade 6)
- Non-English spoken at home (all grades)

- Being Hispanic (grades 6, 10, and 12), Asian (grades 10 and 12), Black/African American (grades 6, 8, and 12), and Pacific Islander (grades 10 and 12)

Survey completers in all schools more likely than all respondents to report:

- Being white (all grades) and Asian (grade 6)

Table 20: Simulating non-completion bias with student characteristics among census schools, risk ratio (95% confidence interval)

Variable	All Completers Compared to All Respondents by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
School factors				
Low grades	0.7 (0.7-0.8)	1.0 (0.9-1.0)	0.9 (0.8-0.9)	1.0 (0.9-1.0)
Feeling unsafe at school	0.9 (0.9-1.0)	0.9 (0.9-1.0)	1.0 (0.9-1.0)	1.0 (0.9-1.1)
Indicators of low socioeconomic status				
Mother didn't graduate high school	na	1.0 (0.9-1.1)	1.0 (0.9-1.1)	1.0 (1.0-1.1)
Living situation due to finances	na	1.0 (0.9-1.1)	1.0 (0.9-1.1)	0.9 (0.8-1.0)
Food insecurity	na	1.0 (0.9-1.1)	1.0 (0.9-1.0)	1.0 (1.0-1.1)
No dental visit in last year	na	0.9 (0.9-1.0)	0.9 (0.8-1.0)	0.9 (0.8-1.0)
Receive free/reduced price lunch	na	1.0 (0.9-1.1)	1.0 (0.9-1.0)	1.0 (0.9-1.1)
Substance use factors				
Current cigarette smoking	0.5 (0.3-0.7)	1.0 (0.9-1.2)	0.9 (0.8-1.0)	1.0 (0.9-1.0)
Current marijuana use	0.8 (0.6-1.0)	0.9 (0.8-1.0)	1.0 (1.0-1.1)	1.0 (1.0-1.1)
Binge drinking	0.7 (0.5-0.8)	0.9 (0.8-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Current alcohol drinking	0.7 (0.6-0.9)	0.9 (0.8-1.0)	1.0 (1.0-1.1)	1.0 (0.9-1.1)
Race/ethnicity and language				
Non-English spoken at home	0.8 (0.7-0.8)	0.9 (0.9-1.0)	0.8 (0.8-0.9)	0.8 (0.8-0.9)
White	1.2 (1.2-1.3)	1.1 (1.0-1.1)	1.2 (1.2-1.3)	1.2 (1.1-1.2)
Hispanic	0.7 (0.7-0.8)	1.0 (1.0-1.1)	1.1 (1.0-1.2)	1.2 (1.1-1.2)
American Indian/Alaska Native	1.0 (0.9-1.1)	0.9 (0.8-1.1)	0.9 (0.8-1.1)	0.9 (0.7-1.1)
Asian	1.2 (1.1-1.3)	0.9 (0.8-1.0)	0.6 (0.6-0.7)	0.6 (0.5-0.7)
Black/African American	0.8 (0.7-0.9)	1.0 (0.9-1.1)	0.7 (0.6-0.8)	0.6 (0.5-0.8)
Pacific Islander	0.8 (0.7-1.0)	0.9 (0.7-1.1)	0.8 (0.6-0.9)	0.7 (0.5-0.9)

* RR: risk ratio; 95% CI: 95% confidence interval; *bolded values are statistically significant at the p < 0.05 level (that is, the 95% CI does not include 1.0). A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.*

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

Findings

Yes, results for questions at the end of the survey were biased due to non-completion.

For the state sample respondents:

1. Non-completion rates ranged by grade from 14% to 29% (highest among 8th graders).
2. Respondents who completed the survey were less likely to report:
 - Lower grades in school (all grades) and feeling unsafe in school (all grades)
 - Variables indicating low economic status: mother didn't graduate high school (all grades), food insecurity (grade 10), no dental visits in past year (all grades), receive free/reduced lunch (all grades)
 - Substance use: cigarettes (grades 6 and 12), marijuana (all grades), binge drinking (grades 6 and 8), and alcohol use (grade 6)
 - Non-English spoken at home (all grades)
 - Being Hispanic (all grades), American Indian/Alaska Native (grades 6 and 10), Black/African American (grades 8, 10, and 12), and Pacific Islander (grade 8)
- Respondents who did complete the survey were more likely to report:
 - Being white (all grades) and Asian (all grades)
3. Results near the end of the survey may not adequately represent the following students:
 - Those with lower grades in school grades 6, 8, and 10)
 - Their mother didn't graduate high school (grade 10) and no dental visits in past year (grade 8)
 - Non-English spoken at home (grades 6, 8, and 12)
 - Being Hispanic (all grades) and Black/African American (grade 8)

For all eligible respondents (census):

4. Non-completion rates ranged by grade from 14% to 24% (highest among 8th graders).
5. Respondents who completed the survey were less likely to report:
 - Lower grades in school (all grades) and feeling unsafe in school (all grades)
 - Variables indicating low economic status: mother didn't graduate high school (all grades), housing situation due to finances (grade 12), food insecurity (all grades), no dental visits in past year (all grades), receive free/reduced lunch (all grades)
 - Substance use – current cigarettes, marijuana, alcohol, and binge drinking (all grades, except for current drinking among 12th graders)
 - Non-English spoken at home (all grades)
 - Being Hispanic (all grades), American Indian/Alaska Native (grades 6, 8, and 10), and Black/African American (all grades), and Pacific Islander (grade 8)
- Respondents who did complete the survey were more likely to report:
 - Being white (all grades) and Asian (all grades)
6. Results near the end of the survey may not adequately represent the following students:
 - Those with lower grades in school (grades 6 and 10)
 - No dental visits in past year (grade 10)
 - Current cigarette smoking (grades 6 and 10), binge drinking (grade 6), current drinking (grade 6)
 - Non-English spoken at home (all grades)
 - Being Hispanic (grades 6, 10, and 12), Asian (grades 10 and 12), Black/African American (grades 6, 8, and 12), and Pacific Islanders (grades 10 and 12)

There were some differences, but overall, respondents who did not complete the survey from the state sampled schools were similar to respondents who did not complete the survey from all eligible schools (census).

A description of questions at the end of the survey forms is available in Appendix B.

7. Student-Level Optional Question Bias

Questions

Are results for the optional questions biased because not all schools took them?

For the state sample:

1. What percent of respondents completed the optional questions?
2. Are respondents who responded to the optional questions different from those who did not?
3. Are all survey respondents different from those that responded to the optional questions?

For all participating schools (census):

4. What percent of respondents completed the optional questions?
5. Are respondents who responded to the optional questions different from those who did not?
6. Are all respondents different from those that responded to the optional questions?

Methods

“Optional question takers” are categorized as such if they answered the optional questions on “tear-off” page of the survey. Form A included one optional question on sexual orientation and Form B included one question on sexual orientation, four questions on sexual behavior, and one question on sexual abuse. “Optional question takers” are from schools that administered the optional questions.

Respondents from these schools not answering the optional questions might have chosen to skip them or might not have gotten to the questions in the allotted time. Students are only counted as optional takers if they answered at least one optional question. “Non-optional question takers” are from schools that removed the optional questions by tearing them off the survey before administration.

We compared respondents based on questions assessing personal characteristics found early in the main body of the survey. The characteristics for student-level comparisons include student reports of:

- School factors
 - Low grades (mostly Cs, Ds or Fs at school)
 - Feeling unsafe at school (answers of “definitely no” or “mostly no” to a question about feeling safe at school)
- Indicators of low socioeconomic status
 - Mother not completing high school
 - Living situation due to family finances
 - Food insecurity (family cutting meal size or skipping meals in past 12 months due of lack of money)
 - No recent dental visit (not visiting dentist for a check-up in the past year)
 - Receive free or reduced-price lunch at school
- Behavioral factors
 - Cigarette smoking (any cigarette smoking in the past 30 days)
 - Marijuana smoking (having ever smoked marijuana)
 - Binge drinking (drinking 5 or more drinks on any one occasion in the past two weeks)

- Drinking alcohol (drinking any alcohol in the past 30 days)
- Race and ethnicity
 - Race and Hispanic ethnicity
 - Non-English language spoken at home

We conducted separate analyses by grade. We developed risk ratios to assess differences between categories of participants. A risk ratio compares rates among groups. For example, if 15% of optional takers and 30% of survey non-optional takers reported getting low grades, we would report a risk ratio of 0.5, meaning that optional takers were half as likely as non-optional takers to have low grades. For every risk ratio, we also provide a “95% confidence interval,” which gives the range that should contain the true population value 95% of the time. The confidence interval is not a measure of how “confident” we are in the estimate; instead, it describes the range of values that we might reasonably expect to include the actual risk ratio among all Washington State respondents. If the confidence interval includes 1, the two groups are not statistically significantly different.

Comparisons are of respondents who answered optional questions compared to those that did not answer optional questions.

We conducted a second set of analyses to determine the potential magnitude of this bias on the optional questions. Four optional questions on sexual behavior were at the end of the survey, so bias on these results might be due to non-completion bias.

We took a close look at how much we might expect non-completion of optional questions to influence grade-level surveys results. We compared the prevalence of responses for all the optional questions from the full state sample to the prevalence of a subset that included only survey completers:

- “Optional Takers” – answered at least one optional question (sexual orientation, sexual behavior and/or sexual abuse).
- “Full state sample” – all respondents in the state sample.

By excluding non-completers from the subset, we simulate the extent of bias that would occur if these questions were non-optional. These same analyses were completed for census schools.

Results

1. Optional Question Participation Rates in the State Sample

Table 21a shows the percent of respondents that took the survey forms that had optional questions. Table 21b shows the percent of “Optional Takers – respondents that took the survey forms that had optional questions and answered at least one optional question (sexual orientation, sexual behavior and/or sexual abuse).

Table 21a: Optional question participation rates for state sample schools

Grade	n	Answered Form with Optional Questions (%)
8	43	67.2%
10	39	70.9%
12	42	70.0%

Table 21b: Percent of Optional Question Takers* for state sample schools

Grade	n	Optional Question Takers* (%)
8	3,828	44.2%
10	7,105	65.6%
12	5,038	66.4%

* Respondents from schools that administered the optional questions and answered at least one optional question (sexual orientation, sexual behavior and/or sexual abuse. 15% of 8th graders, 9% of 10th graders and 8% of 12 graders did not answer at least one option question and are not included in these analyses.

For more information about survey non-completion for each individual survey question by grade level and form type, see Appendix A: Non-completion by Form Type and Grade.

2. Optional Takers Compared to Non-Optional Takers in the State Sample

Table 22 gives risk ratios for characteristics listed above comparing respondents in the state sample who answered at least one optional question to those who did not.

Of the 54 comparison tests conducted, 25 showed statistically significant differences. The results show that optional question takers have some variable risks compared to respondents who did not take the optional questions.

Optional question takers in the state sample were less likely than respondents who did not take the optional questions to report:

- Lower grades in school (all grades) and feeling unsafe at school (grade 10)
- Socioeconomic indicators – mother didn’t graduate high school (grades 10 and 12), food insecurity (grade 10), no dental visit in last year (grades 8 and 10), receives free/reduced lunch (grades 10 and 12)
- Non-English spoken at home (grades 10 and 12)
- Being Hispanic (grades 10 and 12), American Indian/Alaska Native (grade 10), Black/African American (grades 10 and 12), and Pacific Islander (grade 12)

Optional question takers in the state sample were more likely to report:

- Being White (grades 10 and 12) and being Asian (grade 8)
- Substance use – binge drinking (grade 12) and current alcohol drinking (grades 10 and 12)

Table 22: Answering optional questions and student characteristics for the state sample, risk ratio (95% confidence interval)

Variable	Answering Optional Questions Compared to those that Did Not Answer Them by Grade		
	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
School factors			
Low grades	0.9 (0.8-1.0)	0.7 (0.7-0.8)	0.9 (0.8-1.0)
Feeling unsafe at school	1.1 (0.9-1.2)	0.8 (0.7-0.9)	1.0 (0.8-1.1)
Indicators of low socioeconomic status			
Mother didn't graduate high school	1.0 (0.8-1.1)	0.8 (0.7-0.9)	0.8 (0.7-0.9)
Living situation due to finances	1.0 (0.8-1.2)	0.9 (0.8-1.1)	1.0 (0.8-1.2)
Food insecurity	1.0 (0.9-1.2)	0.9 (0.8-1.0)	1.0 (0.8-1.2)
No dental visit in last year	0.8 (0.7-0.9)	0.7 (0.6-0.8)	0.9 (0.8-1.1)
Receive free/reduced price lunch	1.0 (0.9-1.2)	0.7 (0.6-0.8)	0.8 (0.7-0.9)
Substance use factors			
Current cigarette smoking	1.2 (0.9-1.5)	1.1 (0.9-1.3)	1.1 (0.9-1.3)
Current marijuana use	1.0 (0.8-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.2)
Binge drinking	1.2 (0.9-1.5)	1.0 (0.9-1.2)	1.2 (1.1-1.4)
Current alcohol drinking	1.1 (1.0-1.3)	1.2 (1.1-1.3)	1.2 (1.1-1.4)
Race/ethnicity and language			
Non-English spoken at home	1.0 (0.9-1.1)	0.7 (0.6-0.8)	0.7 (0.6-0.8)
White	1.0 (1.0-1.1)	1.5 (1.4-1.7)	1.4 (1.3-1.6)
Hispanic	1.0 (0.9-1.1)	0.7 (0.6-0.7)	0.7 (0.7-0.8)
American Indian/Alaska Native	1.0 (0.8-1.2)	0.6 (0.5-0.8)	1.0 (0.7-1.5)
Asian	1.2 (1.0-1.4)	1.2 (1.0-1.4)	1.0 (0.8-1.3)
Black/African American	0.9 (0.7-1.1)	0.7 (0.6-0.9)	0.5 (0.4-0.7)
Pacific Islander	0.9 (0.7-1.2)	0.8 (0.6-1.1)	0.7 (0.4-1.0)

* RR: risk ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0). A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

3. State Sample Optional Question Takers Compared to All State Sample Respondents

Table 23 shows the differences in prevalence between state sample optional question takers and the prevalence of all state sample respondents for the same student characteristic questions assessed above.

Of the 54 comparison tests conducted, 7 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents who completed the optional questions are different from respondents from the full state sample for some of the characteristics assessed. The results were mixed, with optional question takers sometimes having more risk and sometimes having less risk than all state sample respondents.

Optional question takers in the state sample were less likely than respondents in the full state sample to report:

- Lower grades in school (grade 10)
- Socioeconomic indicators – mother didn't graduate high school (grade 10)

- Non-English spoken at home (grades 10 and 12)
- Being Hispanic (grades 10 and 12) and Black/African American (grade 12)

Optional question takers in the state sample were more likely to report:

- Being White (grades 10 and 12)

Table 23: Simulating optional question taking bias with student characteristics among state sample schools, risk ratio (95% confidence interval) by grade.

Variable	Answering Optional Questions Compared to those that Did Not Answer Them by Grade		
	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
School factors			
Low grades	0.9 (0.8-1.0)	0.9 (0.8-1.0)	1.0 (0.9-1.0)
Feeling unsafe at school	1.0 (0.9-1.1)	0.9 (0.9-1.0)	1.0 (0.9-1.1)
Indicators of low socioeconomic status			
Mother didn't graduate high school	1.0 (0.9-1.1)	0.9 (0.8-1.0)	0.9 (0.8-1.0)
Living situation due to finances	1.0 (0.8-1.2)	1.0 (0.8-1.1)	1.0 (0.9-1.2)
Food insecurity	1.0 (0.9-1.1)	1.0 (0.9-1.0)	1.0 (0.9-1.1)
No dental visit in last year	0.9 (0.8-1.0)	0.9 (0.8-1.0)	1.0 (0.9-1.1)
Receive free/reduced price lunch	1.0 (0.9-1.1)	0.9 (0.8-1.0)	0.9 (0.8-1.0)
Substance use factors			
Current cigarette smoking	1.1 (0.9-1.4)	1.0 (0.9-1.2)	1.0 (0.9-1.2)
Current marijuana use	1.0 (0.8-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Binge drinking	1.1 (0.9-1.3)	1.0 (0.9-1.1)	1.1 (1.0-1.2)
Current alcohol drinking	1.1 (0.9-1.2)	1.1 (1.0-1.1)	1.1 (1.0-1.2)
Race/ethnicity and language			
Non-English spoken at home	1.0 (0.9-1.1)	0.9 (0.8-1.0)	0.9 (0.8-1.0)
White	1.0 (0.9-1.1)	1.2 (1.1-1.2)	1.1 (1.0-1.2)
Hispanic	1.0 (0.9-1.1)	0.9 (0.8-0.9)	0.9 (0.8-1.0)
American Indian/Alaska Native	1.0 (0.8-1.2)	0.8 (0.7-1.0)	1.0 (0.8-1.3)
Asian	1.1 (1.0-1.3)	1.1 (0.9-1.2)	1.0 (0.8-1.2)
Black/African American	0.9 (0.8-1.1)	0.9 (0.7-1.1)	0.8 (0.6-1.0)
Pacific Islander	0.9 (0.7-1.2)	0.9 (0.7-1.2)	0.8 (0.6-1.2)

* RR: risk ratio; 95% CI: 95% confidence interval; **bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0).** A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

4. Optional Question Participation Rates in Census Schools

Table 24a shows the percent of respondents that took the survey forms that had optional questions. Table 24b shows the percent of “Optional Takers – respondents that took the survey forms that had optional questions and answered at least one optional question (sexual orientation, sexual behavior and/or sexual abuse).

Table 24a: Optional question participation rates for census schools

Grade	n	Answered Form with Optional Questions (%)
8	304	67.9%
10	306	74.8%
12	299	74.2%

Table 24b: Percent of Optional Question Takers* for census schools

Grade	n	Optional Question Takers* (%)
8	32,733	52.4%
10	36,037	64.8%
12	26,093	66.9%

* Respondents from schools that administered the optional questions and answered at least one optional question (sexual orientation, sexual behavior and/or sexual abuse. 15% of 8th graders, 11% of 10th graders and 9% of 12 graders did not answer at least one option question and are not included in these analyses.

For more information about survey non-completion for each individual survey question by grade level and form type, see Appendix A: Non-completion by Form Type and Grade.

5. Optional Question Takers Compared to All Respondents

Table 25 gives risk ratios for characteristics listed above comparing respondents in census schools who answered at least one optional question to those who did not.

Of the 54 comparison tests conducted, 35 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents who completed optional questions are different from respondents that did not fill out the optional questions for the characteristics assessed. The results were mixed, with optional question takers sometimes having more risk and sometimes having less risk than respondents who did not take the optional questions.

Optional question takers in all schools were less likely to report:

- Lower grades in school (all grades) and feeling unsafe at school (all grades)
- Socioeconomic indicators – mother didn’t graduate high school (all grades), food insecurity (grade 12), no dental visit in last year (all grades), receives free/reduced lunch (grades 8 and 10)
- Substance use – current cigarette smoking (grade 10) and marijuana use (grade 8)
- Non-English spoken at home (all grades)
- Being Hispanic (all grades), American Indian/Alaska Native (grades 8 and 10), and Black/African American (all grades)

Optional question takers were more likely to report:

- Being White (all grades), being Asian (grade 8), and Pacific Islander (grade 12)
- Substance use – current alcohol drinking (grades 10 and 12)

Table 25: Answering optional questions and student characteristics for census schools, risk ratio (95% confidence interval).

Variable	Answering Optional Questions Compared to those that Did Not Answer Them by Grade		
	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
School factors			
Low grades	0.7 (0.7-0.8)	0.8 (0.8-0.8)	0.8 (0.8-0.9)
Feeling unsafe at school	0.9 (0.9-1.0)	0.9 (0.8-0.9)	0.9 (0.8-0.9)
Indicators of low socioeconomic status			
Mother didn't graduate high school	0.8 (0.7-0.8)	0.9 (0.9-1.0)	0.9 (0.9-1.0)
Living situation due to finances	1.0 (0.9-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Food insecurity	1.0 (0.9-1.0)	1.0 (0.9-1.0)	0.9 (0.9-1.0)
No dental visit in last year	0.8 (0.8-0.8)	0.8 (0.8-0.9)	0.9 (0.9-1.0)
Receive free/reduced price lunch	0.8 (0.7-0.8)	0.9 (0.9-1.0)	1.0 (0.9-1.1)
Substance use factors			
Current cigarette smoking	1.0 (0.9-1.1)	0.9 (0.8-1.0)	1.0 (0.9-1.0)
Current marijuana use	0.9 (0.8-1.0)	1.0 (0.9-1.0)	1.0 (1.0-1.1)
Binge drinking	1.0 (0.9-1.0)	1.0 (1.0-1.1)	1.0 (1.0-1.1)
Current alcohol drinking	1.0 (0.9-1.0)	1.1 (1.0-1.1)	1.1 (1.0-1.1)
Race/ethnicity and language			
Non-English spoken at home	0.9 (0.8-0.9)	0.9 (0.9-1.0)	0.9 (0.9-1.0)
White	1.2 (1.2-1.2)	1.2 (1.1-1.2)	1.1 (1.1-1.2)
Hispanic	0.8 (0.7-0.8)	0.9 (0.8-0.9)	0.9 (0.9-1.0)
American Indian/Alaska Native	0.8 (0.7-0.9)	0.8 (0.7-0.8)	0.9 (0.8-1.1)
Asian	1.3 (1.3-1.4)	1.1 (1.0-1.1)	1.1 (1.0-1.1)
Black/African American	0.8 (0.8-0.9)	0.9 (0.8-0.9)	0.8 (0.7-0.9)
Pacific Islander	1.0 (0.9-1.1)	1.1 (0.9-1.2)	1.2 (1.0-1.5)

* RR: risk ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0). A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

6. Optional Question Takers Compared to Non-Optional Question Takers in Census Schools

Table 26 gives risk ratios for characteristics listed above comparing respondents in census schools who answered at least one optional question to those who did not.

Of the 54 comparison tests conducted, 18 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents who completed optional questions are different from respondents that did not fill out the optional questions for the characteristics assessed. The results were mixed, but only among 8th grade optional question takers sometimes having more risk and sometimes having less risk than census respondents.

Optional question takers in all schools were less likely to report:

- Lower grades in school (all grades) and feeling unsafe at school (grade 10)
- Socioeconomic indicators – mother didn't graduate high school (grade 8), no dental visit in last year (grades 8 and 10), receives free/reduced lunch (grade 8)

- Non-English spoken at home (grade 8)
- Being Hispanic (grades 8 and 10), American Indian/Alaska Native (grades 8 and 10), and Black/African American (grade 12)

Optional question takers were more likely to report:

- Being White (all grades) and being Asian (grade 8)

Table 26: Simulating optional question taking bias with student characteristics for census schools, risk ratio (95% confidence interval) by grade.

Variable	Answering Optional Questions Compared to those that Did Not Answer Them by Grade		
	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
School factors			
Low grades	0.9 (0.8-0.9)	0.9 (0.9-1.0)	0.9 (0.9-1.0)
Feeling unsafe at school	1.0 (0.9-1.0)	0.9 (0.9-1.0)	1.0 (0.9-1.0)
Indicators of low socioeconomic status			
Mother didn't graduate high school	0.9 (0.8-0.9)	1.0 (0.9-1.0)	1.0 (0.9-1.0)
Living situation due to finances	1.0 (0.9-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Food insecurity	1.0 (1.0-1.0)	1.0 (1.0-1.0)	1.0 (0.9-1.0)
No dental visit in last year	0.9 (0.9-0.9)	0.9 (0.9-1.0)	1.0 (0.9-1.0)
Receive free/reduced price lunch	0.9 (0.9-0.9)	1.0 (0.9-1.0)	1.0 (0.9-1.0)
Substance use factors			
Current cigarette smoking	1.0 (0.9-1.1)	1.0 (0.9-1.0)	1.0 (0.9-1.0)
Current marijuana use	0.9 (0.9-1.0)	1.0 (1.0-1.0)	1.0 (1.0-1.0)
Binge drinking	1.0 (0.9-1.0)	1.0 (1.0-1.1)	1.0 (1.0-1.1)
Current alcohol drinking	1.0 (0.9-1.0)	1.0 (1.0-1.1)	1.0 (1.0-1.1)
Race/ethnicity and language			
Non-English spoken at home	0.9 (0.9-1.0)	1.0 (0.9-1.0)	1.0 (0.9-1.0)
White	1.1 (1.1-1.1)	1.1 (1.0-1.1)	1.0 (1.0-1.1)
Hispanic	0.9 (0.9-0.9)	1.0 (0.9-1.0)	1.0 (0.9-1.0)
American Indian/Alaska Native	0.9 (0.8-1.0)	0.9 (0.8-1.0)	1.0 (0.9-1.1)
Asian	1.1 (1.1-1.2)	1.0 (1.0-1.1)	1.0 (1.0-1.1)
Black/African American	0.9 (0.9-1.0)	0.9 (0.9-1.0)	0.9 (0.9-1.0)
Pacific Islander	1.0 (0.9-1.1)	1.0 (0.9-1.1)	1.1 (0.9-1.2)

* RR: risk ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0). A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

Findings

Yes, results for the optional questions were somewhat biased because not all schools administered them.

For the state sample respondents:

1. Optional questions were asked of 67% of 8th graders, 71% of 10th graders and 70% of 12th graders.
2. Optional question takers were less likely to report:
 - Lower grades in school (all grades) and feeling unsafe at school (grade 10)
 - Socioeconomic indicators – mother didn't graduate high school (grades 10 and 12), food insecurity (grade 10), no dental visit in last year (grades 8 and 10), receives free/reduced lunch (grades 10 and 12)
 - Non-English spoken at home (grades 10 and 12)
 - Being Hispanic (grades 10 and 12), American Indian/Alaska Native (grade 10), Black/African American (grades 10 and 12), and Pacific Islander (grade 12)

Optional question takers were more likely to report:

- Binge drinking (grade 12) and current alcohol drinking (grades 10 and 12)
- Being white (grades 10 and 12) and being Asian (grade 8)

3. Optional question results may not adequately represent the following students:
 - Those with lower grades in school (grade 10)
 - Their mother didn't graduate from high school (grade 10)
 - Non-English language spoken at home (grades 10 and 12)
 - Hispanics (grades 10 and 12) and Black/African Americans (grade 12)

For all eligible respondents (census):

1. Optional questions were asked of 68% of 8th graders, 75% of 10th, and 74% of 12th graders.
4. Optional question takers were less likely to report:
 - Lower grades in school (all grades) and feeling unsafe at school (all grades)
 - Socioeconomic indicators – mother didn't graduate high school (all grades), food insecurity (grade 12), no dental visit in last year (all grades), receives free/reduced lunch (grades 8 and 10)
 - Substance use – current cigarette smoking (grade 10) and marijuana use (grade 8)
 - Non-English spoken at home (all grades)
 - Being Hispanic (all grades), American Indian/Alaska Native (grades 8 and 10), and Black/African American (all grades)

Optional question takers were more likely to report:

- Being White (all grades), being Asian (grade 8), and Pacific Islander (grade 12)
- Substance use – current alcohol drinking (grades 10 and 12)

2. Optional question results may not adequately represent the following students:
 - Lower grades in school (all grades) and feeling unsafe at school (grade 10)
 - Socioeconomic indicators – mother didn't graduate high school (grade 8), no dental visit in last year (grades 8 and 10), receives free/reduced lunch (grade 8)
 - Non-English spoken at home (grade 8)
 - Being Hispanic (grades 8 and 10), American Indian/Alaska Native (grades 8 and 10), and Black/African American (grade 12)

There were some differences, but overall, respondents who took the optional questions from the state sampled schools were similar to respondents from all sampled schools. Some of the student level differences between those who took and did not take the optional questions appear to be due to survey non-completion.

8. Race/Ethnicity Comparisons

Questions

Are respondents in the state sample different from respondents from all eligible schools (census)?

1. Is student reported race/ethnicity similar to school reported race/ethnicity (obtained from parents/guardians)?
2. Is student reported race/ethnicity in the state sample similar to all eligible schools (census)?
3. Are race/ethnic group student responses to questions in the state sample similar to responses in all eligible schools (census)?

Methods

On the HYS students select the races and or ethnicity that best describes them. They can select multiple responses. These responses are collapsed into the following categories:

- White non-Hispanic
- Hispanic
- American Indian/Alaska Native non-Hispanic
- Asian non-Hispanic
- Black/African American non-Hispanic
- Pacific Islander non-Hispanic
- Other race non-Hispanic
- Multiracial non-Hispanic (if selected two or more race groups)

Schools* collect similar data on race/ethnicity, except it does not have data on “other race.” As a first step the race/ethnicity results from HYS were compared to the school data.

*School reported race/ethnicity provided by OSPI, <http://www.k12.wa.us/DataAdmin/enrollment.aspx>

A simple t-test was used to determine if there were significant differences between student and school reported race/ethnicity.

We compared respondents based on questions assessing personal characteristics found early in the main body of the survey. The characteristics for student-level comparisons include student reports of:

- School factors
 - Low grades (mostly Cs, Ds or Fs at school)
 - Feeling unsafe at school (answers of “definitely no” or “mostly no” to a question about feeling safe at school)
- Indicators of low socioeconomic status
 - Mother not completing high school
 - Living situation due to family finances
 - Food insecurity (family cutting meal size or skipping meals in past 12 months due of lack of money)
 - No recent dental visit (not visiting dentist for a check-up in the past year)
 - Receive free or reduced price lunch at school
- Behavioral factors

- Cigarette smoking (any cigarette smoking in the past 30 days)
- Marijuana smoking (having ever smoked marijuana)
- Binge drinking (drinking 5 or more drinks on any one occasion in the past two weeks)
- Drinking alcohol (drinking any alcohol in the past 30 days)
- Race and ethnicity
 - Race and Hispanic ethnicity
 - Non-English language spoken at home
- Sexual behavior and sexual orientation
 - Ever had sex
 - Describe themselves as gay, lesbian, bisexual, or questioning

We conducted separate analyses by grade. We developed risk ratios to assess differences between categories of participants. A risk ratio compares rates among groups. For every risk ratio, we also provide a “95% confidence interval,” which gives the range that should contain the true population value 95% of the time. The confidence interval is not a measure of how “confident” we are in the estimate; instead, it describes the range of values that we might reasonably expect to include the actual risk ratio among all Washington State respondents. If the confidence interval includes 1, the two groups are not statistically significantly different.

Comparisons are of respondents in the state sample schools compared to census school respondents.

Results

1. Comparing Student and School Reported Race/Ethnicity

Student reported race/ethnicity was different from school reported race/ethnicity. In general, student report more closely matched school report as grade increased. To see a comparison for each race/ethnic group by grade as reported by students and schools in state sample and schools in the census, see Appendix E.

Table 28 is the average difference between how students reported race and how schools reported race. Students are less likely to report that they are white non-Hispanic, Hispanic and multi-racial non-Hispanic, but more likely to report that they are American Indian/Alaska Native non-Hispanic, Asian non-Hispanic, Black/African American non-Hispanic, and Pacific Islander non-Hispanic compared to schools. HYS allows students to report “other race”, which may be a factor in the differences between student and school reports.

Table 28. Average difference between student HYS report and school report of race/ethnicity

Average difference	State Sample	Census
White non-Hispanic	-10.0	-9.9
Hispanic	-2.8	-2.8
American Indian/Alaska Native non-Hispanic	2.5	2.3
Asian non-Hispanic	0.8	0.8
Black/African American non-Hispanic	0.4	0.5
Pacific Islander non-Hispanic	0.8	0.9
Multi-racial non-Hispanic	-0.6	-0.9

While students and school report race/ethnicity differently, there were no differences between the state sample schools compared to census schools in how students reported race/ethnicity.

2. State Sample Respondents Compared to Census Respondents

Tables 28a-i gives risk ratios for characteristics listed above comparing respondents in the state sample to respondents in census schools, first for all respondents and then by each race/ethnic group.

Of the 504 comparison tests conducted, 34 showed statistically significant differences:

- Two among all students
- Four among white non-Hispanic students
- Three among Hispanic students
- Three among American Indian/Alaska Native non-Hispanic students
- Eight among Asian non-Hispanic students
- One among Black/African American non-Hispanic students
- Two among Pacific Islander non-Hispanic students
- Four among other race non-Hispanic students
- Five among multi-racial non-Hispanic students

Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents in the state sample are different from census school respondents for the characteristics assessed

To see student level characteristics for each race/ethnic group by grade for the state sample the census, see Appendix F.

All Students

Of the 54 comparison tests conducted, 2 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents in the state sample are different from census school respondents for the characteristics assessed.

Census respondents were more likely than state sample respondents to report:

- Substance use – current alcohol drinking (grade 6) and binge drinking (grade 6)

Table 29a: Student characteristics for state sample compared to census schools, risk ratio (95% confidence interval)

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
Indicators of low socioeconomic status				
Non-English spoken at home	1.2 (1.0-1.5)	1.0 (0.7-1.3)	1.1 (0.8-1.4)	1.1 (0.8-1.5)
Mother didn't graduate high school	na	0.9 (0.7-1.1)	0.9 (0.7-1.2)	0.9 (0.7-1.2)
Living situation due to finances	na	1.0 (0.9-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.2)
Food insecurity	na	1.0 (0.9-1.1)	1.0 (0.9-1.1)	0.9 (0.8-1.1)
No dental visit in last year	na	0.9 (0.8-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.2)
School-related measures				
Low grades in school	1.1 (1.0-1.3)	0.9 (0.8-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Unsafe at school	1.0 (0.9-1.2)	1.0 (0.9-1.1)	1.0 (0.9-1.1)	1.0 (0.8-1.1)
Bullied at school	1.0 (1.0-1.1)	1.0 (0.9-1.1)	1.1 (1.0-1.1)	1.0 (0.9-1.1)
Carried weapons at school	1.1 (1.0-1.2)	1.0 (0.9-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Substance use factors				
Current cigarette smoking	1.3 (1.0-1.8)	1.0 (0.8-1.1)	1.1 (0.9-1.2)	1.0 (0.9-1.2)
Current marijuana use	1.1 (0.8-1.5)	1.0 (0.8-1.1)	0.9 (0.8-1.0)	1.0 (0.9-1.0)
Current alcohol drinking	1.2 (1.0-1.5)	1.0 (0.9-1.2)	1.0 (0.9-1.0)	1.0 (0.9-1.1)
Binge drinking	1.3 (1.0-1.5)	1.0 (0.9-1.2)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Sexual Behavior and Orientation				
Ever had sex	na	1.0 (0.8-1.3)	0.9 (0.8-1.1)	0.9 (0.8-1.0)
Gay, lesbian, bisexual, questioning	na	1.1 (1.0-1.2)	1.0 (0.9-1.1)	1.1 (1.0-1.2)

* RR: risk ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0). A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

White non-Hispanic Students

Of the 54 comparison tests conducted, 4 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents in the state sample are different from census respondents for the characteristics assessed.

Census white non-Hispanic respondents were more likely than state sample respondents to report:

- Non-English language spoken at home (grades 8, 10 and 12)
- Describing themselves as gay, lesbian, bisexual or questioning (grade 8)

Table 29b: White non-Hispanic student characteristics for state sample compared census schools, risk ratio (95% confidence interval)

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
Indicators of low socioeconomic status				
Non-English spoken at home	1.2 (0.9-1.6)	1.3 (1.0-1.7)	1.5 (1.2-1.9)	1.4 (1.1-1.8)
Mother didn't graduate high school	na	1.0 (0.8-1.2)	1.0 (0.8-1.1)	1.1 (0.9-1.3)
Living situation due to finances	na	0.9 (0.8-1.1)	1.0 (0.9-1.2)	1.0 (0.9-1.2)
Food insecurity	na	1.1 (0.9-1.3)	1.0 (0.9-1.2)	0.9 (0.8-1.1)
No dental visit in last year	na	0.9 (0.8-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.2)
School-related measures				
Low grades in school	1.1 (1.0-1.3)	1.1 (0.9-1.3)	1.1 (0.9-1.2)	1.0 (0.9-1.2)
Unsafe at school	1.0 (0.9-1.2)	1.0 (0.8-1.2)	1.0 (0.9-1.2)	1.0 (0.8-1.1)
Bullied at school	1.1 (1.0-1.2)	1.0 (0.9-1.2)	1.1 (1.0-1.2)	1.0 (0.9-1.1)
Carried weapons at school	1.2 (1.0-1.5)	1.0 (0.8-1.1)	1.0 (0.8-1.2)	1.0 (0.8-1.2)
Substance use factors				
Current cigarette smoking	1.3 (0.8-2.0)	0.9 (0.8-1.2)	1.1 (1.0-1.3)	1.0 (0.9-1.2)
Current marijuana use	1.2 (0.8-1.8)	1.1 (0.9-1.3)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Current alcohol drinking	1.2 (0.9-1.5)	1.0 (0.9-1.2)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Binge drinking	1.3 (0.9-1.8)	0.9 (0.8-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Sexual Behavior and Orientation				
Ever had sex	na	1.1 (0.8-1.5)	1.0 (0.8-1.1)	1.0 (0.9-1.1)
Gay, lesbian, bisexual, questioning	na	1.2 (1.0-1.3)	1.0 (0.9-1.1)	1.0 (0.9-1.2)

* RR: risk ratio; 95% CI: 95% confidence interval; **bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0). A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.**

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

Hispanic Students

Of the 54 comparison tests conducted, 3 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents in the state sample are different from census school respondents for the characteristics assessed.

Census Hispanic respondents were more likely than state sample respondents to report:

- Describing themselves as gay, lesbian, bisexual or questioning (grade 12)

Census Hispanic respondents were less likely than state sample respondents to report:

- Low grades in school (grade 8)
- Carrying weapons at school (grade 6)

Table 29c: Hispanic student characteristics for state sample compared to census schools, risk ratio (95% confidence interval)

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
Indicators of low socioeconomic status				
Non-English spoken at home	1.1 (0.9-1.4)	0.9 (0.7-1.1)	0.9 (0.8-1.1)	1.0 (0.8-1.2)
Mother didn't graduate high school	na	0.9 (0.7-1.1)	1.0 (0.8-1.2)	0.9 (0.7-1.1)
Living situation due to finances	na	1.0 (0.9-1.3)	1.0 (0.9-1.2)	1.1 (0.9-1.3)
Food insecurity	na	1.0 (0.9-1.2)	1.1 (1.0-1.2)	1.0 (0.9-1.1)
No dental visit in last year	na	0.9 (0.8-1.1)	1.1 (0.9-1.2)	1.1 (0.9-1.3)
School-related measures				
Low grades in school	1.1 (0.9-1.3)	0.8 (0.7-1.0)	1.0 (0.9-1.1)	1.1 (0.9-1.2)
Unsafe at school	0.9 (0.7-1.0)	1.1 (0.9-1.3)	1.0 (0.9-1.1)	1.0 (0.8-1.1)
Bullied at school	1.0 (0.9-1.1)	1.0 (0.9-1.1)	1.1 (1.0-1.2)	1.1 (0.9-1.2)
Carried weapons at school	0.8 (0.7-1.0)	1.0 (0.8-1.2)	1.0 (0.8-1.1)	1.0 (0.8-1.2)
Substance use factors				
Current cigarette smoking	1.1 (0.6-1.9)	1.0 (0.8-1.4)	1.1 (0.9-1.3)	1.1 (1.0-1.4)
Current marijuana use	0.9 (0.6-1.3)	1.0 (0.8-1.2)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Current alcohol drinking	1.2 (0.8-1.7)	1.0 (0.8-1.3)	1.1 (0.9-1.2)	1.1 (1.0-1.2)
Binge drinking	1.1 (0.8-1.7)	1.1 (0.9-1.4)	1.0 (0.9-1.2)	1.0 (0.9-1.2)
Sexual Behavior and Orientation				
Ever had sex	na	0.9 (0.6-1.4)	0.9 (0.8-1.0)	0.9 (0.8-1.0)
Gay, lesbian, bisexual, questioning	na	1.1 (0.9-1.3)	1.0 (0.9-1.2)	1.2 (1.0-1.4)

* RR: risk ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0). A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

American Indian/Alaska Native non-Hispanic Students

Of the 54 comparison tests conducted, 2 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents in the state sample are different from census school respondents for the characteristics assessed.

Census AI/AN respondents were more likely than state sample respondents to report:

- Non-English language spoken at home (grade 6)

Census AI/AN respondents were less likely than state sample respondents to report:

- Low grades in school (grade 10)

Table 29d: American Indian/Alaska Native non-Hispanic student characteristics for state sample compared to census schools, risk ratio (95% confidence interval)

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
Indicators of low socioeconomic status				
Non-English spoken at home	1.4 (1.0-2.0)	0.9 (0.6-1.3)	1.2 (0.8-1.8)	1.0 (0.6-1.6)
Mother didn't graduate high school	na	0.9 (0.6-1.2)	1.0 (0.7-1.3)	1.0 (0.6-1.5)
Living situation due to finances	na	0.8 (0.6-1.2)	1.1 (0.7-1.7)	0.9 (0.5-1.6)
Food insecurity	na	0.9 (0.6-1.2)	1.0 (0.7-1.2)	1.1 (0.8-1.6)
No dental visit in last year	na	1.0 (0.7-1.4)	0.9 (0.6-1.3)	0.9 (0.6-1.3)
School-related measures				
Low grades in school	1.1 (0.9-1.3)	1.0 (0.8-1.3)	0.8 (0.6-1.0)	0.9 (0.7-1.2)
Unsafe at school	1.0 (0.8-1.2)	1.0 (0.8-1.3)	1.1 (0.8-1.5)	0.7 (0.5-1.0)
Bullied at school	1.2 (1.0-1.4)	1.0 (0.8-1.2)	0.9 (0.8-1.2)	0.9 (0.6-1.3)
Carried weapons at school	1.0 (0.7-1.4)	1.5 (0.9-2.5)	1.0 (0.7-1.4)	1.1 (0.6-1.9)
Substance use factors				
Current cigarette smoking	1.9 (0.8-4.9)	0.9 (0.6-1.4)	1.1 (0.8-1.6)	1.3 (0.9-1.8)
Current marijuana use	1.0 (0.5-1.8)	1.0 (0.7-1.3)	1.0 (0.7-1.2)	1.1 (0.8-1.5)
Current alcohol drinking	1.1 (0.7-1.8)	1.0 (0.7-1.4)	1.0 (0.8-1.3)	1.0 (0.7-1.4)
Binge drinking	1.7 (1.0-3.0)	0.8 (0.5-1.2)	0.9 (0.7-1.2)	1.1 (0.8-1.5)
Sexual Behavior and Orientation				
Ever had sex	na	1.6 (0.7-3.4)	0.7 (0.5-1.0)	1.0 (0.6-1.6)
Gay, lesbian, bisexual, questioning	na	0.8 (0.6-1.0)	0.9 (0.7-1.2)	1.1 (0.7-1.7)

* RR: risk ratio; 95% CI: 95% confidence interval; **bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0).** A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

Asian non-Hispanic Students

Of the 59 comparison tests conducted, 6 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents in the state sample are different from census school respondents for the characteristics assessed.

Census Asian respondents were more likely than state sample respondents to report:

- Non-English language spoken at home (grade 10)

Census Asian respondents were less likely than state sample respondents to report:

- Low grades in school (grades 8 and 12)
- Feeling unsafe at school (grade 12)
- Current cigarette smoking (grade 12)
- Ever having sex (grade 12)

Table 29e: Asian non-Hispanic student characteristics for state sample compared to census schools, risk ratio (95% confidence interval)

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
Indicators of low socioeconomic status				
Non-English spoken at home	1.0 (0.8-1.3)	1.1 (0.8-1.5)	1.5 (1.1-2.1)	1.4 (1.0-1.8)
Mother didn't graduate high school	na	0.8 (0.5-1.2)	1.1 (0.7-1.7)	0.8 (0.5-1.2)
Living situation due to finances	na	0.8 (0.6-1.2)	1.0 (0.7-1.4)	1.4 (0.9-2.4)
Food insecurity	na	0.8 (0.5-1.1)	1.1 (0.7-1.6)	0.8 (0.6-1.1)
No dental visit in last year	na	0.8 (0.7-1.0)	1.1 (0.8-1.5)	0.9 (0.6-1.3)
School-related measures				
Low grades in school	0.9 (0.7-1.2)	0.7 (0.6-0.9)	0.9 (0.6-1.2)	0.7 (0.5-0.9)
Unsafe at school	1.1 (0.9-1.4)	0.9 (0.8-1.1)	0.8 (0.6-1.0)	0.7 (0.6-1.0)
Bullied at school	1.1 (1.0-1.3)	0.9 (0.8-1.1)	1.1 (0.8-1.4)	0.9 (0.7-1.2)
Carried weapons at school	0.9 (0.7-1.2)	1.0 (0.7-1.4)	0.9 (0.6-1.4)	0.7 (0.5-1.1)
Substance use factors				
Current cigarette smoking	0.8 (0.4-1.6)	1.0 (0.6-1.7)	1.0 (0.6-1.6)	0.6 (0.4-0.9)
Current marijuana use	1.6 (0.6-4.2)	1.0 (0.7-1.4)	0.8 (0.6-1.1)	0.8 (0.6-1.0)
Current alcohol drinking	0.9 (0.6-1.4)	0.9 (0.6-1.3)	0.8 (0.6-1.0)	1.0 (0.8-1.2)
Binge drinking	1.4 (0.7-2.6)	0.9 (0.6-1.4)	0.8 (0.6-1.1)	0.9 (0.7-1.1)
Sexual Behavior and Orientation				
Ever had sex	na	0.6 (0.4-1.0)	1.5 (0.9-2.2)	0.7 (0.5-1.0)
Gay, lesbian, bisexual, questioning	na	1.0 (0.8-1.3)	0.9 (0.8-1.1)	1.2 (0.9-1.7)

* RR: risk ratio; 95% CI: 95% confidence interval; **bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0).** A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

Black/African American non-Hispanic Students

Of the 54 comparison tests conducted, 1 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents in the state sample are different from census school respondents for the characteristics assessed.

Census Black/African American respondents were less likely than state sample respondents to report:

- Carrying a weapon at school (grade 12)

Table 29f: Black/African American non-Hispanic student characteristics for state sample compared to census schools, risk ratio (95% confidence interval)

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
Indicators of low socioeconomic status				
Non-English spoken at home	1.1 (0.9-1.5)	1.2 (0.8-1.8)	1.2 (0.8-1.9)	1.1 (0.8-1.4)
Mother didn't graduate high school	na	0.9 (0.7-1.3)	1.0 (0.7-1.3)	1.0 (0.7-1.4)
Living situation due to finances	na	0.9 (0.6-1.3)	1.1 (0.7-1.6)	0.8 (0.5-1.1)
Food insecurity	na	1.0 (0.8-1.4)	1.1 (0.8-1.4)	1.1 (0.9-1.4)
No dental visit in last year	na	1.0 (0.8-1.3)	1.2 (0.9-1.5)	1.1 (0.8-1.7)
School-related measures				
Low grades in school	1.0 (0.8-1.2)	1.0 (0.8-1.3)	0.9 (0.7-1.1)	0.8 (0.6-1.1)
Unsafe at school	0.9 (0.7-1.2)	1.1 (0.8-1.3)	1.0 (0.8-1.4)	1.0 (0.8-1.3)
Bullied at school	1.1 (0.9-1.3)	1.1 (0.9-1.3)	1.0 (0.8-1.3)	0.9 (0.6-1.3)
Carried weapons at school	1.0 (0.7-1.3)	1.2 (0.8-1.8)	0.8 (0.5-1.1)	0.7 (0.5-1.0)
Substance use factors				
Current cigarette smoking	1.0 (0.5-2.2)	0.9 (0.6-1.4)	1.1 (0.7-1.7)	0.9 (0.6-1.3)
Current marijuana use	1.0 (0.5-2.0)	1.0 (0.7-1.5)	1.0 (0.7-1.3)	0.8 (0.7-1.1)
Current alcohol drinking	1.2 (0.7-2.1)	1.1 (0.8-1.5)	0.9 (0.7-1.2)	0.9 (0.7-1.3)
Binge drinking	1.0 (0.6-1.7)	0.9 (0.7-1.4)	0.7 (0.5-1.0)	0.9 (0.7-1.3)
Sexual Behavior and Orientation				
Ever had sex	na	1.2 (0.6-2.4)	0.8 (0.5-1.3)	1.4 (0.9-2.0)
Gay, lesbian, bisexual, questioning	na	1.0 (0.7-1.3)	0.9 (0.7-1.2)	1.3 (0.9-1.9)

* RR: risk ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0). A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

Pacific Islander non-Hispanic Students

Of the 54 comparison tests conducted, 2 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents in the state sample are different from census school respondents for the characteristics assessed.

Census Pacific Islander respondents were more likely than state sample respondents to report:

- Mother didn't graduate high school (grade 10)
- Bullied at school (grade 8)

Table 29g: Pacific Islander non-Hispanic student characteristics for state sample compared to census schools, risk ratio (95% confidence interval)

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
Indicators of low socioeconomic status				
Non-English spoken at home	1.2 (0.8-1.8)	1.0 (0.7-1.6)	1.4 (1.0-2.0)	1.2 (0.8-1.8)
Mother didn't graduate high school	na	1.0 (0.6-1.6)	1.8 (1.1-2.9)	0.8 (0.5-1.4)
Living situation due to finances	na	0.7 (0.5-1.2)	0.9 (0.6-1.3)	0.9 (0.5-1.6)
Food insecurity	na	1.0 (0.7-1.6)	1.2 (0.8-1.7)	1.3 (0.8-2.1)
No dental visit in last year	na	1.0 (0.7-1.5)	1.4 (0.9-2.1)	1.1 (0.7-1.7)
School-related measures				
Low grades in school	0.9 (0.7-1.2)	1.0 (0.7-1.3)	1.2 (1.0-1.6)	1.1 (0.7-1.6)
Unsafe at school	1.1 (0.8-1.4)	1.1 (0.8-1.4)	1.0 (0.7-1.4)	1.1 (0.7-1.6)
Bullied at school	1.1 (0.9-1.4)	1.5 (1.1-1.9)	1.0 (0.7-1.3)	0.9 (0.5-1.4)
Carried weapons at school	1.1 (0.7-1.7)	1.0 (0.6-1.7)	0.9 (0.5-1.4)	1.3 (0.7-2.4)
Substance use factors				
Current cigarette smoking	0.9 (0.3-2.4)	1.4 (0.8-2.6)	1.4 (0.8-2.5)	1.3 (0.7-2.4)
Current marijuana use	1.6 (0.4-5.8)	1.1 (0.7-1.6)	0.9 (0.6-1.3)	1.1 (0.7-1.6)
Current alcohol drinking	0.8 (0.4-1.4)	1.1 (0.7-1.8)	0.9 (0.7-1.3)	1.2 (0.8-1.9)
Binge drinking	1.1 (0.5-2.2)	1.2 (0.7-2.1)	0.8 (0.5-1.1)	1.4 (0.8-2.4)
Sexual Behavior and Orientation				
Ever had sex	na	0.9 (0.5-1.7)	1.1 (0.7-1.8)	1.0 (0.6-1.6)
Gay, lesbian, bisexual, questioning	na	1.2 (0.7-2.0)	1.1 (0.7-1.6)	0.8 (0.5-1.2)

* RR: risk ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0). A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

Other Race non-Hispanic Students

Of the 54 comparison tests conducted, 4 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents in the state sample are different from census school respondents for the characteristics assessed.

Census other race respondents were more likely than state sample respondents to report:

- Non-English spoken at home (grade 6)

Census other race respondents were less likely than state sample respondents to report:

- Mother didn't graduate high school (grade 8)
- Substance use – current marijuana use (grade 10) and current alcohol drinking (grade 10)

Table 29h: Other race non-Hispanic student characteristics for state sample compared to census schools, risk ratio (95% confidence interval)

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
Indicators of low socioeconomic status				
Non-English spoken at home	1.3 (1.0-1.6)	0.9 (0.7-1.2)	1.1 (0.9-1.4)	1.3 (0.9-1.7)
Mother didn't graduate high school	na	0.7 (0.6-0.9)	0.9 (0.7-1.2)	0.9 (0.6-1.3)
Living situation due to finances	na	0.8 (0.6-1.1)	0.9 (0.7-1.2)	1.2 (0.7-2.0)
Food insecurity	na	0.9 (0.8-1.1)	1.2 (1.0-1.5)	0.9 (0.7-1.3)
No dental visit in last year	na	0.9 (0.8-1.1)	1.0 (0.8-1.3)	0.9 (0.6-1.3)
School-related measures				
Low grades in school	1.0 (0.8-1.1)	0.9 (0.8-1.1)	1.0 (0.8-1.2)	0.9 (0.7-1.2)
Unsafe at school	1.0 (0.9-1.2)	1.0 (0.8-1.1)	0.9 (0.7-1.2)	1.0 (0.7-1.3)
Bullied at school	1.0 (0.9-1.1)	1.1 (1.0-1.3)	1.1 (0.9-1.4)	1.1 (0.8-1.4)
Carried weapons at school	1.1 (0.9-1.4)	1.0 (0.7-1.5)	1.1 (0.8-1.5)	1.0 (0.6-1.6)
Substance use factors				
Current cigarette smoking	1.2 (0.7-2.1)	0.9 (0.6-1.2)	1.0 (0.7-1.3)	1.0 (0.7-1.3)
Current marijuana use	1.5 (0.9-2.6)	0.9 (0.7-1.2)	0.8 (0.6-0.9)	1.1 (0.8-1.5)
Current alcohol drinking	1.1 (0.8-1.4)	1.1 (0.9-1.5)	0.8 (0.6-1.0)	1.0 (0.8-1.4)
Binge drinking	1.1 (0.8-1.5)	1.1 (0.7-1.5)	0.9 (0.7-1.1)	1.0 (0.7-1.4)
Sexual Behavior and Orientation				
Ever had sex	na	1.0 (0.7-1.5)	1.3 (0.9-1.8)	0.9 (0.6-1.4)
Gay, lesbian, bisexual, questioning	na	1.0 (0.8-1.2)	0.9 (0.8-1.2)	0.9 (0.7-1.2)

* RR: risk ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0). A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

Multi-racial non-Hispanic Students

Of the 54 comparison tests conducted, 5 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents in the state sample are different from census school respondents for the characteristics assessed.

Census multi-racial respondents were less likely than state sample respondents to report:

- Non-English spoken at home (grade 8)
- Mother didn't graduate high school (grade 8)
- Feeling unsafe at school (grade 8)
- Substance use – current cigarette smoking (grade 10) and binge drinking (grade 10)

Table 29i: Multi-racial non-Hispanic student characteristics for state sample compared to census schools, risk ratio (95% confidence interval)

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
Indicators of low socioeconomic status				
Non-English spoken at home	1.3 (0.9-1.8)	0.8 (0.6-1.0)	1.2 (0.9-1.7)	1.1 (0.7-1.7)
Mother didn't graduate high school	na	0.7 (0.5-0.9)	1.0 (0.8-1.3)	0.9 (0.7-1.3)
Living situation due to finances	na	0.9 (0.6-1.3)	1.2 (0.9-1.8)	0.8 (0.6-1.2)
Food insecurity	na	1.1 (0.8-1.4)	1.0 (0.8-1.2)	1.0 (0.7-1.2)
No dental visit in last year	na	0.9 (0.7-1.2)	1.0 (0.7-1.4)	0.9 (0.7-1.3)
School-related measures				
Low grades in school	1.1 (0.8-1.3)	0.8 (0.7-1.0)	1.1 (0.9-1.4)	1.0 (0.8-1.3)
Unsafe at school	1.0 (0.8-1.3)	0.8 (0.6-0.9)	1.0 (0.8-1.3)	1.0 (0.8-1.3)
Bullied at school	1.0 (0.9-1.2)	1.0 (0.9-1.2)	1.0 (0.8-1.2)	1.1 (0.9-1.5)
Carried weapons at school	1.1 (0.8-1.5)	1.1 (0.7-1.6)	1.0 (0.8-1.4)	1.0 (0.7-1.4)
Substance use factors				
Current cigarette smoking	0.7 (0.4-1.3)	1.3 (0.8-2.0)	0.8 (0.6-1.0)	0.9 (0.6-1.4)
Current marijuana use	0.8 (0.5-1.3)	0.8 (0.6-1.2)	0.9 (0.7-1.1)	0.9 (0.7-1.2)
Current alcohol drinking	0.9 (0.6-1.4)	1.2 (0.8-1.6)	0.9 (0.7-1.1)	1.0 (0.8-1.3)
Binge drinking	1.2 (0.7-1.9)	1.2 (0.8-1.8)	0.7 (0.6-0.9)	1.1 (0.8-1.4)
Sexual Behavior and Orientation				
Ever had sex	na	1.3 (0.6-3.0)	1.0 (0.8-1.3)	1.0 (0.7-1.4)
Gay, lesbian, bisexual, questioning	na	0.9 (0.7-1.1)	1.0 (0.8-1.3)	1.2 (0.9-1.5)

* RR: risk ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the $p < 0.05$ level (that is, the 95% CI does not include 1.0). A risk ratio less than 1 indicates that the characteristic is less common among respondents completing the survey.

**Race/ethnic groups only include respondents who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic then they are reported as Hispanic.

Findings

Yes, respondents in the state sample are somewhat different from respondents from all eligible schools (census)

1. The percentage of 6th, 8th, 10th, and 12 grade white; 6th, 8th, and 10th grade Hispanic students in the state sample are lower than the parent reported results from OSPI. The percentages of 12th grade Hispanic; 6th, 8th, 10th, and 12th grade American Indian/Alaska Native; 6th and 8th grade Asian; 6th and 10th grade Black/African American; and 6th, 8th, 10th, and 12th grade Pacific Islander students in the state samples are higher than OSPI.
2. The percentage of 6th, 8th, 10th, and 12 grade white; 6th, 8th, 10th, and 12th grade Hispanic; and 6th and 8th grade multi-racial students in the HYS census are lower than the parent reported results from OSPI. The percentages of 12th grade Hispanic; 6th, 8th, 10th, and 12th grade American Indian/Alaska Native; 6th, 8th, and 10th grade Asian; 6th and 8th grade Black/African American; and 6th, 8th, 10th, and 12th grade Pacific Islander students in the HYS census are higher than OSPI.
3. Where comparing student responses from the state sample to the census results among racial/ethnic groups only 34 differences were found out of 504 comparison tests. The following differences were found:
 - White students in the census were more likely to report living in non-English speaking homes (grades 8, 10 and 12) and were more likely to describe themselves as gay, lesbian, bisexual or not sure of their sexual orientation (grade 8).
 - Hispanic 12th graders were more likely to describe themselves as gay, lesbian, bisexual or not sure of their sexual orientation (grade 12). Hispanic students in the state sample were more likely to report carrying a weapon at school (grade 6) and to get lower grades in school (grade 8).
 - American Indian/Alaska Native 6th graders in the census were more likely to report living in a non-English speaking home, and 10th graders in the state sample were more likely to report getting lower grades in school or ever had sex in their lifetime.
 - Asian students in the census were more likely to report living in a non-English speaking home (grades 10 and 12). Asian students in the state sample were more likely to report getting lower grades in school (grades 8 and 12), to feel unsafe at school (grades 10 and 12), to smoke cigarettes (grade 12), and to have ever had sex in their lifetime (grade 12).
 - Black/African American 12th graders in the state sample were more likely to report carrying a weapon at school.
 - Pacific Islander students in the census were more likely to report having a mother that didn't graduate from high school (grade 10) and to be bullied at school (grade 8).
 - Students who report they were another race in the census were more likely to live in non-English speaking homes (grade 6). Other race students in the state sample were more likely to report having a mother who didn't graduate high school (grade 8), to smoke cigarettes (grade 10), and to binge drink (grade 10).
 - 8th grade students who selected more than one race in the state sample were more likely to report living in a non-English speaking home, to have a mother who didn't graduate from high school, and to feel unsafe at school. 10th grade students in the state sample were more likely to report cigarette smoking and binge drinking.

It appears that the state sample results and the census results are comparable, and both could be used for statewide analysis.

9. Conclusions

School Participation Bias

Alternative Schools

In 2016, alternative schools in the state sample were just as likely to participate in HYS, but census alternatives schools were less likely to participate. Very few alternative schools were selected for the state sample making it difficult to detect a difference in participation.

School Demographics

State sample schools that participated in HYS were similar to non-participating schools for grade-level enrollment size and minority enrollment but participating 6th grade schools had lower free/reduced price lunch rates than non-participating schools. Census schools that participated had higher grade-level enrollment, had higher minority enrollment (grades 6 and 8), and lower free/reduced price lunch rates (grades 10 and 12) than non-participating schools.

Academic Achievement

State sample schools that participated in HYS had higher on-time graduation rates (grade 10) than non-participating schools. Census schools that participated had higher percentages students meeting English and Math assessment requirements (grade 6) and had higher on-time graduation rates (grades 10 and 12) than non-participating schools.

Urban/Rural Locations

Sixth grade state sample schools that participated in HYS were less likely to be in isolated/rural locations than urban schools. Census schools that participated were less likely in isolated/rural locations (grades 6, 8, 10, and 12), in small town locations (grades 6 and 8), and in sub-urban locations (grades 6, 8 and 12) than urban schools.

Summary of Participation Bias

Participation in the 2016 HYS was extremely high among schools in the state sample and the census (between 82 and 94%). Some schools were less likely to participate but there were very few differences among state sampled schools and non-participants. Due to the increased number of schools in the census, we were able to find more differences from non-participating schools. Schools in the census may underrepresent alternative schools, schools with lower enrollment and lower percent minority enrollment, and secondary schools with higher free/reduced lunch rates and lower on-time graduation rates. They also may underrepresent schools in non-urban areas.

The 2016 HYS state sample results may underrepresent students from schools with low economic status, students from schools with academic achievement issues, and students in isolated/rural areas. The 2016 HYS results may over-represent students from schools with high economic status, students from schools with fewer academic achievement issues, and students from schools in urban areas.

For census schools, schools that were the least likely to participate in the 2016 HYS were alternative, “small”, and in non-urban areas. These finding could be due to the fact that alternative schools and schools in non-urban areas are “small” and larger schools may have more resources to implement the survey. Larger schools might also be more likely to participate because reliable results would be available to them based on their size. Additional efforts to support “small” schools to participate in the future may prove useful in making the results more representative of all students statewide. Schools with academic achievement issues were also less likely to participate in the 2016 HYS. These schools may be more focused on improving academic achievement and may have less time to spend on optional activities like the HYS and could also use additional support to participate in the future.

Student Non-Completion Bias

Students who finished the Healthy Youth Survey responded differently compared to those who did not finish the survey making the prevalence estimates for questions at the end of the survey to be potentially subject to bias. The 2016 HYS state sample results may underrepresent students getting low grades in schools, who have low economic status, who live in non-English speaking homes, and who are Hispanic or Black/African American.

The 2016 HYS census results may underrepresent students getting low grades in school, who have low economic status, who's living situation is due to finances, who had to cut meals due to finances, who did not see a dentist, who smoke cigarettes, use marijuana and drink alcohol, who live in non-English speaking homes, and who are Hispanic, American Indian/Alaska Native, Black/African American, or Pacific Islander.

School and Student Optional Question Administration Bias

School-level

State sample schools that asked optional questions had similar school demographics to those that did not ask optional questions. The 2016 state sample optional question results may underrepresent large schools and schools with academic achievement issues. The 2016 optional question results for census schools may underrepresent schools with lower minority enrollment and schools in sub-urban areas.

Student-level

The 2016 state sample optional question results may underrepresent students getting lower grades in school, with low socio-economic status, who live in non-English speaking homes, and are Hispanic or Black/African American. The 2016 optional question results for census schools may underrepresent students getting lower grades in school, with low socio-economic status, those using cigarettes, marijuana and alcohol, living in a non-English speaking home, and are Hispanic, Asian, Black/African American, or Pacific Islander. The optional questions are found at the end of the survey, so it is possible that the differences between optional questions takers and non-optional question takers were affected by non-completion bias.

Summary of Optional Question Bias

In 2016, there was a large increase in the number of schools and students taking the optional questions (from about 40% in 2014 to about 70% in 2016). It appears that this increase in optional question taking decreased the differences between optional and non-optional survey takers. While there are some school and student-level differences between optional survey takers and non-optional survey takers, for state sampled schools and census schools the results from optional questions are likely representative of students in Washington State.

Racial/Ethnic Differences between the State Sample and Census Schools

In 2016, there were very few differences in response among students in the state sample and the census. Of the 54 comparison tests, the only differences were that 6th grade students in the census were more likely to report current alcohol drinking and binge drinking. It appears that the state sample results and the census results are comparable, and both could be used for statewide analysis.

When looking at racial/ethnic populations there were different responses among students in the state sample and the census. Compared to students in the state sample, these groups of students in the census were more likely to:

- Live in a non-English speaking home – white (8/10/12), American Indian/Alaska Native (6), Asian (10), and other race (6) students
- Have a mother who didn't graduate high school - Pacific Islander (10) students
- Be bullied at school – Pacific Islander (8) students
- Describe themselves as gay, lesbian, bisexual or questioning - white (8) and Hispanic students (12)

Compared to students in the state sample, these groups of students in the census were less likely to:

- Live in a non-English speaking home – multi-racial students (8)
- Have a mother who didn't graduate high school - other race (8) and multi-racial students
- Report lower grades in school – Hispanic (8), American Indian/Alaska Native (10), and Asian (8/10) students
- Feel unsafe at school – Asian (12) and multi-racial students (8)
- Carry a weapon at school - Hispanic (6) and Black/African American students (12)
- Smoke cigarettes - Asian (12) and multi-racial students (10)
- Use marijuana – other race (10) students
- Alcohol drinking – other race (10) students
- Binge drink – multi-racial students (10)
- To have ever had sex – Asian (12) students

Summary of Racial/Ethnic Group Differences

Comparing percentage of students in racial/ethnic groups in the census and state sample to the percentages of students reported by OSPI, they are only 0.2% different from each other. We do see some differences in student reported results when comparing the census to the state sample, but only living in a non-English speaking home and getting lower grades in school affected multiple race/ethnic groups and multiple grades. The census and state sample results appear to be comparable, with the possible exceptions of those two measures. Caution may need to be exercised when looking at Asian 12th graders, as they have the greatest number of differences.

Appendix A: Non-Completion by Form Type and Grade

The analysis of student-level characteristics showed survey non-completion as the primary potential source of bias among schools in the state sample. The analysis showed that respondents finishing the survey are different in some respects from respondents who stopped earlier in the survey. If the respondents differ in a characteristic that influences how they would answer survey questions at the end of the survey, then percentages derived from those questions might not accurately reflect the true percentage.

An important consideration for determining the potential impact of non-completion bias is what percentage of respondents did not complete the survey, and where in the survey they stopped answering questions. For each administration of HYS, the Healthy Youth Survey Planning Committee tries to adjust the length of the survey to try to keep non-completion under 15%.

Table 1: Number of questions on each survey form

Survey Form	Number of Survey Questions	
	Core Survey	Optional Questions
Form A	138	1
Form B	116	5
Form C	76	0

Figures 1a-e gives the proportion of students who answered each question on each survey form. The dropout rate is the highest for 8th graders taking A.

Figure 1a: Question non-completion over the course of Form C, grade 6 for the state sample.

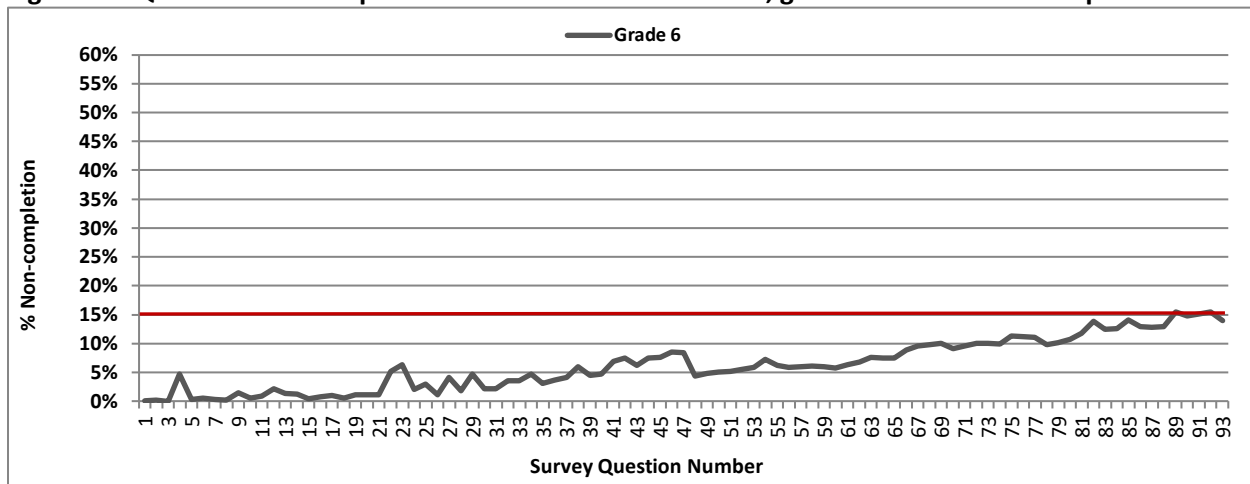


Figure 1b: Question non-completion over the course of Form C, grade 6 in census schools.

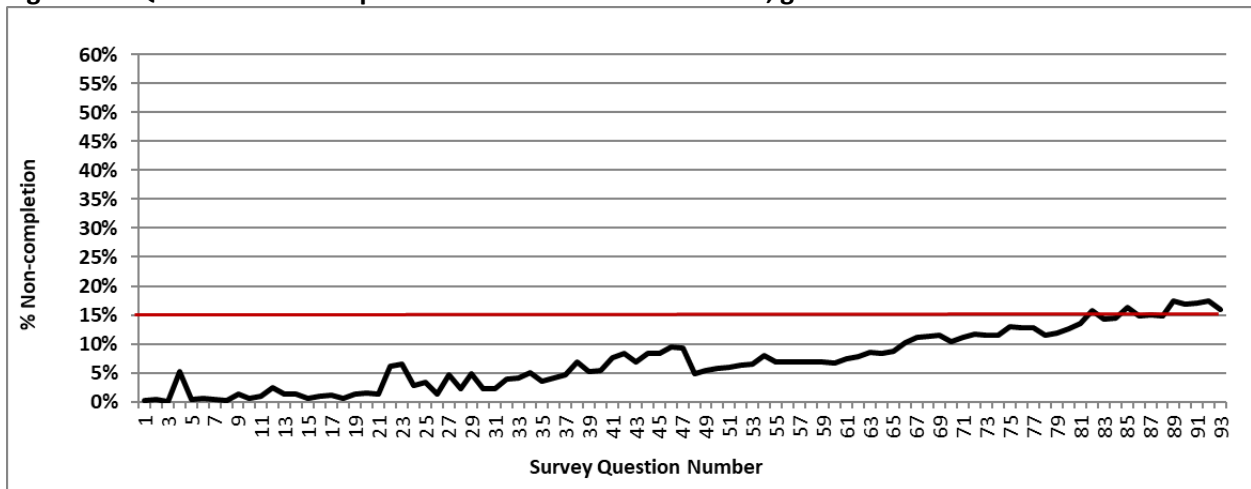


Figure 1c: Question non-completion over the course of Form A by grade for the state sample.

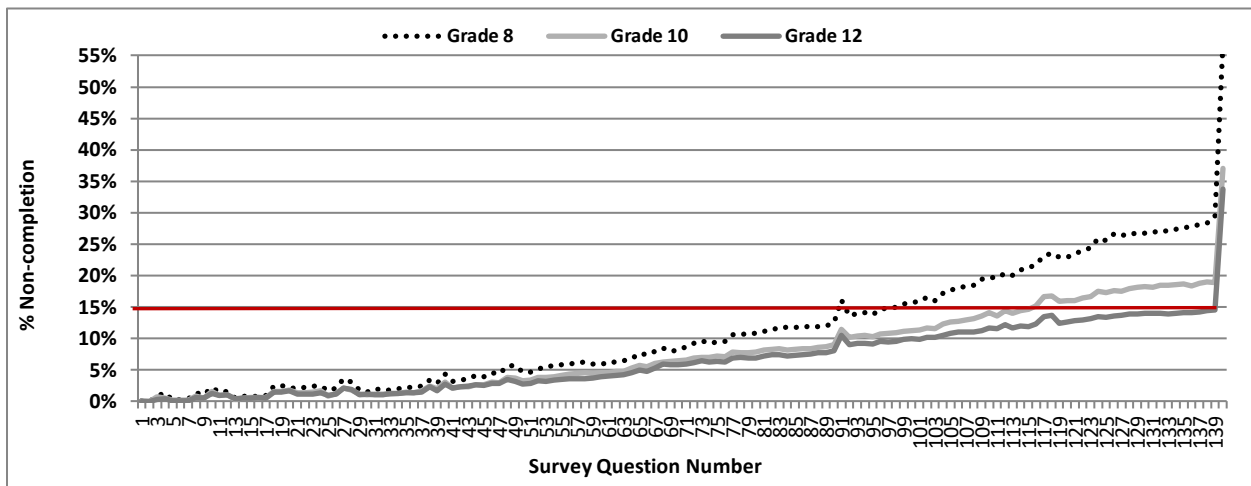


Figure 1d: Question non-completion over the course of Form A by grade in census schools.

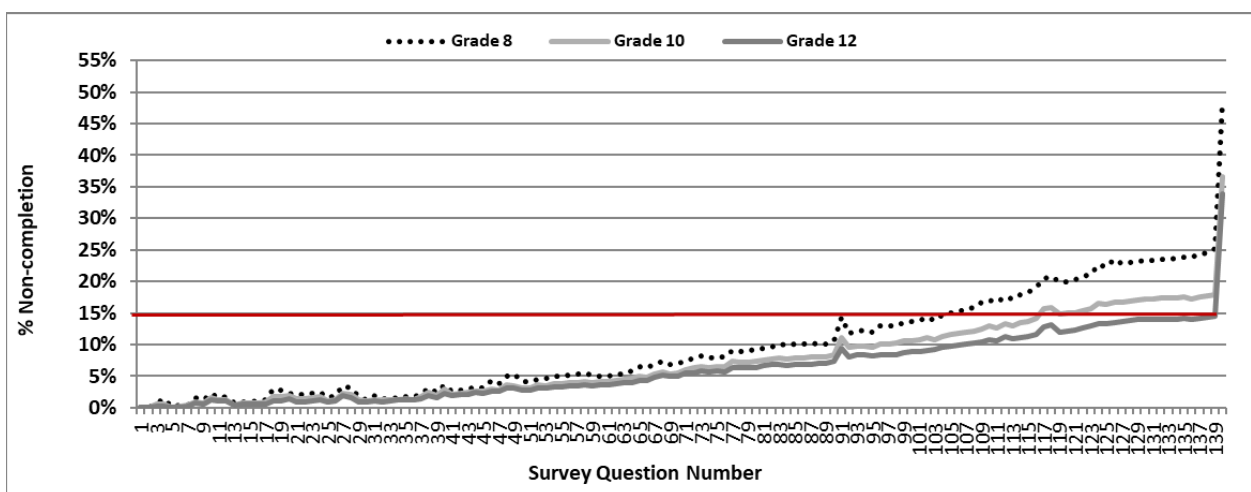


Figure 1e: Question non-completion over the course of Form B by grade for the state sample

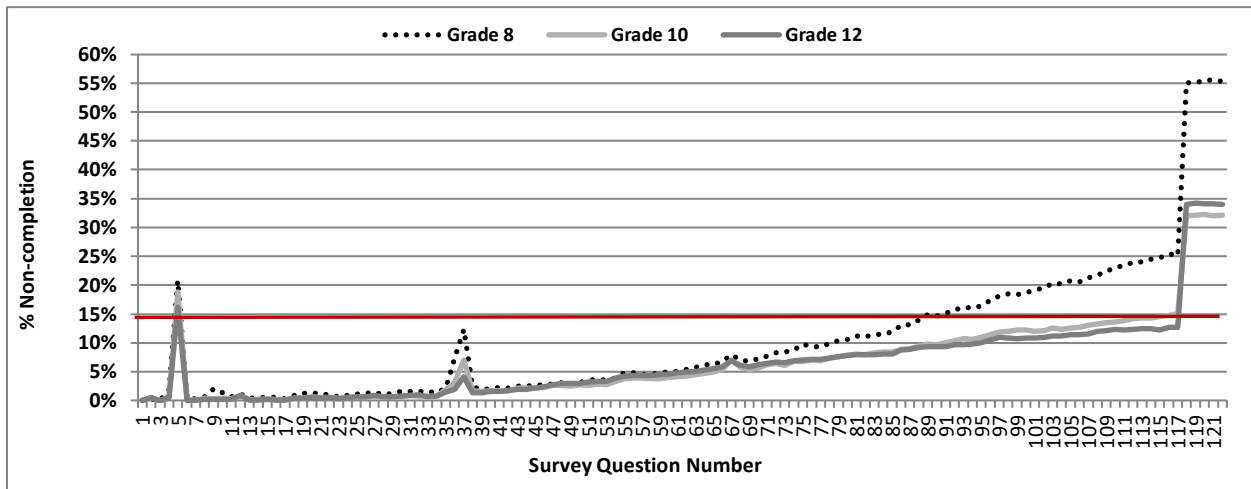
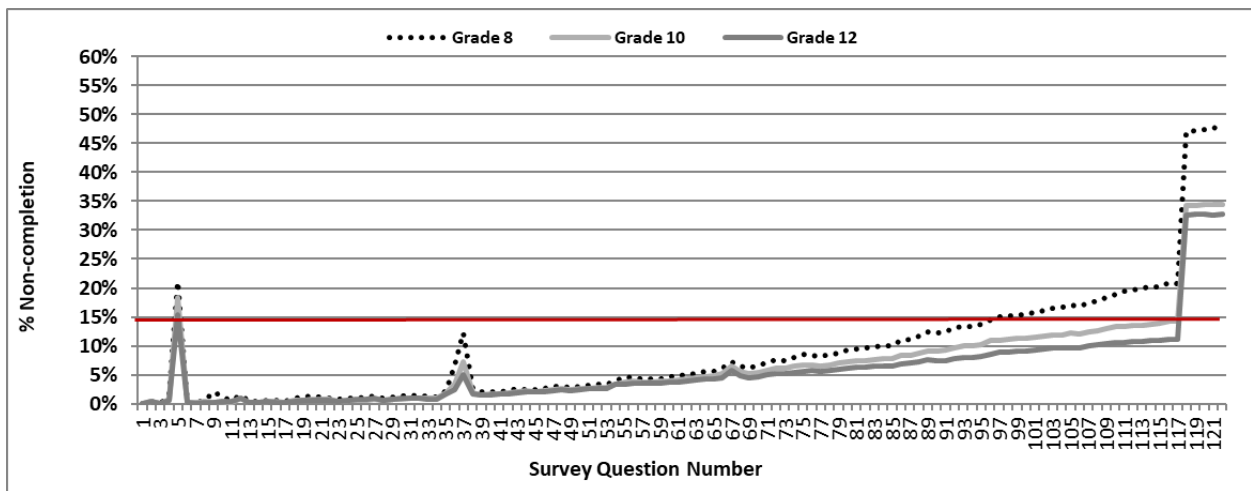


Figure 1f: Question non-completion over the course of Form B by grade in census schools.



Appendix B: Questions at the End of the Survey

Respondents who answered all the last 30 questions at the end of Form A or Form B, not including the optional questions, were considered to have “completed” the survey. The following is a list of topics that were asked about at the end of both forms.

The last 30 questions asked of 8th, 10th, and 12th graders included the following topics:

- Abuse
- Alcohol and marijuana use and consequences
- Behaviors related to injury
- Cigarettes and electronic cigarettes/vape
- Demographics
- Family protective factor – opportunities for prosocial involvement
- Family risk factor - poor family management
- Food insecurity
- Gambling
- Peer-individual risk and protective factors - interaction with prosocial peers and friends use of drugs, and social skills
- Physical, emotional and sexual abuse (sexual abuse questions were optional)
- Quality of life
- School support and counseling
- Secondhand smoke exposure
- Sexual behavior (optional questions)
- Sexuality education
- Social and emotional learning
- Substance use on school property
- Suicide education
- Worrying and anxiousness

An 85% completion rate is desired for all HYS questions. The following questions were not completed by 85% of 8th graders. If certain types of 8th graders don’t complete the survey, the results from these questions may not be representative of 8th graders.

8th Grader non-completion rate fell below the desired 85% mark for the following questions:

- Demographics
 - If you are of Asian or Pacific Islander background, which groups best describe you? Mark all that apply.
 - How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn’t enough money for food?
- Behaviors related to injury
 - During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been using marijuana?
 - During the past 30 days, how many times did you drive a car or other vehicle within three hours after using marijuana?
 - During the past 30 days, how many days did you text or email while driving a car or other vehicle?
- Abuse
 - During the past 12 months, did someone you were dating or going out with ever limit your activities, threaten you, or make you feel unsafe in any other way?

- In the past 12 months, how many times did someone you were dating or going out with physically hurt you on purpose? (Count such things as being hit, slammed into something, or injured with an object or weapon.)
- Not counting TV, movies, video games, and sporting events, have you seen an adult hit, slap, punch, shove, kick, or otherwise physically hurt another adult more than one time?
- Has an adult ever physically hurt you on purpose (like pushed, slapped, hit, kicked or punched you), leaving a mark, bruise or injury?
- How often does a parent or adult in your home swear at you, insult you, put you down or humiliate you?
- Gambling
 - In the past 12 months, how often have you gambled (bet) for money or possessions?
- Sexuality education
 - Last year, did you hear or see information at your school about the warning signs of suicide and how to get help for yourself or a friend?
- Suicide education
 - Last year in school, were you taught about abstinence (not having sex) to prevent sexually transmitted diseases (STDs) and pregnancy?
 - Last year in school, were you taught about ways other than abstinence to prevent sexually transmitted diseases (STDs) and pregnancy?
- School support and counseling
 - Does your school have a counselor?
 - In the last year, did you have any contact with the counselor?
 - There are people in this school who will help me if I need it.
- Social and emotional learning
 - I know how to disagree without starting a fight or argument.
 - When I have problems at school, I am good at finding ways to solve them.
 - When I make a decision, I think about what might happen afterward.
 - I try to understand how other people feel and think.
- Worrying and anxiousness
 - How often over the last 2 weeks were you bothered by: Feeling nervous, anxious or on edge?
 - How often over the last 2 weeks were you bothered by: Not being able to stop or control worrying?
- Family risk factor - poor family management
 - My parents ask if I've gotten my homework done.
 - When I am not at home, one of my parents knows where I am and who I am with.
 - The rules in my family are clear.
 - My family has clear rules about alcohol and drug use.
 - If you drank some beer, wine, or liquor (for example vodka, whiskey, or gin) without your parent's permission, would you be caught by them?
 - Would your parents know if you did not come home on time?
 - If you carried a handgun without your parent's permission, would you be caught by them?
 - If you skipped school, would you be caught by your parents?
- Family protective factor - opportunities for prosocial involvement
 - If I had a personal problem, I could ask my mom or dad for help.
 - My parents give me lots of chances to do fun things with them.
 - My parents ask me what I think before most family decisions affecting me are made.
- Substance use on school property
 - During the past 30 days, on how many days did you have at least one drink of alcohol on school property?
 - During the past 30 days, on how many days did you use marijuana on school property?
- 1. Cigarettes and electronic cigarettes/vapes

- Do you think that you will smoke a cigarette anytime in the next year?
 - During the past 12 months, have you ever tried to quit using tobacco (cigarettes, cigars, chew/dip)?
 - During the past 30 days, how did you usually get your own tobacco? (Choose only one answer.)
 - During the past 30 days, on how many days did you use tobacco (cigarettes, cigars, or chew/dip) on school property?
 - During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens on school property?
 - During the past 30 days, what type of substances did you use in an electronic cigarette, also called e-cigs, or vape pens? Select all that apply
 - During the past 30 days, how did you usually get your own electronic vapor products? (Choose only one answer.)
 - How much do you think people risk harming themselves if they use electronic cigarettes, also called e-cigs or vape pens regularly (almost daily)?
2. Alcohol and marijuana use and consequences
- a. Think about the students in your school. If you had to guess, how wrong do most students in your grade think it is to drink alcohol regularly?
 - During the past 30 days, how did you get alcohol (beer, wine or hard liquor)? Choose all that apply.
 - During the past 30 days, what type of alcohol did you usually drink?
 - During the past 30 days, how did you get marijuana? Choose all that apply.
 - During the past 30 days, if you used marijuana, how did you usually use it?
 - If you use marijuana or hashish (weed, hash, pot) how long do you usually stay high?
 - Does anyone who lives with you now use marijuana?
 - In the past year, which of the following happened because you drank alcohol or used drugs? Choose all that apply.
- Peer-individual protective factor - interaction with prosocial peers
 - Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have:
 - Participated in clubs, organizations or activities at school?
 - i. Made a commitment to stay drug-free?
 - ii. Liked school?
 - iii. Regularly attended religious services?
 - iv. Tried to do well in school?
 - Peer-individual risk factor - friends use of drugs
 - Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have:
 - i. Smoked cigarettes?
 - ii. Tried beer, wine, or hard liquor (for example vodka, whiskey, or gin) when their parents didn't know about it?
 - iii. Used marijuana?
 - iv. Used LSD, cocaine, amphetamines, or other illegal drugs?
 - Peer norms around substance use
 - How wrong do your friends feel it would be for you to:
 - i. Have one or two drinks of an alcoholic beverage nearly every day?
 - ii. Use tobacco?
 - iii. Use marijuana?
 - iv. Use prescription drugs not prescribed to you?
 - Peer-individual protective factor - social skills
 - You're looking at CDs in a music store with a friend. You look up and see her slip a CD under her coat. She smiles and says, "Which one do you want? Go ahead, take it while nobody's

- around.” There is nobody in sight, no employees, and no other customers. What would you do now?
- You are visiting another part of town and you don’t know any of the people your age there. You are walking down the street and some teenager you don’t know is walking toward you. He is about your size. As he is about to pass you, he deliberately bumps into you and you almost lose your balance. What would you say or do?
 - You are at a party at someone’s house and one of your friends offers you a drink containing alcohol. What would you say or do?

An 85% completion rate is desired for all HYS questions. The following questions were not completed by 85% of 10th graders. If certain types of 10th graders don’t complete the survey, the results from these questions may not be representative of 10th graders.

10th Grader non-completion rate fell below the desired 85% mark for the following questions:

3. Alcohol and marijuana use and consequences

- During the past 30 days, what type of alcohol did you usually drink?
- During the past 30 days, how did you get marijuana? Choose all that apply.
- During the past 30 days, if you used marijuana, how did you usually use it?
- If you use marijuana or hashish (weed, hash, pot) how long do you usually stay high?
- Does anyone who lives with you now use marijuana?
- In the past year, which of the following happened because you drank alcohol or used drugs? Choose all that apply.
- Peer-individual protective factor - interaction with prosocial peers
 - Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have:
 - Participated in clubs, organizations or activities at school?
 - i. Made a commitment to stay drug-free?
 - ii. Liked school?
 - iii. Regularly attended religious services?
 - iv. Tried to do well in school?
- Peer-individual risk factor - friends use of drugs
 - Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have:
 - i. Smoked cigarettes?
 - ii. Tried beer, wine, or hard liquor (for example vodka, whiskey, or gin) when their parents didn’t know about it?
 - iii. Used marijuana?
 - iv. Used LSD, cocaine, amphetamines, or other illegal drugs?
- Peer norms around substance use
 - How wrong do your friends feel it would be for you to:
 - i. Have one or two drinks of an alcoholic beverage nearly every day?
 - ii. Use tobacco?
 - iii. Use marijuana?
 - iv. Use prescription drugs not prescribed to you?
- Peer-individual protective factor - social skills
 - You’re looking at CDs in a music store with a friend. You look up and see her slip a CD under her coat. She smiles and says, “Which one do you want? Go ahead, take it while nobody’s around.” There is nobody in sight, no employees, and no other customers. What would you do now?
 - You are visiting another part of town and you don’t know any of the people your age there. You are walking down the street and some teenager you don’t know is walking toward you.

- He is about your size. As he is about to pass you, he deliberately bumps into you and you almost lose your balance. What would you say or do?
- You are at a party at someone's house and one of your friends offers you a drink containing alcohol. What would you say or do?

An 85% completion rate is desired for all HYS questions. All Form A and Form B questions were completed by 85% of 12th graders.

The following is a list of the optional questions on the "tear-off" portion of the survey forms. Since 67% of 8th, 71% of 10th and 70% of 12th grade state sampled schools selected to ask these questions, the results from these questions may not be representable. See Section 8. Student-Level Optional Question Bias for more details.

8th, 10th and 12th Grader only completed the following questions if their school chose to take the optional survey questions.

- Sexual orientation
 - Which of the following best describes you? (Heterosexual (straight), Gay or lesbian, Bisexual, Not sure)
- Sexual behavior
 - How old were you when you had sexual intercourse for the first time?
 - With how many people have you ever had sexual intercourse?
 - The last time you had sexual intercourse, did you or your partner use a condom?
- Physical, emotional and sexual abuse
 - Have you ever been in a situation where someone made you engage in kissing, sexual touch or intercourse when you did not want to?

Appendix C: Student Characteristics by Completion

Methods

Risk ratio tables comparing student characteristics of survey non-completers (respondents who did not answer the last 3 questions) to completers (those that answered all of the last 30 questions) are provided in Section 7. Student-level Completion Bias. Differences in respondent characteristics show if respondents who do not complete the survey are different from those that do complete it. Differences may indicate that questions towards the end of the survey have non-completion bias.

Risk ratio tables comparing all survey respondents to completers are also provided in Section 7. Student-level Completion Bias. Comparing all respondents to completers shows the potential magnitude of the non-completion bias on the actual survey results.

Instead of presenting risk ratios, Tables 1-4 show the differences in prevalence for selected student characteristic questions by grade for:

- a. Non-completers versus completers in the state sample
- b. All respondents versus completers in the state sample
- c. Non-completers versus completers in census schools
- d. All respondents versus completers in census schools

Results

Non-completion among 6th Grade

- a. Non-completers in the state sample were more likely to report low grades in school, not feeling safe at school, current cigarette smoking, current marijuana use, binge drinking, current alcohol drinking, and living in a home where English isn't usually spoken. Non-completers were less likely to be white or Asian, and more likely to be Hispanic or American Indian/Alaska Native.
- b. All respondents in the state sample were more likely to report low grades in school, not feeling safe at school, current cigarette smoking, current marijuana use, binge drinking, current alcohol drinking, and living in a home where English isn't usually spoken. Non-completers were less likely to be white or Asian, and more likely to be Hispanic or Black/African American.
- c. Non-completers in census schools were more likely to report low grades in school, not feeling safe at school, current cigarette smoking, current marijuana use, binge drinking, and current alcohol drinking. Non-completers were less likely to be white or Asian, and more likely to be Hispanic, American Indian/Alaska Native or Black/African American.
- d. All respondents to completers in census schools were more likely to report low grades in school, not feeling safe at school, current cigarette smoking, and living in a home where English isn't usually spoken. Non-completers were less likely to be white or Asian, and more likely to be Hispanic or Black/African American.

Table 1a: Comparison of student characteristics among 6th grade non-completers to completers in the state sample.

Question	Options	Non-completers Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.4 (2.2)	88.2 (0.7)	0.0000
	Mostly Cs, Ds, or Fs	24.7 (2.2)	11.8 (0.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	88.5 (1.6)	90.5 (0.7)	0.0163
	no/mostly & NO/def not true	11.5 (1.6)	9.5 (0.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	98.6 (0.7)	99.7 (0.1)	0.0000
	At least 1 day	1.4 (0.7)	0.3 (0.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	98.8 (0.6)	99.3 (0.2)	0.0372
	At least 1 day	1.2 (0.6)	0.7 (0.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	97.6 (0.9)	98.9 (0.2)	0.0002
	At least once	2.5 (0.9)	1.1 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	97.5 (0.9)	98.5 (0.3)	0.0165
	At least 1 day	2.5 (0.9)	1.5 (0.3)	
What language is usually spoken at home?	English	76.2 (2.1)	82.9 (0.9)	0.0000
	Other language	23.8 (2.1)	17.1 (0.9)	
How do you describe yourself? (Select one or more responses.)	White	29.6 (2.4)	40.5 (-26.4)	0.0000
	Hispanic	22.3 (2.1)	13.5 (0.8)	0.0000
	American Indian/Alaska Native	7.3 (1.3)	5.9 (-21.7)	0.0376
	Asian	5.9 (1.2)	11.1 (0.7)	0.0000
	Black/African American	4.4 (1.1)	3.7 (-3.2)	0.1924
	Pacific Islander	2.1 (0.7)	1.6 (0.3)	0.1801

* 95% confidence interval, p-value significant if less than 0.05

Table 1b: Comparison of student characteristics among all 6th grade respondents to completers in the state sample (simulating bias).

Question	Options	All Respondents Percent (\pm CI)	Completers Percent (\pm CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	86.1 (0.7)	88.2 (0.7)	0.0001
	Mostly C's, D's, or F's	13.9 (0.7)	11.8 (0.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	90.2 (0.6)	90.5 (0.7)	0.4588
	no/mostly & NO/def not true	9.8 (0.6)	9.5 (0.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.5 (0.1)	99.7 (0.1)	0.1449
	At least 1 day	0.5 (0.1)	0.3 (0.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	99.3 (0.2)	99.3 (0.2)	0.5683
	At least 1 day	0.8 (0.2)	0.7 (0.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.7 (0.2)	98.9 (0.2)	0.3204
	At least once	1.3 (0.2)	1.1 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	98.4 (0.3)	98.5 (0.3)	0.5062
	At least 1 day	1.7 (0.3)	1.5 (0.3)	
What language is usually spoken at home?	English	81.7 (0.8)	82.9 (0.9)	0.0482
	Other language	18.3 (0.8)	17.1 (0.9)	
How do you describe yourself? (Select one or more responses.)	White	38.7 (1.0)	40.5 (1.1)	0.0184
	Hispanic	15.0 (0.7)	13.5 (0.8)	0.0075
	American Indian/Alaska Native	6.2 (0.5)	5.9 (0.5)	0.5230
	Asian	10.2 (0.6)	11.1 (0.7)	0.0747
	Black/African American	3.8 (0.4)	3.7 (0.4)	0.6893
	Pacific Islander	1.7 (0.3)	1.6 (0.3)	0.6797

* 95% confidence interval, p-value significant if less than 0.05

Table 1c: Comparison of student characteristics among 6th grade non-completers to completers in census schools.

Question	Options	All Respondents Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.8 (0.8)	86.3 (0.3)	0.0000
	Mostly C's, D's, or F's	24.3 (0.8)	13.8 (0.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	87.4 (0.6)	90.5 (0.3)	0.0000
	no/mostly & NO/def not true	12.6 (0.6)	9.5 (0.3)	
During the past 30 days, on how many days did you smoke cigarettes?	None	98.7 (0.2)	99.4 (0.1)	0.0000
	At least 1 day	1.3 (0.2)	0.6 (0.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	98.9 (0.2)	99.2 (0.1)	0.0314
	At least 1 day	1.1 (0.2)	0.8 (0.1)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.0 (0.3)	98.4 (0.1)	0.0087
	At least once	2.0 (0.3)	1.6 (0.1)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	97.6 (0.3)	97.9 (0.1)	0.0474
	At least 1 day	2.4 (0.3)	2.1 (0.1)	
What language is usually spoken at home?	English	74.2 (0.8)	80.3 (0.4)	0.0000
	Other language	25.8 (0.8)	19.7 (0.4)	
How do you describe yourself? (Select one or more responses.)	White	27.2 (0.8)	37.8 (0.5)	0.0000
	Hispanic	21.5 (0.8)	16.5 (0.4)	0.0000
	American Indian/Alaska Native	7.0 (0.5)	5.8 (0.2)	0.0000
	Asian	6.7 (0.5)	10.0 (0.3)	0.0000
	Black/African American	7.0 (0.5)	4.1 (0.2)	0.0000
	Pacific Islander	2.2 (0.3)	1.9 (0.1)	0.0392

* 95% confidence interval, p-value significant if less than 0.05

Table 1d: Comparison of student characteristics among all 6th grade respondents to completers in census schools (simulating bias).

Question	Options	Non-completers Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	84.3 (0.3)	88.2 (0.7)	0.0000
	Mostly C's, D's, or F's	15.7 (0.3)	11.8 (0.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	89.9 (0.3)	90.5 (0.7)	0.1218
	no/mostly & NO/def not true	90.5 (0.3)	90.0 (0.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.3 (0.1)	99.7 (0.1)	0.0004
	At least 1 day	0.7 (0.1)	0.3 (0.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	99.1 (0.1)	99.3 (0.2)	0.0816
	At least 1 day	0.9 (0.1)	0.7 (0.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.4 (0.1)	98.9 (0.2)	0.0003
	At least once	1.7 (0.1)	1.1 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	97.9 (0.1)	98.5 (0.3)	0.0006
	At least 1 day	2.1 (0.1)	1.5 (0.3)	
What language is usually spoken at home?	English	79.1 (0.3)	82.9 (0.9)	0.0000
	Other language	20.9 (0.3)	17.1 (0.9)	
How do you describe yourself? (Select one or more responses.)	White	35.8 (0.4)	40.5 (1.1)	0.0000
	Hispanic	17.4 (0.3)	13.5 (0.8)	0.0000
	American Indian/Alaska Native	6.0 (0.2)	5.9 (0.5)	0.7616
	Asian	9.4 (0.2)	11.1 (0.7)	0.0000
	Black/African American	4.6 (0.2)	3.7 (0.4)	0.0002
	Pacific Islander	1.9 (0.1)	1.6 (0.3)	0.0728

* 95% confidence interval, p-value significant if less than 0.05

Non-completion among 8th Grade

- a. Non-completers in the state sample were more likely to report low grades in school, not feeling safe at school, having a mother that didn't graduate high school, not seeing a dentist, current marijuana use, binge drinking, and living in a home where English isn't usually spoken. Non-completers were less likely to be white or Asian, and more likely to be Hispanic, Black/African American or Pacific Islander.
- b. All respondents in the state sample were more likely to report low grades in school, not feeling safe at school, having a mother that didn't graduate high school, skipping/cutting meals due to finances, not seeing a dentist, current marijuana use, binge drinking, and living in a home where English isn't usually spoken. Non-completers were less likely to be white or Asian, and more likely to be Hispanic, Black/African American or Pacific Islander.
- c. Non-completers in census schools were more likely to report low grades in school, not feeling safe at school, having a mother that didn't graduate high school, skipping/cutting meals due to finances, not seeing a dentist, current cigarette smoking, current marijuana use, binge drinking, current alcohol drinking, and living in a home where English isn't usually spoken. Non-completers were less likely to be white or Asian, and more likely to be Hispanic, American Indian/Alaska Native, Black/African American or Pacific Islander.
- d. All respondents compared to completers in census schools were more likely to report low grades in school, not feeling safe at school, having a mother that didn't graduate high school, skipping/cutting meals due to finances, not seeing a dentist, current marijuana use, binge drinking, and living in a home where English isn't usually spoken. Non-completers were less likely to be white or Asian, and more likely to be Hispanic or Black/African.

Table 2a: Comparison of student characteristics among 8th grade non-completers to completers in the state sample.

Question	Options	Non-completers Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	71.7 (2.0)	79.6 (1.1)	0.0000
	Mostly C's, D's, or F's	28.3 (2.0)	20.4 (1.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	81.8 (1.6)	84.4 (0.9)	0.0046
	no/mostly & NO/def not true	18.2 (1.6)	15.6 (0.9)	
How far did your mother get in school?	Graduated HS or more	80.8 (2.1)	86.2 (1.0)	0.0000
	Didn't graduate HS	19.2 (2.1)	13.8 (1.0)	
Living situation due to finances	No	94.1 (1.1)	94.5 (0.6)	0.5435
	Yes	5.9 (1.1)	5.6 (0.6)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	88.8 (1.5)	90.2 (0.8)	0.1095
	At least once	11.2 (1.5)	9.8 (0.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	69.8 (3.0)	79.0 (1.5)	0.0000
	More than a year ago	30.2 (3.0)	21.0 (1.5)	
Do you receive free or reduced price lunches at school?	No	55.7 (3.7)	64.8 (1.8)	0.0000
	Yes	44.3 (3.7)	35.2 (1.8)	
During the past 30 days, on how many days did you smoke cigarettes?	None	96.7 (0.8)	97.1 (0.4)	0.3829
	At least 1 day	3.3 (0.8)	2.9 (0.4)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	91.8 (1.2)	94.4 (0.6)	0.0000
	At least 1 day	8.2 (1.2)	5.6 (0.6)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	95.1 (1.0)	95.6 (0.5)	0.0055
	At least once	4.9 (1.0)	4.4 (0.5)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	91.8 (1.2)	92.8 (0.7)	0.1199
	At least 1 day	8.2 (1.2)	7.2 (0.7)	
What language is usually spoken at home?	English	72.9 (1.9)	80.5 (1.0)	0.0000
	Other language	27.1 (1.9)	19.5 (1.0)	
How do you describe yourself? (Select one or more responses.)	White	37.0 (1.9)	48.6 (1.3)	0.0000
	Hispanic	26.2 (1.7)	19.6 (1.0)	0.0000
	American Indian/Alaska Native	3.8 (0.8)	3.3 (0.5)	0.2728
	Asian	6.8 (1.0)	8.6 (0.7)	0.0062
	Black/African American	7.2 (1.0)	4.5 (0.5)	0.0000
	Pacific Islander	2.6 (0.6)	1.7 (0.4)	0.0152

* 95% confidence interval, p-value significant if less than 0.05

Table 2b: Comparison of student characteristics among all 8th grade respondents to completers in the state sample (simulating bias).

Question	Options	Non-completers Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	77.5 (0.9)	79.6 (1.1)	0.0053
	Mostly C's, D's, or F's	22.5 (0.9)	20.4 (1.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	83.7 (0.8)	84.4 (0.9)	0.2370
	no/mostly & NO/def not true	16.3 (0.8)	15.6 (0.9)	
How far did your mother get in school?	Graduated HS or more	85.0 (0.9)	86.2 (1.0)	0.0787
	Didn't graduate HS	15.1 (0.9)	13.8 (1.0)	
Living situation due to finances	No	94.4 (0.5)	94.5 (0.6)	0.8125
	Yes	5.7 (0.5)	5.6 (0.6)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	89.9 (0.7)	90.2 (0.8)	0.5623
	At least once	10.1 (0.7)	9.8 (0.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	76.8 (1.3)	79.0 (1.5)	0.0301
	More than a year ago	23.3 (1.3)	21.0 (1.5)	
Do you receive free or reduced price lunches at school?	No	62.9 (1.6)	64.8 (1.8)	0.1328
	Yes	37.1 (1.6)	35.2 (1.8)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.0 (0.9)	97.1 (1.1)	0.7269
	At least 1 day	3.0 (0.9)	2.9 (1.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	93.7 (0.5)	94.4 (0.6)	0.0940
	At least 1 day	6.3 (0.5)	5.6 (0.6)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	96.0 (0.4)	96.4 (0.5)	0.2715
	At least once	4.0 (0.4)	3.6 (0.5)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	92.6 (0.6)	92.8 (0.7)	0.5362
	At least 1 day	7.5 (0.6)	7.2 (0.7)	
What language is usually spoken at home?	English	78.4 (0.9)	80.5 (1.0)	0.0025
	Other language	21.6 (0.9)	19.5 (1.0)	
How do you describe yourself? (Select one or more responses.)	White	45.1 (1.1)	48.6 (1.3)	0.0001
	Hispanic	21.6 (0.9)	19.6 (1.0)	0.0052
	American Indian/Alaska Native	3.5 (0.4)	3.3 (0.5)	0.6406
	Asian	8.1 (0.6)	8.6 (0.7)	0.2541
	Black/African American	5.3 (0.5)	4.5 (0.5)	0.0280
	Pacific Islander	2.0 (0.3)	1.7 (0.4)	0.2930

* 95% confidence interval, p-value significant if less than 0.05

Table 2c: Comparison of student characteristics among 8th grade non-completers to completers in census schools.

Question	Options	Non-completers Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	70.7 (0.8)	81.1 (0.4)	0.0000
	Mostly C's, D's, or F's	29.3 (0.8)	18.9 (0.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	81.5 (0.6)	84.2 (0.4)	0.0000
	no/mostly & NO/def not true	18.6 (0.6)	15.8 (0.4)	
How far did your mother get in school?	Graduated HS or more	82.4 (0.8)	87.6 (0.4)	0.0000
	Didn't graduate HS	17.6 (0.8)	12.4 (0.4)	
Living situation due to finances	No	94.4 (0.4)	94.6 (0.2)	0.6167
	Yes	5.6 (0.4)	5.5 (0.2)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	89.2 (0.6)	90.0 (0.3)	0.0000
	At least once	10.8 (0.6)	10.0 (0.3)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	69.4 (1.2)	80.0 (0.5)	0.0000
	More than a year ago	30.6 (1.2)	20.0 (0.5)	
Do you receive free or reduced price lunches at school?	No	56.8 (1.5)	66.7 (0.6)	0.0000
	Yes	43.2 (1.5)	33.3 (0.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	96.7 (0.3)	97.2 (0.2)	0.0012
	At least 1 day	3.4 (0.3)	2.8 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	92.9 (0.5)	94.3 (0.2)	0.0000
	At least 1 day	7.1 (0.5)	5.7 (0.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	95.5 (0.4)	96.3 (0.2)	0.0002
	At least once	4.5 (0.4)	3.7 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	92.0 (0.5)	92.6 (0.3)	0.0163
	At least 1 day	8.1 (0.5)	7.4 (0.3)	
What language is usually spoken at home?	English	75.5 (0.7)	80.5 (0.4)	0.0000
	Other language	24.5 (0.7)	19.5 (0.4)	
How do you describe yourself? (Select one or more responses.)	White	38.6 (0.8)	49.7 (0.5)	0.0000
	Hispanic	23.4 (0.7)	17.9 (0.4)	0.0000
	American Indian/Alaska Native	4.6 (0.3)	3.3 (0.2)	0.0000
	Asian	6.9 (0.4)	10.3 (0.3)	0.0000
	Black/African American	6.8 (0.4)	3.8 (0.2)	0.0000
	Pacific Islander	2.2 (0.2)	1.8 (0.1)	0.0006

* 95% confidence interval, p-value significant if less than 0.05

Table 2d: Comparison of student characteristics among all 8th grade respondents to completers in census schools (simulating bias).

Question	Options	Non-completers Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	78.9 (0.3)	79.6 (1.1)	0.2112
	Mostly C's, D's, or F's	21.2 (0.3)	20.4 (1.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	83.5 (0.3)	84.4 (0.9)	0.0847
	no/mostly & NO/def not true	16.5 (0.3)	15.6 (0.9)	
How far did your mother get in school?	Graduated HS or more	86.6 (0.3)	86.2 (1.0)	0.4543
	Didn't graduate HS	13.4 (0.3)	13.8 (1.0)	
Living situation due to finances	No	94.5 (0.2)	94.5 (0.6)	0.8237
	Yes	5.5 (0.2)	5.6 (0.6)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	89.8 (0.3)	90.2 (0.8)	0.4216
	At least once	10.2 (0.3)	9.8 (0.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	78.0 (0.5)	79.0 (1.5)	0.2133
	More than a year ago	22.0 (0.5)	21.0 (1.5)	
Do you receive free or reduced price lunches at school?	No	65.1 (0.6)	64.8 (1.8)	0.7594
	Yes	34.9 (0.6)	35.2 (1.8)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.1 (0.3)	97.1 (1.1)	0.9941
	At least 1 day	2.9 (0.3)	2.9 (1.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	94.0 (0.2)	94.4 (0.6)	0.1887
	At least 1 day	6.1 (0.2)	5.6 (0.6)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	96.1 (0.2)	96.4 (0.5)	0.2805
	At least once	3.9 (0.2)	3.6 (0.5)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	92.4 (0.2)	92.8 (0.7)	0.2886
	At least 1 day	7.6 (0.2)	7.2 (0.7)	
What language is usually spoken at home?	English	79.3 (0.3)	80.5 (1.0)	0.0287
	Other language	20.7 (0.3)	19.5 (1.0)	
How do you describe yourself? (Select one or more responses.)	White	46.9 (0.4)	48.6 (1.3)	0.0134
	Hispanic	19.3 (0.3)	19.6 (1.0)	0.5633
	American Indian/Alaska Native	3.7 (0.2)	3.3 (0.5)	0.1841
	Asian	9.4 (0.2)	8.6 (0.7)	0.0588
	Black/African American	4.6 (0.2)	4.5 (0.5)	0.7207
	Pacific Islander	1.9 (0.1)	1.7 (0.4)	0.4595

* 95% confidence interval, p-value significant if less than 0.05

Non-completion among 10th Grade

- a. Non-completers in the state sample were more likely to report low grades in school, not feeling safe at school, having a mother that didn't graduate high school, skipping/cutting meals due to finances, not seeing a dentist, current marijuana use, and living in a home where English isn't usually spoken. Non-completers were less likely to be white or Asian, and more likely to be Hispanic, American Indian/Alaska Native or Black/African American.
- b. All respondents in the state sample were more likely to report low grades in school, not feeling safe at school, having a mother that didn't graduate high school, skipping/cutting meals due to finances, not seeing a dentist, current cigarette smoking, current marijuana use, binge drinking, current alcohol drinking, and living in a home where English isn't usually spoken. Non-completers were less likely to be white or Asian, and more likely to be American Indian/Alaska Native.
- c. Non-completers in census schools were more likely to report low grades in school, not feeling safe at school, having a mother that didn't graduate high school, skipping/cutting meals due to finances, not seeing a dentist, current cigarette smoking, current marijuana use, binge drinking, current alcohol drinking, and living in a home where English isn't usually spoken. Non-completers were less likely to be white or Asian, and more likely to be Hispanic, American Indian/Alaska Native or Black/African American.
- d. All respondents to completers in census schools were more likely to report low grades in school, not feeling safe at school, having a mother that didn't graduate high school, skipping/cutting meals due to finances, not seeing a dentist, current cigarette smoking, current marijuana use, binge drinking, and living in a home where English isn't usually spoken. Non-completers were less likely to be white or Asian, and more likely to be Hispanic, American Indian/Alaska Native or Black/African American.

Table 3a: Comparison of student characteristics among 10th grade non-completers to completers in the state sample.

Question	Options	Non-completers Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	61.7 (2.5)	77.8 (0.9)	0.0000
	Mostly C's, D's, or F's	38.3 (2.5)	22.2 (0.9)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	81.1 (1.8)	83.3 (0.8)	0.0227
	no/mostly & NO/def not true	18.9 (1.8)	16.7 (0.8)	
How far did your mother get in school?	Graduated HS or more	76.1 (2.5)	85.2 (0.8)	0.0000
	Didn't graduate HS	23.9 (2.5)	14.8 (0.8)	
Living situation due to finances	No	93.3 (1.3)	94.3 (0.5)	0.1457
	Yes	6.7 (1.3)	5.7 (0.5)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	86.1 (1.9)	88.1 (0.7)	0.0401
	At least once	13.9 (1.9)	11.9 (0.7)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	70.0 (3.7)	81.6 (1.2)	0.0000
	More than a year ago	30.0 (3.7)	18.4 (1.2)	
Do you receive free or reduced price lunches at school?	No	48.7 (4.6)	67.1 (1.5)	0.0000
	Yes	51.3 (4.6)	32.9 (1.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	93.0 (1.3)	94.1 (0.5)	0.0696
	At least 1 day	7.1 (1.3)	5.9 (0.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	80.0 (2.0)	83.6 (0.8)	0.0004
	At least 1 day	20.0 (2.0)	16.4 (0.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	88.4 (1.6)	89.8 (0.6)	0.0941
	At least once	11.6 (1.6)	10.2 (0.6)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	79.1 (2.0)	80.1 (0.9)	0.3546
	At least 1 day	20.9 (2.0)	19.9 (0.9)	
What language is usually spoken at home?	English	72.3 (2.2)	82.1 (0.8)	0.0000
	Other language	27.7 (2.2)	17.9 (0.8)	
How do you describe yourself? (Select one or more responses.)	White	40.3 (2.2)	57.9 (1.1)	0.0000
	Hispanic	36.3 (2.2)	20.9 (0.9)	0.0000
	American Indian/Alaska Native	4.1 (0.9)	2.1 (0.3)	0.0000
	Asian	3.4 (0.8)	6.0 (0.5)	0.0000
	Black/African American	4.3 (0.9)	2.8 (0.4)	0.0007
	Pacific Islander	1.6 (0.5)	1.4 (0.3)	0.6253

* 95% confidence interval, p-value significant if less than 0.05

Table 3b: Comparison of student characteristics among all 10th grade respondents to completers in the state sample (simulating bias).

Question	Options	All Respondents Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.4 (0.8)	77.8 (0.9)	0.0000
	Mostly C's, D's, or F's	24.6 (0.8)	22.2 (0.9)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	82.9 (0.7)	83.3 (0.8)	0.0784
	no/mostly & NO/def not true	17.1 (0.7)	16.7 (0.8)	
How far did your mother get in school?	Graduated HS or more	84.0 (0.8)	85.2 (0.8)	0.0008
	Didn't graduate HS	16.0 (0.8)	14.8 (0.8)	
Living situation due to finances	No	94.1 (0.5)	94.3 (0.5)	0.1279
	Yes	5.9 (0.5)	5.7 (0.5)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	87.8 (0.6)	88.1 (0.7)	0.5802
	At least once	12.2 (0.6)	11.9 (0.7)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	80.2 (1.1)	81.6 (1.2)	0.0804
	More than a year ago	19.8 (1.1)	18.4 (1.2)	
Do you receive free or reduced price lunches at school?	No	65.3 (1.4)	67.1 (1.5)	0.0707
	Yes	34.7 (1.4)	32.9 (1.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	94.0 (0.5)	94.1 (0.5)	0.5906
	At least 1 day	6.1 (0.5)	5.9 (0.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	83.1 (0.7)	83.6 (0.8)	0.3042
	At least 1 day	17.0 (0.7)	16.4 (0.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	89.6 (0.6)	89.8 (0.6)	0.6296
	At least once	10.4 (0.6)	10.2 (0.6)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	80.0 (0.8)	80.1 (0.9)	0.7862
	At least 1 day	20.1 (0.8)	19.9 (0.9)	
What language is usually spoken at home?	English	80.5 (0.8)	82.1 (0.8)	0.0053
	Other language	19.5 (0.8)	17.9 (0.8)	
How do you describe yourself? (Select one or more responses.)	White	54.6 (1.0)	57.9 (1.1)	0.0000
	Hispanic	23.8 (0.8)	20.9 (0.9)	0.0000
	American Indian/Alaska Native	2.4 (0.3)	2.1 (0.3)	0.0782
	Asian	5.6 (0.5)	6.0 (0.5)	0.1546
	Black/African American	3.1 (0.3)	2.8 (0.4)	0.2678
	Pacific Islander	1.4 (0.2)	1.4 (0.3)	0.8748

* 95% confidence interval, p-value significant if less than 0.05

Table 3c: Comparison of student characteristics among 10th grade non-completers to completers in census schools.

Question	Options	Non-completers Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	65.5 (1.1)	77.4 (0.4)	0.0000
	Mostly C's, D's, or F's	34.5 (1.1)	22.6 (0.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	79.9 (0.8)	83.7 (0.4)	0.0000
	no/mostly & NO/def not true	20.1 (0.8)	16.4 (0.4)	
How far did your mother get in school?	Graduated HS or more	79.6 (1.0)	86.1 (0.4)	0.0000
	Didn't graduate HS	20.4 (1.0)	13.9 (0.4)	
Living situation due to finances	No	93.7 (0.6)	94.1 (0.2)	0.1851
	Yes	6.3 (0.6)	5.9 (0.2)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	86.4 (0.8)	87.9 (0.3)	0.0011
	At least once	13.6 (0.8)	12.1 (0.3)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	72.0 (1.6)	80.9 (0.5)	0.0000
	More than a year ago	28.0 (1.6)	19.1 (0.5)	
Do you receive free or reduced price lunches at school?	No	55.1 (2.0)	67.8 (0.6)	0.0000
	Yes	44.9 (2.0)	32.2 (0.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	91.7 (0.6)	93.9 (0.2)	0.0000
	At least 1 day	8.3 (0.6)	6.1 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	80.8 (0.9)	84.7 (0.3)	0.0000
	At least 1 day	19.2 (0.9)	15.3 (0.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	88.0 (0.7)	90.1 (0.3)	0.0000
	At least once	12.0 (0.7)	9.9 (0.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	79.1 (0.9)	80.7 (0.4)	0.0009
	At least 1 day	20.9 (0.9)	19.3 (0.4)	
What language is usually spoken at home?	English	73.9 (1.0)	80.6 (0.4)	0.0000
	Other language	26.1 (1.0)	19.4 (0.4)	
How do you describe yourself? (Select one or more responses.)	White	43.5 (1.0)	55.2 (0.5)	0.0000
	Hispanic	25.8 (0.9)	18.0 (0.4)	0.0000
	American Indian/Alaska Native	3.1 (0.4)	2.0 (0.1)	0.0000
	Asian	7.2 (0.5)	9.5 (0.3)	0.0000
	Black/African American	6.2 (0.5)	3.6 (0.2)	0.0000
	Pacific Islander	2.1 (0.3)	1.8 (0.1)	0.0839

* 95% confidence interval, p-value significant if less than 0.05

Table 4d: Comparison of student characteristics among all 10th grade respondents to completers in census schools (simulating bias).

Question	Options	All Respondents Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.7 (0.4)	77.8 (0.9)	0.0000
	Mostly C's, D's, or F's	24.3 (0.4)	22.2 (0.9)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	83.0 (0.3)	83.3 (0.8)	0.0784
	no/mostly & NO/def not true	17.0 (0.3)	16.7 (0.8)	
How far did your mother get in school?	Graduated HS or more	85.3 (0.3)	85.2 (0.8)	0.0008
	Didn't graduate HS	14.7 (0.3)	14.8 (0.8)	
Living situation due to finances	No	94.1 (0.2)	94.3 (0.5)	0.1279
	Yes	5.9 (0.2)	5.7 (0.5)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	87.7 (0.3)	88.1 (0.7)	0.5802
	At least once	12.3 (0.3)	11.9 (0.7)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	79.8 (0.5)	81.6 (1.2)	0.0053
	More than a year ago	20.2 (0.5)	18.4 (1.2)	
Do you receive free or reduced price lunches at school?	No	66.6 (0.6)	67.1 (1.5)	0.4861
	Yes	33.4 (0.6)	32.9 (1.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	93.6 (0.2)	94.1 (0.5)	0.0483
	At least 1 day	6.4 (0.2)	5.9 (0.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	84.1 (0.3)	83.6 (0.8)	0.3042
	At least 1 day	15.9 (0.3)	16.4 (0.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	89.8 (0.3)	89.8 (0.6)	0.6296
	At least once	10.2 (0.3)	10.2 (0.6)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	80.5 (0.4)	80.1 (0.9)	0.7862
	At least 1 day	19.5 (0.4)	19.9 (0.9)	
What language is usually spoken at home?	English	79.5 (0.4)	82.1 (0.8)	0.0053
	Other language	20.5 (0.4)	17.9 (0.8)	
How do you describe yourself? (Select one or more responses.)	White	53.1 (0.4)	57.9 (1.1)	0.0000
	Hispanic	19.4 (0.3)	20.9 (0.9)	0.0000
	American Indian/Alaska Native	2.2 (0.1)	2.1 (0.3)	0.0782
	Asian	9.1 (0.3)	6.0 (0.5)	0.1546
	Black/African American	4.1 (0.2)	2.8 (0.4)	0.2678
	Pacific Islander	1.9 (0.1)	1.4 (0.3)	0.8748

* 95% confidence interval, p-value significant if less than 0.05

Non-completion among 12th Grade

- a. Non-completers in the state sample were more likely to report low grades in school, not feeling safe at school, having a mother that didn't graduate high school, not seeing a dentist, current cigarette smoking, current marijuana use, and living in a home where English isn't usually spoken. Non-completers were less likely to be white or Asian, and more likely to be Hispanic or Black/African American.
- b. All respondents in the state sample were more likely to report low grades in school, not feeling safe at school, having a mother that didn't graduate high school, not seeing a dentist, current cigarette smoking, current marijuana use, and living in a home where English isn't usually spoken. Non-completers were less likely to be white, and more likely to be Black/African American.
- c. Non-completers in census schools were more likely to report low grades in school, not feeling safe at school, having a mother that didn't graduate high school, living situation due to finances, skipping/cutting meals due to finances, not seeing a dentist, current cigarette smoking, current marijuana use, binge drinking, and living in a home where English isn't usually spoken. Non-completers were less likely to be white or Asian, and more likely to be Hispanic or Black/African American.
- d. All respondents compared to completers in census schools were more likely to report low grades in school, not feeling safe at school, having a mother that didn't graduate high school, current cigarette smoking, current marijuana use, and living in a home where English isn't usually spoken. Non-completers were less likely to be white, and more likely to be Hispanic or Black/African American.

Table 4a: Comparison of student characteristics among 12th grade non-completers to completers in the state sample.

Question	Options	Non-completers Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	62.9 (3.5)	72.0 (1.1)	0.0000
	Mostly C's, D's, or F's	37.1 (3.5)	28.0 (1.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	82.3 (2.4)	85.2 (0.9)	0.0194
	no/mostly & NO/def not true	17.7 (2.4)	14.8 (0.9)	
How far did your mother get in school?	Graduated HS or more	77.5 (3.3)	84.0 (1.0)	0.0000
	Didn't graduate HS	22.5 (3.3)	16.0 (1.0)	
Living situation due to finances	No	92.6 (1.9)	94.1 (0.6)	0.1034
	Yes	7.4 (1.9)	5.9 (0.6)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	82.4 (2.9)	84.7 (0.9)	0.1375
	At least once	17.6 (2.9)	15.3 (0.9)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	73.3 (4.8)	78.6 (1.4)	0.0249
	More than a year ago	26.8 (4.8)	21.4 (1.4)	
Do you receive free or reduced price lunches at school?	No	54.1 (6.3)	65.8 (1.7)	0.0003
	Yes	45.9 (6.3)	34.2 (1.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	86.9 (2.2)	89.6 (0.8)	0.0178
	At least 1 day	13.1 (2.2)	10.4 (0.8)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	70.1 (3.1)	74.3 (1.1)	0.0094
	At least 1 day	29.9 (3.1)	25.7 (1.1)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	81.1 (2.7)	82.2 (1.0)	0.4132
	At least once	18.9 (2.7)	17.8 (1.0)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	69.0 (3.1)	67.9 (1.2)	0.5498
	At least 1 day	31.1 (3.1)	32.1 (1.2)	
What language is usually spoken at home?	English	75.8 (2.9)	83.3 (0.9)	0.0000
	Other language	24.2 (2.9)	16.7 (0.9)	
How do you describe yourself? (Select one or more responses.)	White	47.4 (3.0)	60.0 (1.2)	0.0000
	Hispanic	31.8 (2.8)	21.9 (1.0)	0.0000
	American Indian/Alaska Native	2.0 (0.8)	1.7 (0.3)	0.5919
	Asian	3.2 (1.1)	5.0 (0.5)	0.0098
	Black/African American	4.7 (1.3)	2.8 (0.4)	0.0008
	Pacific Islander	1.2 (0.7)	1.2 (0.3)	0.9575

* 95% confidence interval, p-value significant if less than 0.05

Table 4b: Comparison of student characteristics among all 12th grade respondents to completers in the state sample (simulating bias).

Question	Options	All Respondents Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	71.1 (1.1)	72.0 (1.1)	0.2208
	Mostly C's, D's, or F's	28.9 (1.1)	28.0 (1.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	84.8 (0.8)	85.2 (0.9)	0.5214
	no/mostly & NO/def not true	15.2 (0.8)	14.8 (0.9)	
How far did your mother get in school?	Graduated HS or more	83.3 (0.9)	84.0 (1.0)	0.3386
	Didn't graduate HS	16.7 (0.9)	16.0 (1.0)	
Living situation due to finances	No	94.0 (0.6)	94.1 (0.6)	0.6882
	Yes	6.0 (0.6)	5.9 (0.6)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	84.4 (0.9)	84.7 (0.9)	0.7385
	At least once	15.6 (0.9)	15.3 (0.9)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	78.1 (1.4)	78.6 (1.4)	0.6202
	More than a year ago	21.9 (1.4)	21.4 (1.4)	
Do you receive free or reduced price lunches at school?	No	65.0 (1.6)	65.8 (1.7)	0.4744
	Yes	35.0 (1.6)	34.2 (1.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	89.3 (0.7)	89.6 (0.8)	0.5403
	At least 1 day	10.8 (0.7)	10.4 (0.8)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	73.8 (1.0)	74.3 (1.1)	0.5114
	At least 1 day	26.2 (1.0)	25.7 (1.1)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	82.1 (0.9)	82.2 (1.0)	0.8387
	At least once	17.9 (0.9)	17.8 (1.0)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	68.1 (1.1)	67.9 (1.2)	0.8789
	At least 1 day	31.9 (1.1)	32.1 (1.2)	
What language is usually spoken at home?	English	82.4 (0.9)	83.3 (0.9)	0.1635
	Other language	17.6 (0.9)	16.7 (0.9)	
How do you describe yourself? (Select one or more responses.)	White	58.1 (1.1)	60.0 (1.2)	0.0292
	Hispanic	23.4 (1.0)	21.9 (1.0)	0.0444
	American Indian/Alaska Native	1.8 (0.3)	1.7 (0.3)	0.8793
	Asian	4.7 (0.5)	5.0 (0.5)	0.4714
	Black/African American	3.1 (0.4)	2.8 (0.4)	0.3335
	Pacific Islander	1.2 (0.3)	1.2 (0.3)	0.9880

* 95% confidence interval, p-value significant if less than 0.05

Table 4c: Comparison of student characteristics among 12th grade non-completers to completers in census schools.

Question	Options	Non-completers Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	v	72.6 (0.5)	0.0000
	Mostly C's, D's, or F's	38.0 (1.5)	27.4 (0.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	81.9 (1.1)	85.6 (0.4)	0.0000
	no/mostly & NO/def not true	18.1 (1.1)	14.4 (0.4)	
How far did your mother get in school?	Graduated HS or more	80.6 (1.4)	84.9 (0.4)	0.0000
	Didn't graduate HS	19.4 (1.4)	15.1 (0.4)	
Living situation due to finances	No	92.2 (0.8)	93.9 (0.3)	0.0001
	Yes	7.8 (0.8)	6.1 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	82.3 (1.3)	85.5 (0.4)	0.0000
	At least once	17.7 (1.3)	14.5 (0.4)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	71.2 (2.2)	77.9 (0.6)	0.0000
	More than a year ago	28.8 (2.2)	22.1 (0.6)	
Do you receive free or reduced price lunches at school?	No	56.9 (2.8)	66.4 (0.7)	0.0000
	Yes	0.0 (0.0)	0.0 (0.0)	
During the past 30 days, on how many days did you smoke cigarettes?	None	86.0 (1.0)	89.6 (0.3)	0.0000
	At least 1 day	14.0 (1.0)	10.4 (0.3)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	70.0 (1.4)	75.1 (0.5)	0.0000
	At least 1 day	30.0 (1.4)	24.9 (0.5)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	80.0 (1.2)	82.8 (0.4)	0.0000
	At least once	20.1 (1.2)	17.2 (0.4)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	66.9 (1.4)	68.1 (0.5)	0.0921
	At least 1 day	33.2 (1.4)	31.9 (0.5)	
What language is usually spoken at home?	English	75.9 (1.3)	81.6 (0.4)	0.0000
	Other language	24.1 (1.3)	18.4 (0.4)	
How do you describe yourself? (Select one or more responses.)	White	47.5 (1.4)	57.3 (0.5)	0.0000
	Hispanic	23.5 (1.1)	18.9 (0.4)	0.0000
	American Indian/Alaska Native	2.3 (0.4)	1.9 (0.1)	0.0636
	Asian	6.2 (0.6)	8.4 (0.3)	0.0000
	Black/African American	7.5 (0.7)	3.7 (0.2)	0.0000
	Pacific Islander	2.0 (0.4)	1.7 (0.1)	0.1033

* 95% confidence interval, p-value significant if less than 0.05

Table 4d: Comparison of student characteristics among all 12th grade respondents to completers in census schools (simulating bias).

Question	Options	All Respondents Percent (±CI)	Completers Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	71.4 (0.5)	72.0 (1.1)	0.3348
	Mostly C's, D's, or F's	28.6 (0.5)	28.0 (1.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	85.1 (0.4)	85.2 (0.9)	0.8326
	no/mostly & NO/def not true	14.9 (0.4)	14.8 (0.9)	
How far did your mother get in school?	Graduated HS or more	84.5 (0.4)	84.0 (1.0)	0.3358
	Didn't graduate HS	15.5 (0.4)	16.0 (1.0)	
Living situation due to finances	No	93.7 (0.3)	94.1 (0.6)	0.1823
	Yes	6.3 (0.3)	5.9 (0.6)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	85.2 (0.4)	84.7 (0.9)	0.2655
	At least once	14.8 (0.4)	15.3 (0.9)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	77.3 (0.6)	78.6 (1.4)	0.0938
	More than a year ago	22.7 (0.6)	21.4 (1.4)	
Do you receive free or reduced price lunches at school?	No	65.7 (0.7)	65.8 (1.7)	0.9370
	Yes	34.3 (0.7)	34.2 (1.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	89.2 (0.3)	89.6 (0.8)	0.3292
	At least 1 day	10.8 (0.3)	10.4 (0.8)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	74.5 (0.5)	74.3 (1.1)	0.7233
	At least 1 day	25.5 (0.5)	25.7 (1.1)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	82.5 (0.4)	82.2 (1.0)	0.6688
	At least once	17.6 (0.4)	17.8 (1.0)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	68.0 (0.5)	67.9 (1.2)	0.9520
	At least 1 day	32.0 (0.5)	32.1 (1.2)	
What language is usually spoken at home?	English	80.9 (0.4)	83.3 (0.9)	0.0000
	Other language	19.1 (0.4)	16.7 (0.9)	
How do you describe yourself? (Select one or more responses.)	White	55.9 (0.5)	60.0 (1.2)	0.0000
	Hispanic	19.5 (0.4)	21.9 (1.0)	0.0000
	American Indian/Alaska Native	1.9 (0.1)	1.7 (0.3)	0.3093
	Asian	8.0 (0.3)	5.0 (0.5)	0.0000
	Black/African American	4.2 (0.2)	2.8 (0.4)	0.0000
	Pacific Islander	1.7 (0.1)	1.2 (0.3)	0.0031

* 95% confidence interval, p-value significant if less than 0.05

Appendix D: Student Characteristics by Optional Questions

Methods

Risk ratio tables comparing student characteristics of respondents who answered optional questions compared to those that did not are provided in Section 8. Student-Level Optional Question Bias. Differences in student characteristics show if respondents who took the optional questions are different from those that did not take them. Differences may indicate that the optional questions results may have bias.

Risk ratio tables comparing all survey respondents to optional question takers are also provided in Section 8. Student-Level Optional Question Bias. Comparing all respondents to optional question takers shows the potential magnitude of the bias on the actual optional survey question results.

Instead of presenting risk ratios, Tables 1-4 show the differences in prevalence for selected student characteristic questions by grade for:

- a. Non-optional question takers versus optional question takers in the state sample
- b. All respondents versus optional question takers in the state sample
- c. Non-optional question takers versus optional question takers in census schools
- d. All respondents versus optional question takers in census schools

Results

Optional Question Taking among 8th Grade

Compared to optional question takers:

- a. Non-optional question takers in the state sample were more likely to report lower grades in school, not seeing a dentist, and less likely to be Asian.
- b. All respondents in the state sample were similar to optional question takers.
- c. Non-optional question takers in census schools were more likely to report low grades in school, not feeling safe in school, having a mother who didn't graduate high school, not seeing a dentist, receiving free/reduced lunch, were more likely to report current marijuana use, were more likely to live in a non-English speaking home, to be Hispanic, to be American Indian/Alaska Native, to be Black /African American; and less likely to be White or Asian.
- d. All respondents in census schools were more likely to report low grades in school, to have a mother who didn't graduate high school, not seeing a dentist, receiving free/reduced lunch, to live in a non-English speaking home to be Hispanic, or American Indian/Alaska Native; and less likely to be White or Asian.

Table 1a: Comparison of student characteristics among 8th grade non-optional question takers to optional question takers in the state sample.

Question	Options	Did Not Administered Optional Questions Percent (\pm CI)	Administered Optional Questions Percent (\pm CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	76.1 (1.3)	78.6 (1.3)	0.0089
	Mostly C's, D's, or F's	23.9 (1.3)	21.4 (1.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	83.9 (1.1)	83.2 (1.2)	0.3587
	no/mostly & NO/def not true	16.1 (1.1)	16.9 (1.2)	
How far did your mother get in school?	Graduated HS or more	84.8 (1.3)	85.2 (1.3)	0.6562
	Didn't graduate HS	15.2 (1.3)	14.8 (1.3)	
Living situation due to finances	No	94.2 (0.7)	94.4 (0.8)	0.6469
	Yes	5.9 (0.7)	5.6 (0.8)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	89.8 (0.9)	89.6 (1.0)	0.7796
	At least once	10.2 (0.9)	10.4 (1.0)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	74.6 (1.9)	78.2 (1.8)	0.0061
	More than a year ago	25.4 (1.9)	21.8 (1.8)	
Do you receive free or reduced price lunches at school?	No	62.8 (2.3)	62.0 (2.3)	0.6183
	Yes	37.2 (2.3)	38.1 (2.3)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.1 (0.5)	96.6 (0.6)	0.1891
	At least 1 day	2.9 (0.5)	3.4 (0.6)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	93.4 (0.7)	93.7 (0.8)	0.5720
	At least 1 day	6.6 (0.7)	6.3 (0.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	96.2 (0.6)	95.6 (0.6)	0.1616
	At least once	3.8 (0.6)	4.4 (0.6)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	92.8 (0.8)	92.0 (0.9)	0.1516
	At least 1 day	7.2 (0.8)	8.0 (0.9)	
What language is usually spoken at home?	English	78.4 (1.2)	78.2 (1.3)	0.8124
	Other language	21.6 (1.2)	21.8 (1.3)	
How do you describe yourself? (Select one or more responses.)	White	44.5 (1.4)	45.4 (1.6)	0.3764
	Hispanic	21.5 (1.2)	21.4 (1.3)	0.9118
	American Indian/Alaska Native	3.6 (0.5)	3.4 (0.6)	0.7411
	Asian	7.6 (0.7)	8.9 (0.9)	0.0253
	Black/African American	5.6 (0.6)	5.1 (0.7)	0.3171
	Pacific Islander	2.2 (0.4)	2.0 (0.5)	0.4881

95% confidence interval, p-value significant if less than 0.05

Table 1b: Comparison of student characteristics among all 8th grade respondents to optional question takers in the state sample (simulating bias).

Question	Options	All Respondents Percent (±CI)	Administered Optional Questions Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	77.3 (0.9)	78.6 (1.3)	0.1128
	Mostly C's, D's, or F's	22.7 (0.9)	21.4 (1.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	83.6 (0.8)	83.2 (1.2)	0.5722
	no/mostly & NO/def not true	16.4 (0.8)	16.9 (1.2)	
How far did your mother get in school?	Graduated HS or more	85.0 (0.9)	85.2 (1.3)	0.7911
	Didn't graduate HS	15.0 (0.9)	14.8 (1.3)	
Living situation due to finances	No	94.3 (0.5)	94.4 (0.8)	0.7809
	Yes	5.7 (0.5)	5.6 (0.8)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	89.7 (0.7)	89.6 (1.0)	0.8689
	At least once	10.3 (0.7)	10.4 (1.0)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	76.3 (1.3)	78.2 (1.8)	0.0993
	More than a year ago	23.7 (1.3)	21.8 (1.8)	
Do you receive free or reduced price lunches at school?	No	62.4 (1.6)	62.0 (2.3)	0.7725
	Yes	37.6 (1.6)	38.1 (2.3)	
During the past 30 days, on how many days did you smoke cigarettes?	None	96.9 (0.4)	96.6 (0.6)	0.4293
	At least 1 day	3.1 (0.4)	3.4 (0.6)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	93.6 (0.5)	93.7 (0.8)	0.7303
	At least 1 day	6.4 (0.5)	6.3 (0.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	96.0 (0.4)	95.6 (0.6)	0.4026
	At least once	4.0 (0.4)	4.4 (0.6)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	92.4 (0.6)	92.0 (0.9)	0.3870
	At least 1 day	7.6 (0.6)	8.0 (0.9)	
What language is usually spoken at home?	English	78.3 (0.9)	78.2 (1.3)	0.8847
	Other language	21.7 (0.9)	21.8 (1.3)	
How do you describe yourself? (Select one or more responses.)	White	44.9 (1.1)	45.4 (1.6)	0.5830
	Hispanic	21.5 (0.9)	21.4 (1.3)	0.9452
	American Indian/Alaska Native	3.5 (0.4)	3.4 (0.6)	0.8370
	Asian	8.2 (0.6)	8.9 (0.9)	0.1702
	Black/African American	5.4 (0.5)	5.1 (0.7)	0.5315
	Pacific Islander	2.1 (0.3)	2.0 (0.5)	0.6642

95% confidence interval, p-value significant if less than 0.05

Table 1c: Comparison of student characteristics among 8th grade non-optional question takers to optional question takers in census schools.

Question	Options	Did Not Administered Optional Questions Percent (±CI)	Administered Optional Questions Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.8 (0.5)	80.9 (0.4)	0.0000
	Mostly C's, D's, or F's	24.2 (0.5)	19.1 (0.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	83.0 (0.4)	83.8 (0.4)	0.0100
	no/mostly & NO/def not true	17.0 (0.4)	16.3 (0.4)	
How far did your mother get in school?	Graduated HS or more	84.7 (0.5)	87.9 (0.4)	0.0000
	Didn't graduate HS	15.3 (0.5)	12.1 (0.4)	
How far did your father get in school?	Graduated HS or more	94.4 (0.3)	94.5 (0.3)	0.8629
	Didn't graduate HS	5.6 (0.3)	5.5 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	89.7 (0.4)	89.7 (0.3)	0.7540
	At least once	10.4 (0.4)	10.3 (0.3)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	75.5 (0.7)	79.5 (0.6)	0.0000
	More than a year ago	24.5 (0.7)	20.6 (0.6)	
Do you receive free or reduced price lunches at school?	No	61.3 (0.9)	67.3 (0.8)	0.0000
	Yes	38.7 (0.9)	32.7 (0.8)	
During the past 30 days, on how many days did you smoke cigarettes?	None	96.9 (0.2)	97.0 (0.2)	0.4816
	At least 1 day	3.1 (0.2)	3.0 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	93.4 (0.3)	94.0 (0.3)	0.0012
	At least 1 day	6.6 (0.3)	6.0 (0.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	95.8 (0.2)	96.0 (0.2)	0.2297
	At least once	4.2 (0.2)	4.0 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	92.2 (0.3)	92.4 (0.3)	0.3768
	At least 1 day	7.8 (0.3)	7.6 (0.3)	
What language is usually spoken at home?	English	78.0 (0.5)	80.2 (0.4)	0.0000
	Other language	22.0 (0.5)	19.8 (0.4)	
How do you describe yourself? (Select one or more responses.)	White	44.1 (0.6)	48.8 (0.5)	0.0000
	Hispanic	21.4 (0.5)	17.5 (0.4)	0.0000
	American Indian/Alaska Native	4.2 (0.2)	3.4 (0.2)	0.0000
	Asian	8.0 (0.3)	10.5 (0.3)	0.0000
	Black/African American	5.1 (0.3)	4.3 (0.2)	0.0000
	Pacific Islander	1.9 (0.2)	1.9 (0.1)	0.5889

95% confidence interval, p-value significant if less than 0.05

Table 1d: Comparison of student characteristics among all 8th grade respondents to optional question takers in census schools (simulating bias).

Question	Options	All Respondents Percent (±CI)	Administered Optional Questions Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	78.6 (0.3)	80.9 (0.4)	0.0000
	Mostly C's, D's, or F's	21.4 (0.3)	19.1 (0.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	83.4 (0.3)	83.8 (0.4)	0.1521
	no/mostly & NO/def not true	16.6 (0.3)	16.3 (0.4)	
How far did your mother get in school?	Graduated HS or more	86.5 (0.3)	87.9 (0.4)	0.0000
	Didn't graduate HS	13.5 (0.3)	12.1 (0.4)	
Living situation due to finances	No	94.5 (0.2)	94.5 (0.3)	0.9255
	Yes	5.5 (0.2)	5.5 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	89.7 (0.3)	89.7 (0.3)	0.8684
	At least once	10.3 (0.3)	10.3 (0.3)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	77.7 (0.5)	79.5 (0.6)	0.0000
	More than a year ago	22.3 (0.5)	20.6 (0.6)	
Do you receive free or reduced price lunches at school?	No	64.7 (0.6)	67.3 (0.8)	0.0000
	Yes	35.3 (0.6)	32.7 (0.8)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.0 (-0.1)	97.0 (0.2)	0.6998
	At least 1 day	3.1 (-0.1)	3.0 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	93.8 (-0.2)	94.0 (-0.3)	0.0751
	At least 1 day	6.3 (-0.2)	6.0 (-0.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	95.9 (0.2)	96.0 (0.2)	0.5134
	At least once	4.1 (0.2)	4.0 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	92.3 (0.2)	92.4 (0.3)	0.6290
	At least 1 day	7.7 (0.2)	7.6 (0.3)	
What language is usually spoken at home?	English	79.2 (0.3)	80.2 (0.4)	0.0002
	Other language	20.9 (0.3)	19.8 (0.4)	
How do you describe yourself? (Select one or more responses.)	White	46.6 (0.4)	48.8 (0.5)	0.0000
	Hispanic	19.4 (0.3)	17.5 (0.4)	0.0000
	American Indian/Alaska Native	3.8 (0.2)	3.4 (0.2)	0.0014
	Asian	9.4 (0.2)	10.5 (0.3)	0.0000
	Black/African American	4.7 (0.2)	4.3 (0.2)	0.0128
	Pacific Islander	1.9 (0.1)	1.9 (0.1)	0.7626

95% confidence interval, p-value significant if less than 0.05

Optional Question Taking among 10th Grade

Compared to optional question takers:

- a. Non-optional question takers in the state sample were more likely to report lower grades in school, feeling unsafe at school, having a mother who didn't graduate high school, having to skip meals, not seeing a dentist, receiving free/reduced price lunch, to live in in a non-English speaking home, to be Hispanic, to be American Indian/Alaska Native or Black/African American; they were less likely to report current alcohol drinking and being white.
- b. All respondents in the state sample were more likely to report lower grades in school, having a mother that didn't graduate high school, living in a non-English speaking home, to be Hispanic, and more likely to be white.
- c. Non-optional question takers in census schools were more likely to report lower grades in school, not feeling safe at school, having a mother that didn't graduate high school, not seeing a dentist, receiving free/reduced lunch, current cigarette smoking, living in a non-English speaking home, to be Hispanic, American Indian/Alaska Native, or Black/African American; and more likely to report current alcohol drinking and to be white.
- d. All respondents in census schools were more likely to report lower grades in school, not feeling safe at school, not seeing a dentist, to be Hispanic, or American Indian/Alaska Native; and more likely to be white.

Table 2a: Comparison of student characteristics among 10th grade non-optional question takers to optional question takers in the state sample.

Question	Options	Did Not Administered Optional Questions Percent (\pm CI)	Administered Optional Questions Percent (\pm CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	70.6 (1.6)	77.1 (1.0)	0.0000
	Mostly C's, D's, or F's	29.4 (1.6)	22.9 (1.0)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	80.7 (1.3)	83.9 (0.9)	0.0000
	no/mostly & NO/def not true	19.4 (1.3)	16.1 (0.9)	
How far did your mother get in school?	Graduated HS or more	81.3 (1.5)	85.2 (0.9)	0.0000
	Didn't graduate HS	18.8 (1.5)	14.8 (0.9)	
Living situation due to finances	No	93.7 (0.8)	94.3 (0.6)	0.2951
	Yes	6.3 (0.8)	5.8 (0.6)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	86.4 (1.2)	88.1 (0.8)	0.0120
	At least once	13.7 (1.2)	11.9 (0.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	76.1 (2.2)	81.3 (1.3)	0.0000
	More than a year ago	23.9 (2.2)	18.7 (1.3)	
Do you receive free or reduced price lunches at school?	No	59.6 (2.7)	67.3 (1.6)	0.0000
	Yes	40.4 (2.7)	32.8 (1.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	94.0 (0.8)	93.6 (0.6)	0.3862
	At least 1 day	6.0 (0.8)	6.4 (0.6)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	82.7 (1.3)	82.8 (0.9)	0.9240
	At least 1 day	17.3 (1.3)	17.2 (0.9)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	89.2 (1.1)	89.1 (0.7)	0.9079
	At least once	10.8 (1.1)	10.9 (0.7)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	81.4 (1.3)	78.8 (1.0)	0.0026
	At least 1 day	18.6 (1.3)	21.2 (1.0)	
What language is usually spoken at home?	English	76.5 (1.4)	82.3 (0.9)	0.0000
	Other language	23.5 (1.4)	17.7 (0.9)	
How do you describe yourself? (Select one or more responses.)	White	47.5 (1.6)	58.2 (1.2)	0.0000
	Hispanic	28.6 (1.5)	21.2 (1.0)	0.0000
	American Indian/Alaska Native	3.2 (0.6)	2.0 (0.3)	0.0001
	Asian	5.0 (0.7)	5.8 (0.5)	0.0923
	Black/African American	3.8 (0.6)	2.8 (0.4)	0.0038
	Pacific Islander	1.7 (0.4)	1.3 (0.3)	0.0988

95% confidence interval, p-value significant if less than 0.05

Table 2b: Comparison of student characteristics among all 10th grader respondents to optional question takers in the state sample (simulating bias).

Question	Options	All Respondents Percent (±CI)	Administered Optional Questions Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.0 (0.8)	77.1 (1.0)	0.0020
	Mostly C's, D's, or F's	25.0 (0.8)	22.9 (1.0)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	82.8 (0.7)	83.9 (0.9)	0.0593
	no/mostly & NO/def not true	17.2 (0.7)	16.1 (0.9)	
How far did your mother get in school?	Graduated HS or more	84.0 (0.8)	85.2 (0.9)	0.0492
	Didn't graduate HS	16.0 (0.8)	14.8 (0.9)	
Living situation due to finances	No	94.1 (0.5)	94.3 (0.6)	0.6459
	Yes	5.9 (0.5)	5.8 (0.6)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	87.6 (0.6)	88.1 (0.8)	0.2812
	At least once	12.4 (0.6)	11.9 (0.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	79.8 (1.1)	81.3 (1.3)	0.0807
	More than a year ago	20.2 (1.1)	18.7 (1.3)	
Do you receive free or reduced price lunches at school?	No	65.2 (1.4)	67.3 (1.6)	0.0498*
	Yes	34.9 (1.4)	32.8 (1.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	93.7 (0.5)	93.6 (0.6)	0.7047
	At least 1 day	6.3 (0.5)	6.4 (0.6)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	82.8 (0.7)	82.8 (0.9)	0.9667
	At least 1 day	17.2 (0.7)	17.2 (0.9)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	89.1 (0.6)	89.1 (0.7)	0.9599
	At least once	10.9 (0.6)	10.9 (0.7)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	79.7 (0.8)	78.8 (1.0)	0.1898
	At least 1 day	20.4 (0.8)	21.2 (1.0)	
What language is usually spoken at home?	English	80.4 (0.8)	82.3 (0.9)	0.0014
	Other language	19.6 (0.8)	17.7 (0.9)	
How do you describe yourself? (Select one or more responses.)	White	54.5 (0.9)	58.2 (1.2)	0.0000
	Hispanic	23.8 (0.8)	21.2 (1.0)	0.0001
	American Indian/Alaska Native	2.4 (0.3)	2.0 (0.3)	0.0633
	Asian	5.5 (0.4)	5.8 (0.5)	0.4471
	Black/African American	3.1 (0.3)	2.8 (0.4)	0.1772
	Pacific Islander	1.4 (0.2)	1.3 (0.3)	0.4432

95% confidence interval, p-value significant if less than 0.05

*Not significant when adjusted for gender

Table 2c: Comparison of student characteristics among 10th grade non-optional question takers to optional question takers in census schools.

Question	Options	Did Not Administered Optional Questions Percent (±CI)	Administered Optional Questions Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	72.2 (0.7)	76.8 (0.4)	0.0000
	Mostly C's, D's, or F's	27.8 (0.7)	23.2 (0.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	81.4 (0.5)	83.5 (0.4)	0.0000
	no/mostly & NO/def not true	18.6 (0.5)	16.5 (0.4)	
How far did your mother get in school?	Graduated HS or more	84.2 (0.6)	85.5 (0.4)	0.0002
	Didn't graduate HS	15.8 (0.6)	14.5 (0.4)	
How far did your father get in school?	Graduated HS or more	94.0 (0.4)	94.0 (0.3)	0.8587
	Didn't graduate HS	6.1 (0.4)	6.0 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	87.4 (0.5)	87.5 (0.4)	0.7479
	At least once	12.6 (0.5)	12.5 (0.4)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	77.5 (0.9)	80.4 (0.6)	0.0000
	More than a year ago	22.5 (0.9)	19.6 (0.6)	
Do you receive free or reduced price lunches at school?	No	64.7 (1.1)	67.0 (0.7)	0.0006
	Yes	35.3 (1.1)	33.0 (0.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	92.9 (0.4)	93.6 (0.3)	0.0028
	At least 1 day	7.1 (0.4)	6.4 (0.3)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	83.4 (0.5)	84.0 (0.4)	0.0932**
	At least 1 day	16.6 (0.5)	16.0 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	89.6 (0.5)	89.5 (0.3)	0.5829
	At least once	10.4 (0.5)	10.5 (0.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	80.9 (0.6)	80.0 (0.4)	0.0126
	At least 1 day	19.1 (0.6)	20.0 (0.4)	
What language is usually spoken at home?	English	78.3 (0.6)	79.8 (0.4)	0.0001
	Other language	21.7 (0.6)	20.2 (0.4)	
How do you describe yourself? (Select one or more responses.)	White	50.2 (0.7)	54.4 (0.5)	0.0000
	Hispanic	20.9 (0.6)	18.7 (0.4)	0.0000
	American Indian/Alaska Native	2.6 (0.2)	2.0 (0.1)	0.0000
	Asian	8.8 (0.4)	9.2 (0.3)	0.1182
	Black/African American	4.6 (0.3)	3.9 (0.2)	0.0002
	Pacific Islander	1.8 (0.2)	1.9 (0.1)	0.3844

95% confidence interval, p-value significant if less than 0.05

**Significant when adjusted for gender

Table 2d: Comparison of student characteristics among all 10th grader respondents to optional question takers in census schools (simulating bias).

Question	Options	All Respondents Percent (±CI)	Administered Optional Questions Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.3 (0.4)	76.8 (0.4)	0.0000
	Mostly C's, D's, or F's	24.7 (0.4)	23.2 (0.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	82.8 (0.3)	83.5 (0.4)	0.0047
	no/mostly & NO/def not true	17.2 (0.3)	16.5 (0.4)	
How far did your mother get in school?	Graduated HS or more	85.1 (0.3)	85.5 (0.4)	0.0973
	Didn't graduate HS	14.9 (0.3)	14.5 (0.4)	
Living situation due to finances	No	94.0 (0.2)	94.0 (0.3)	0.9368
	Yes	6.0 (0.2)	6.0 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	87.4 (0.3)	87.5 (0.4)	0.8889
	At least once	12.6 (0.3)	12.5 (0.4)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	79.5 (0.5)	80.4 (0.6)	0.0184
	More than a year ago	20.5 (0.5)	19.6 (0.6)	
Do you receive free or reduced price lunches at school?	No	66.3 (0.6)	67.0 (0.7)	0.1471
	Yes	33.7 (0.6)	33.0 (0.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	93.3 (0.2)	93.6 (0.3)	0.1772
	At least 1 day	6.7 (0.2)	6.4 (0.3)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	83.8 (0.3)	84.0 (0.4)	0.4528
	At least 1 day	16.2 (0.3)	16.0 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	89.5 (0.3)	89.5 (0.3)	0.8074
	At least once	10.5 (0.3)	10.5 (0.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	80.3 (0.3)	80.0 (0.4)	0.2646
	At least 1 day	19.7 (0.3)	20.0 (0.4)	
What language is usually spoken at home?	English	79.3 (0.3)	79.8 (0.4)	0.0714
	Other language	20.7 (0.3)	20.2 (0.4)	
How do you describe yourself? (Select one or more responses.)	White	52.9 (0.4)	54.4 (0.5)	0.0000
	Hispanic	19.5 (0.3)	18.7 (0.4)	0.0039
	American Indian/Alaska Native	2.2 (0.1)	2.0 (0.1)	0.0251
	Asian	9.1 (0.2)	9.2 (0.3)	0.4721
	Black/African American	4.2 (0.2)	3.9 (0.2)	0.0836
	Pacific Islander	1.9 (0.1)	1.9 (0.1)	0.6892

95% confidence interval, p-value significant if less than 0.05

Optional Question Taking among 12th Grade

Compared to optional question takers:

- a. Non-optional question takers in the state sample were more likely to report lower grades in school, to have a mother who didn't graduate high school, to receive free/reduced lunch, to live in a non-English speaking home, to be Hispanic, Black/African American, or Pacific Islander; and more likely to report binge drinking and current alcohol drinking, and to be white.
- b. All respondents in the state sample were more likely to live in a non-English speaking home, and to be Hispanic or Black/African American; and less likely to be white.
- c. Non-optional question takers in census schools more likely to report lower grades in school, feeling unsafe at school, having a mother who didn't graduate high school, to have skipped meals, not see a dentist, to live in a non-English speaking home, to be Hispanic or Black/African American; less likely to report current alcohol drinking, and to be white or Pacific Islander.
- d. All respondents in census schools were more likely to report lower grades in school and to be Black/African American; and less likely to be white.

Table 3a: Comparison of student characteristics among 12th grade non-optional question takers to optional question takers in the state sample.

Question	Options	Did Not Administered Optional Questions Percent (\pm CI)	Administered Optional Questions Percent (\pm CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	68.8 (1.9)	71.7 (1.3)	0.0120
	Mostly C's, D's, or F's	31.2 (1.9)	28.3 (1.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	84.3 (1.4)	84.7 (1.0)	0.6481
	no/mostly & NO/def not true	15.7 (1.4)	15.3 (1.0)	
How far did your mother get in school?	Graduated HS or more	80.5 (1.7)	84.4 (1.1)	0.0001
	Didn't graduate HS	19.6 (1.7)	15.6 (1.1)	
Living situation due to finances	No	93.9 (1.0)	93.8 (0.7)	0.9230
	Yes	6.1 (1.0)	6.2 (0.7)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	83.6 (1.6)	84.6 (1.0)	0.2609
	At least once	16.4 (1.6)	15.4 (1.0)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	76.6 (2.5)	78.4 (1.6)	0.2186
	More than a year ago	23.4 (2.5)	21.6 (1.6)	
Do you receive free or reduced price lunches at school?	No	61.0 (3.0)	66.2 (1.9)	0.0035
	Yes	39.0 (3.0)	33.8 (1.9)	
During the past 30 days, on how many days did you smoke cigarettes?	None	89.6 (1.2)	88.7 (0.9)	0.2466
	At least 1 day	10.4 (1.2)	11.3 (0.9)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	74.1 (1.8)	73.3 (1.2)	0.4393
	At least 1 day	25.9 (1.8)	26.7 (1.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	83.8 (1.5)	81.2 (1.1)	0.0059
	At least once	16.2 (1.5)	18.9 (1.1)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	71.1 (1.8)	66.5 (1.3)	0.0001
	At least 1 day	28.9 (1.8)	33.5 (1.3)	
What language is usually spoken at home?	English	78.0 (1.7)	83.8 (1.0)	0.0000
	Other language	22.0 (1.7)	16.2 (1.0)	
How do you describe yourself? (Select one or more responses.)	White	52.0 (1.9)	60.7 (1.4)	0.0000
	Hispanic	27.2 (1.7)	21.7 (1.1)	0.0000
	American Indian/Alaska Native	1.8 (0.5)	1.8 (0.4)	0.9076
	Asian	4.7 (0.8)	4.8 (0.6)	0.9581
	Black/African American	4.4 (0.8)	2.4 (0.4)	0.0000
	Pacific Islander	1.6 (0.5)	1.0 (0.3)	0.0426

95% confidence interval, p-value significant if less than 0.05

Table 3b: Comparison of student characteristics among all 12th grade respondents to optional question takers in the state sample (simulating bias).

Question	Options	All Respondents Percent (±CI)	Administered Optional Questions Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	70.8 (1.1)	71.7 (1.3)	0.2831
	Mostly C's, D's, or F's	29.2 (1.1)	28.3 (1.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	84.6 (0.8)	84.7 (1.0)	0.8391
	no/mostly & NO/def not true	15.5 (0.8)	15.3 (1.0)	
How far did your mother get in school?	Graduated HS or more	83.2 (0.9)	84.4 (1.1)	0.0947
	Didn't graduate HS	16.8 (0.9)	15.6 (1.1)	
Living situation due to finances	No	93.9 (0.6)	93.8 (0.7)	0.9669
	Yes	6.1 (0.6)	6.2 (0.7)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	84.3 (0.8)	84.6 (1.0)	0.6356
	At least once	15.7 (0.8)	15.4 (1.0)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	77.8 (1.3)	78.4 (1.6)	0.6005
	More than a year ago	22.2 (1.3)	21.6 (1.6)	
Do you receive free or reduced price lunches at school?	No	64.7 (1.6)	66.2 (1.9)	0.2252
	Yes	35.3 (1.6)	33.8 (1.9)	
During the past 30 days, on how many days did you smoke cigarettes?	None	89.0 (0.7)	88.7 (0.9)	0.6155
	At least 1 day	11.0 (0.7)	11.3 (0.9)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	73.6 (1.0)	73.3 (1.2)	0.7379
	At least 1 day	26.5 (1.0)	26.7 (1.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	82.0 (0.9)	81.2 (1.1)	0.2384
	At least once	18.0 (0.9)	18.9 (1.1)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	68.0 (1.1)	66.5 (1.3)	0.0901
	At least 1 day	32.0 (1.1)	33.5 (1.3)	
What language is usually spoken at home?	English	82.0 (0.9)	83.8 (1.0)	0.0074
	Other language	18.0 (0.9)	16.2 (1.0)	
How do you describe yourself? (Select one or more responses.)	White	57.8 (1.1)	60.7 (1.4)	0.0011
	Hispanic	23.6 (1.0)	21.7 (1.1)	0.0176
	American Indian/Alaska Native	1.8 (0.3)	1.8 (0.4)	0.9585
	Asian	4.8 (0.5)	4.8 (0.6)	0.9812
	Black/African American	3.1 (0.4)	2.4 (0.4)	0.0253
	Pacific Islander	1.2 (0.3)	1.0 (0.3)	0.3479

95% confidence interval, p-value significant if less than 0.05

Table 3c: Comparison of student characteristics among 12th grade non-optional question takers to optional question takers in census schools.

Question	Options	Did Not Administered Optional Questions Percent (±CI)	Administered Optional Questions Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	68.5 (0.8)	72.3 (0.5)	0.0000
	Mostly C's, D's, or F's	31.5 (0.8)	27.7 (0.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	83.9 (0.6)	85.4 (0.4)	0.0001
	no/mostly & NO/def not true	16.1 (0.6)	14.6 (0.4)	
How far did your mother get in school?	Graduated HS or more	83.8 (0.7)	84.5 (0.5)	0.0800
	Didn't graduate HS	16.2 (0.7)	15.5 (0.5)	
How far did your father get in school?	Graduated HS or more	93.6 (0.5)	93.6 (0.3)	0.9912
	Didn't graduate HS	6.4 (0.5)	6.4 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	84.5 (0.7)	85.3 (0.4)	0.0397
	At least once	15.5 (0.7)	14.7 (0.4)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	76.1 (1.1)	77.4 (0.7)	0.0485
	More than a year ago	23.9 (1.1)	22.6 (0.7)	
Do you receive free or reduced price lunches at school?	No	65.2 (1.3)	65.5 (0.8)	0.6539
	Yes	34.9 (1.3)	34.5 (0.8)	
During the past 30 days, on how many days did you smoke cigarettes?	None	88.6 (0.6)	89.1 (0.4)	0.1480
	At least 1 day	11.4 (0.6)	10.9 (0.4)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	74.3 (0.8)	74.2 (0.5)	0.8753
	At least 1 day	25.7 (0.8)	25.8 (0.5)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	82.7 (0.7)	82.1 (0.5)	0.1292
	At least once	17.3 (0.7)	17.9 (0.5)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	69.0 (0.8)	67.4 (0.6)	0.0018
	At least 1 day	31.0 (0.8)	32.6 (0.6)	
What language is usually spoken at home?	English	79.5 (0.7)	81.1 (0.5)	0.0002
	Other language	20.5 (0.7)	18.9 (0.5)	
How do you describe yourself? (Select one or more responses.)	White	53.8 (0.9)	56.4 (0.6)	0.0000
	Hispanic	20.7 (0.7)	19.3 (0.5)	0.0020
	American Indian/Alaska Native	2.0 (0.2)	1.9 (0.2)	0.2515
	Asian	7.7 (0.5)	8.2 (0.3)	0.1288
	Black/African American	5.0 (0.4)	4.0 (0.2)	0.0000
	Pacific Islander	1.5 (0.2)	1.8 (0.2)	0.0119

95% confidence interval, p-value significant if less than 0.05

Table 3d: Comparison of student characteristics among all 12th grader respondents to optional question takers in census schools (simulating bias).

Question	Options	All Respondents Percent (±CI)	Administered Optional Questions Percent (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	71.1 (0.5)	72.3 (0.5)	0.0017
	Mostly C's, D's, or F's	28.9 (0.5)	27.7 (0.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	84.9 (0.4)	85.4 (0.4)	0.0830
	no/mostly & NO/def not true	15.1 (0.4)	14.6 (0.4)	
How far did your mother get in school?	Graduated HS or more	84.3 (0.4)	84.5 (0.5)	0.4602
	Didn't graduate HS	15.7 (0.4)	15.5 (0.5)	
Living situation due to finances	No	93.6 (0.3)	93.6 (0.3)	0.9962
	Yes	6.4 (0.3)	6.4 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	85.1 (0.4)	85.3 (0.4)	0.3845
	At least once	15.0 (0.4)	14.7 (0.4)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	77.0 (0.6)	77.4 (0.7)	0.4076
	More than a year ago	23.0 (0.6)	22.6 (0.7)	
Do you receive free or reduced price lunches at school?	No	65.4 (0.7)	65.5 (0.8)	0.8539
	Yes	34.6 (0.7)	34.5 (0.8)	
During the past 30 days, on how many days did you smoke cigarettes?	None	89.0 (0.3)	89.1 (0.4)	0.5306
	At least 1 day	11.1 (0.3)	10.9 (0.4)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	74.3 (0.4)	74.2 (0.5)	0.9462
	At least 1 day	25.7 (0.4)	25.8 (0.5)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	82.3 (0.4)	82.1 (0.5)	0.5168
	At least once	17.7 (0.4)	17.9 (0.5)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	67.9 (0.5)	67.4 (0.6)	0.1797
	At least 1 day	32.1 (0.5)	32.6 (0.6)	
What language is usually spoken at home?	English	80.6 (0.4)	81.1 (0.5)	0.1081
	Other language	19.4 (0.4)	18.9 (0.5)	
How do you describe yourself? (Select one or more responses.)	White	55.5 (0.5)	56.4 (0.6)	0.0273
	Hispanic	19.8 (0.4)	19.3 (0.5)	0.1678
	American Indian/Alaska Native	1.9 (0.1)	1.9 (0.2)	0.6080
	Asian	8.0 (0.3)	8.2 (0.3)	0.5007
	Black/African American	4.3 (0.2)	4.0 (0.2)	0.0483
	Pacific Islander	1.7 (0.1)	1.8 (0.2)	0.2694

95% confidence interval, p-value significant if less than 0.05

Appendix E: Comparing Student and School Reported Race/Ethnicity

The analysis of student self-report of race/ethnicity on HYS was compared to school* reported race/ethnicity. The analysis showed that students are less likely to report that they are white non-Hispanic, Hispanic and multi-racial non-Hispanic, but more likely to report that they are American Indian/Alaska Native non-Hispanic, Asian non-Hispanic, Black/African American non-Hispanic, and Pacific Islander non-Hispanic compared to schools. HYS allows students to report “other race”, which may be a factor in the differences between student and school reports.

While students and schools report race/ethnicity different, there were not differences in how students reported race/ethnicity in the state sample schools compared to their report among census schools.

*School reported race/ethnicity provided by OSPI, <http://www.k12.wa.us/DataAdmin/enrollment.aspx>

Table 1a: Comparison of percentage of white non-Hispanic students reported by HYS and OSPI in state sample schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent white	6	83	38.7	1.9	17.2	35.0	42.5	0.0000
OSPI percent white			60.2	2.5	23.1	55.2	65.3	
<i>difference</i>			-21.5	1.2	10.8	-23.8	-19.1	
HYS percent white	8	64	48.1	2.6	20.8	42.9	53.3	0.0000
OSPI percent white			58.9	3.0	24.1	52.9	65.0	
<i>difference</i>			-10.8	1.0	8.1	-12.8	-8.8	
HYS percent white	10	55	57.6	2.9	21.2	51.9	63.3	0.0001
OSPI percent white			62.0	3.0	22.6	55.9	68.1	
<i>difference</i>			-4.4	1.0	7.6	-6.5	-2.4	
HYS percent white	12	60	59.2	3.0	23.6	53.1	65.3	0.0000
OSPI percent white			62.5	3.3	25.2	56.0	69.0	
<i>difference</i>			-3.3	0.7	5.3	-4.7	-2.0	

Table 1b: Comparison of percentage of white non-Hispanic students reported by HYS and OSPI in census schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent white	6	587	36.7	0.7	18.1	35.3	38.2	0.0000
OSPI percent white			56.7	1.0	23.7	54.8	58.6	
<i>difference</i>			-20.0	0.5	12.3	-21.0	-19.0	
HYS percent white	8	445	48.4	1.0	21.1	46.4	50.4	0.0000
OSPI percent white			58.8	1.1	24.1	56.5	61.0	
<i>difference</i>			-10.4	0.4	9.0	-11.2	-9.5	
HYS percent white	10	403	55.4	1.2	24.1	53.0	57.7	0.0000
OSPI percent white			60.5	1.2	25.1	58.0	62.9	
<i>difference</i>			-5.1	0.6	11.2	-6.2	-4.0	
HYS percent white	12	400	56.6	1.2	24.6	54.2	59.0	0.0000
OSPI percent white			60.6	1.2	24.1	58.2	63.0	
<i>difference</i>			-4.0	0.5	9.1	-4.9	-3.1	

Table 2a: Comparison of percentage of Hispanic students reported by HYS and OSPI in state sample schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent Hispanic	6	83	15.6	1.9	17.2	11.8	19.3	0.0000
OSPI percent Hispanic			20.3	2.1	18.8	16.2	24.4	
<i>difference</i>			-4.7	0.5	4.8	-5.8	-3.7	
HYS percent Hispanic	8	64	19.3	2.1	16.8	15.1	23.5	0.0000
OSPI percent Hispanic			22.2	2.3	18.2	17.6	26.7	
<i>difference</i>			-2.9	0.4	3.4	-3.7	-2.1	
HYS percent Hispanic	10	55	21.4	3.0	22.1	15.4	27.4	0.0000
OSPI percent Hispanic			24.1	3.1	23.0	17.9	30.3	
<i>difference</i>			-2.7	0.6	4.6	-4.0	-1.5	
HYS percent Hispanic	12	60	22.3	3.1	23.8	16.1	28.4	0.1926
OSPI percent Hispanic			23.2	3.2	24.8	16.7	29.6	
<i>difference</i>			-0.9	0.7	5.1	-2.2	0.4	

Table 2b: Comparison of percentage of Hispanic students reported by HYS and OSPI in census schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent Hispanic	6	587	16.0	0.7	16.2	14.7	17.4	0.0000
OSPI percent Hispanic			21.7	0.8	19.9	20.0	23.3	
<i>difference</i>			-5.6	0.3	6.1	-6.1	-5.1	
HYS percent Hispanic	8	445	18.3	0.9	19.4	16.5	20.1	0.0000
OSPI percent Hispanic			21.1	1.0	20.3	19.2	23.0	
<i>difference</i>			-2.8	0.2	4.9	-3.2	-2.3	
HYS percent Hispanic	10	403	18.5	1.0	19.7	16.6	20.4	0.0000
OSPI percent Hispanic			20.2	1.0	20.0	18.3	22.2	
<i>difference</i>			-1.7	0.3	7.0	-2.4	-1.0	
HYS percent Hispanic	12	400	19.4	1.0	20.2	17.4	21.4	0.0039
OSPI percent Hispanic			20.3	1.0	20.0	18.4	22.3	
<i>difference</i>			-0.9	0.3	6.5	-1.6	-0.3	

Table 3a: Comparison of percentage of American Indian/Alaska Native non-Hispanic students reported by HYS and OSPI in state sample schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent American Indian	6	83	6.5	0.5	4.8	5.5	7.6	0.0000
OSPI percent American Indian			0.8	0.1	1.3	0.5	1.1	
<i>difference</i>			5.7	0.5	4.6	4.7	6.7	
HYS percent American Indian	8	64	4.1	0.6	4.5	3.0	5.2	0.0000
OSPI percent American Indian			1.2	0.4	2.8	0.5	1.9	
<i>difference</i>			2.9	0.4	2.9	2.2	3.6	
HYS percent American Indian	10	55	2.8	0.5	3.4	1.8	3.7	0.0245
OSPI percent American Indian			1.9	0.5	3.7	0.9	2.9	
<i>difference</i>			0.9	0.4	2.7	0.1	1.6	
HYS percent American Indian	12	60	2.0	0.3	2.4	1.4	2.6	0.0134
OSPI percent American Indian			1.3	0.2	1.8	0.8	1.7	
<i>difference</i>			0.7	0.3	2.1	0.2	1.3	

Table 3b: Comparison of percentage of American Indian/Alaska Native non-Hispanic students reported by HYS and OSPI in census schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent American Indian	6	587	7.4	0.4	8.7	6.7	8.1	0.0000
OSPI percent American Indian			2.2	0.3	8.5	1.5	2.9	
<i>difference</i>			5.1	0.2	5.6	4.7	5.6	
HYS percent American Indian	8	445	5.7	0.5	10.2	4.8	6.7	0.0000
OSPI percent American Indian			3.0	0.5	10.1	2.1	4.0	
<i>difference</i>			2.7	0.2	4.8	2.2	3.1	
HYS percent American Indian	10	403	4.2	0.5	9.1	3.3	5.1	0.0004
OSPI percent American Indian			3.3	0.5	9.7	2.3	4.2	
<i>difference</i>			0.9	0.3	5.2	0.4	1.4	
HYS percent American Indian	12	400	3.8	0.5	10.2	2.8	4.8	0.0007
OSPI percent American Indian			3.2	0.5	9.8	2.2	4.2	
<i>difference</i>			0.6	0.2	3.5	0.3	0.9	

Table 4a: Comparison of percentage of Asian non-Hispanic students reported by HYS and OSPI in state sample schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent Asian	6	83	8.6	1.1	9.6	6.5	10.8	0.0000
OSPI percent Asian			7.4	1.1	9.9	5.2	9.5	
<i>difference</i>			1.3	0.3	2.6	0.7	1.9	
HYS percent Asian	8	64	6.8	1.0	8.1	4.8	8.9	0.0000
OSPI percent Asian			5.7	1.0	8.1	3.7	7.7	
<i>difference</i>			1.1	0.3	2.1	0.6	1.7	
HYS percent Asian	10	55	4.5	0.7	5.2	3.1	5.9	0.1946
OSPI percent Asian			4.0	0.7	5.5	2.5	5.5	
<i>difference</i>			0.5	0.4	2.6	-0.2	1.2	
HYS percent Asian	12	60	3.9	0.6	4.6	2.7	5.0	0.4866
OSPI percent Asian			3.7	0.7	5.3	2.3	5.0	
<i>difference</i>			0.2	0.3	2.0	-0.3	0.7	

Table 4b: Comparison of percentage of Asian non-Hispanic students reported by HYS and OSPI in census schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent Asian	6	587	7.7	0.4	9.3	7.0	8.5	0.0000
OSPI percent Asian			6.6	0.4	9.3	5.9	7.4	
<i>difference</i>			1.1	0.1	2.9	0.9	1.3	
HYS percent Asian	8	445	7.3	0.4	9.1	6.4	8.1	0.0000
OSPI percent Asian			6.1	0.4	9.0	5.2	6.9	
<i>difference</i>			1.2	0.1	2.6	1.0	1.5	
HYS percent Asian	10	403	6.1	0.4	8.9	5.2	7.0	0.0000
OSPI percent Asian			5.4	0.4	8.6	4.6	6.3	
<i>difference</i>			0.7	0.2	3.1	0.4	1.0	
HYS percent Asian	12	400	5.4	0.4	8.0	4.6	6.1	0.3298
OSPI percent Asian			5.2	0.4	8.0	4.4	6.0	
<i>difference</i>			0.2	0.2	3.3	-0.2	0.5	

Table 5a: Comparison of percentage of Black/African American non-Hispanic students reported by HYS and OSPI in state sample schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent Black/African American	6	83	3.9	0.5	4.7	2.9	5.0	0.0453
OSPI percent Black/African American			3.3	0.6	5.5	2.2	4.5	
<i>difference</i>			0.6	0.3	2.7	0.0	1.2	
HYS percent Black/African American	8	64	5.0	0.7	5.9	3.5	6.4	0.3363
OSPI percent Black/African American			4.6	1.0	8.0	2.6	6.6	
<i>difference</i>			0.4	0.4	3.0	-0.4	1.1	
HYS percent Black/African American	10	55	2.7	0.4	3.2	1.8	3.6	0.0217
OSPI percent Black/African American			2.1	0.5	4.1	1.0	3.2	
<i>difference</i>			0.5	0.2	1.7	0.1	1.0	
HYS percent Black/African American	12	60	3.3	0.7	5.4	1.9	4.7	0.9692
OSPI percent Black/African American			3.3	1.0	7.6	1.3	5.2	
<i>difference</i>			0.0	0.6	4.5	-1.1	1.2	

Table 5b: Comparison of percentage of Black/African American non-Hispanic students reported by HYS and OSPI in census schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent Black/African American	6	587	4.7	0.2	5.5	4.2	5.1	0.0000
OSPI percent Black/African American			3.9	0.3	6.9	3.4	4.5	
<i>difference</i>			0.7	0.1	3.1	0.5	1.0	
HYS percent Black/African American	8	445	4.1	0.3	5.6	3.6	4.6	0.0001
OSPI percent Black/African American			3.6	0.3	6.6	3.0	4.2	
<i>difference</i>			0.5	0.1	2.8	0.3	0.8	
HYS percent Black/African American	10	403	3.6	0.3	5.6	3.1	4.2	0.1549
OSPI percent Black/African American			3.3	0.3	6.4	2.7	3.9	
<i>difference</i>			0.3	0.2	4.1	-0.1	0.7	
HYS percent Black/African American	12	400	4.3	0.4	7.8	3.6	5.1	0.1497
OSPI percent Black/African American			3.9	0.4	7.1	3.2	4.6	
<i>difference</i>			0.5	0.3	6.6	-0.2	1.1	

Table 6a: Comparison of percentage of Pacific Islander non-Hispanic students reported by HYS and OSPI in state sample schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent Pacific Islander	6	83	1.7	0.2	2.2	1.2	2.2	0.0000
OSPI percent Pacific Islander			0.9	0.2	1.8	0.6	1.3	
<i>difference</i>			0.8	0.2	1.5	0.4	1.1	
HYS percent Pacific Islander	8	64	1.8	0.3	2.4	1.2	2.4	0.0002
OSPI percent Pacific Islander			1.0	0.3	2.1	0.5	1.5	
<i>difference</i>			0.8	0.2	1.6	0.4	1.2	
HYS percent Pacific Islander	10	55	1.3	0.3	2.2	0.7	1.9	0.0046
OSPI percent Pacific Islander			0.5	0.1	0.9	0.2	0.7	
<i>difference</i>			0.8	0.3	2.0	0.3	1.4	
HYS percent Pacific Islander	12	60	1.3	0.3	2.1	0.7	1.8	0.0013
OSPI percent Pacific Islander			0.6	0.1	1.0	0.3	0.8	
<i>difference</i>			0.7	0.2	1.6	0.3	1.1	

Table 6b: Comparison of percentage of Pacific Islander non-Hispanic students reported by HYS and OSPI in census schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent Pacific Islander	6	587	2.0	0.2	4.9	1.6	2.4	0.0000
OSPI percent /Pacific Islander			1.0	0.1	2.1	0.9	1.2	
<i>difference</i>			0.9	0.2	3.9	0.6	1.3	
HYS percent Pacific Islander	8	445	1.7	0.1	2.3	1.5	1.9	0.0000
OSPI percent /Pacific Islander			0.8	0.1	1.7	0.7	1.0	
<i>difference</i>			0.8	0.1	1.5	0.7	1.0	
HYS percent Pacific Islander	10	403	1.8	0.2	4.6	1.3	2.2	0.0000
OSPI percent /Pacific Islander			0.9	0.1	2.3	0.6	1.1	
<i>difference</i>			0.9	0.2	3.8	0.5	1.3	
HYS percent Pacific Islander	12	400	1.5	0.1	2.9	1.3	1.8	0.0000
OSPI percent /Pacific Islander			0.7	0.1	1.4	0.6	0.8	
<i>difference</i>			0.8	0.1	2.3	0.6	1.1	

Table 7a: Comparison of percentage of multi-racial non-Hispanic students reported by HYS and OSPI in state sample schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent Multi-racial	6	83	6.7	0.4	3.9	5.9	7.6	0.5791
OSPI percent Multi-racial			7.0	0.5	4.5	6.0	8.0	
<i>difference</i>			-0.3	0.5	4.9	-1.4	0.8	
HYS percent Multi-racial	8	64	5.6	0.5	4.3	4.6	6.7	0.1511
OSPI percent Multi-racial			6.4	0.5	4.2	5.4	7.5	
<i>difference</i>			-0.8	0.5	4.3	-1.9	0.3	
HYS percent Multi-racial	10	55	4.8	0.5	3.6	3.8	5.8	0.3313
OSPI percent Multi-racial			5.3	0.5	4.1	4.2	6.4	
<i>difference</i>			-0.5	0.6	4.1	-1.7	0.6	
HYS percent Multi-racial	12	60	4.7	0.6	4.4	3.5	5.8	0.0942
OSPI percent Multi-racial			5.5	0.5	3.9	4.5	6.5	
<i>difference</i>			-0.8	0.5	3.7	-1.8	0.1	

Table 7b: Comparison of percentage of multi-racial non-Hispanic students reported by HYS and OSPI in census schools

Source	Grade	Obs	Mean	Std. Err.	Std. Dev.	95% CI Lower	95% CI Upper	p-value
HYS percent Multi-racial	6	587	6.6	0.2	4.7	6.3	7.0	0.0000
OSPI percent Multi-racial			7.7	0.2	5.6	7.3	8.2	
<i>difference</i>			-1.1	0.2	6.0	-1.6	-0.6	
HYS percent Multi-racial	8	445	5.5	0.2	4.9	5.1	6.0	0.0000
OSPI percent Multi-racial			6.6	0.2	5.3	6.1	7.1	
<i>difference</i>			-1.1	0.2	5.1	-1.5	-0.6	
HYS percent Multi-racial	10	403	5.5	0.3	6.4	4.9	6.1	0.0358
OSPI percent Multi-racial			6.4	0.3	6.9	5.7	7.0	
<i>difference</i>			-0.9	0.4	8.3	-1.7	-0.1	
HYS percent Multi-racial	12	400	5.7	0.3	5.8	5.1	6.2	0.2136
OSPI percent Multi-racial			6.1	0.3	5.2	5.6	6.6	
<i>difference</i>			-0.4	0.3	6.5	-1.0	0.2	

Appendix F: Comparing Student Race/Ethnicity

The analysis of student self-report of race/ethnicity on HYS was compared to school* reported race/ethnicity. The analysis showed that students are less likely to report that they are white non-Hispanic, Hispanic and multi-racial non-Hispanic, but more likely to report that they are American Indian/Alaska Native non-Hispanic, Asian non-Hispanic, Black/African American non-Hispanic, and Pacific Islander non-Hispanic compared to schools. HYS allows students to report “other race”, which may be a factor in the differences between student and school reports.

While students and schools report race/ethnicity different, there were not differences in how students reported race/ethnicity in the state sample schools compared to their report among census schools.

*School reported race/ethnicity provided by OSPI, <http://www.k12.wa.us/DataAdmin/enrollment.aspx>

All Students

Census school respondents were more likely to report:

- Substance use – current alcohol drinking (grade 6) and binge drinking (grade 6)

Table 1a: Comparison of student characteristics among 6th graders in the state sample to census schools.

Question	Options	State Sample	Census	Difference
		Percent (±CI)	Percent (±CI)	p-value
What language is usually spoken at home?	English	81.8 (3.5)	79.1 (1.6)	0.1294
	Other language	18.2 (3.5)	20.9 (1.6)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	85.6 (1.8)	84.0 (0.7)	0.0814
	Mostly Cs, Ds or Fs	14.4 (1.8)	16.0 (0.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	90.1 (1.2)	89.9 (0.4)	0.6755
	no/mostly & NO/def not true	9.9 (1.2)	10.1 (0.4)	
In the last 30 days, how often have you been bullied?	None	72.7 (1.8)	71.8 (0.6)	0.2593
	At least 1 day	27.3 (1.8)	28.2 (0.6)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.9 (0.4)	96.6 (0.2)	0.0961
	At least 1 day	3.1 (0.4)	3.4 (0.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.5 (0.2)	99.3 (0.1)	0.0528
	At least 1 day	0.5 (0.2)	0.7 (0.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	99.2 (0.2)	99.1 (0.1)	0.4865
	At least 1 day	0.8 (0.2)	0.9 (0.1)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	98.2 (0.4)	97.9 (0.2)	0.0445
	At least 1 day	1.8 (0.4)	2.1 (0.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.7 (0.3)	98.3 (0.1)	0.0171
	At least once	1.3 (0.3)	1.7 (0.1)	

95% confidence interval, p-value significant if less than 0.05

Table 1b: Comparison of student characteristics among 8th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	78.3 (5.1)	79.2 (1.7)	0.718
	Other language	21.7 (5.1)	20.9 (1.7)	
How far did your mother get in school?	Graduated HS or more	85.0 (3.3)	86.5 (1.2)	0.3037
	Didn't graduate HS	15.0 (3.3)	13.5 (1.2)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.3 (0.6)	94.5 (0.2)	0.4959
	Yes	5.7 (0.6)	5.5 (0.2)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	89.7 (1.3)	89.7 (0.5)	0.9437
	At least once	10.3 (1.3)	10.3 (0.5)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	76.3 (2.7)	77.7 (0.9)	0.2682
	More than a year ago	23.7 (2.7)	22.3 (0.9)	
Do you receive free or reduced price lunches at school?	No	62.4 (6.6)	64.7 (2.3)	0.4388
	Yes	37.6 (6.6)	35.3 (2.3)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	77.3 (2.7)	78.6 (1.0)	0.2917
	Mostly Cs, Ds or Fs	22.7 (2.7)	21.4 (1.0)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	83.6 (1.7)	83.4 (0.7)	0.8344
	no/mostly & NO/def not true	16.4 (1.7)	16.6 (0.7)	
In the last 30 days, how often have you been bullied?	None	72.6 (1.6)	72.3 (0.6)	0.7213
	At least 1 day	27.4 (1.6)	27.7 (0.6)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.0 (0.5)	96.2 (0.2)	0.5754
	At least 1 day	4.0 (0.5)	3.8 (0.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	96.9 (0.5)	97.0 (0.2)	0.719
	At least 1 day	3.1 (0.5)	3.1 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	93.6 (1.1)	93.8 (0.4)	0.7232
	At least 1 day	6.4 (1.1)	6.3 (0.4)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	92.4 (1.1)	92.3 (0.4)	0.8086
	At least 1 day	7.6 (1.1)	7.7 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	96.0 (0.7)	95.9 (0.3)	0.9417
	At least 1 day	4.0 (0.7)	4.1 (0.3)	
Have you ever had sexual intercourse?	No	92.1 (2.1)	92.1 (0.6)	0.9534
	Yes	7.9 (2.1)	7.9 (0.6)	
Which of the following best describes you?	Straight (heterosexual)	82.4 (1.3)	81.4 (0.6)	0.1741
	Gay, lesbian, or not sure	17.7 (1.3)	18.6 (0.6)	

95% confidence interval, p-value significant if less than 0.05

Table 1c: Comparison of student characteristics among 10th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	80.4 (5.4)	79.3 (1.9)	0.6523
	Other language	19.6 (5.4)	20.7 (1.9)	
How far did your mother get in school?	Graduated HS or more	84.0 (4.0)	85.1 (1.5)	0.5052
	Didn't graduate HS	16.0 (4.0)	14.9 (1.5)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.1 (0.6)	94.0 (0.3)	0.7112
	Yes	5.9 (0.6)	6.0 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	87.6 (1.2)	87.4 (0.6)	0.7828
	At least once	12.4 (1.2)	12.6 (0.6)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	79.8 (1.8)	79.5 (0.9)	0.7201
	More than a year ago	20.2 (1.8)	20.5 (0.9)	
Do you receive free or reduced price lunches at school?	No	65.2 (6.5)	66.3 (2.6)	0.6928
	Yes	34.9 (6.5)	33.7 (2.6)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.0 (2.9)	75.3 (1.3)	0.8349
	Mostly Cs, Ds or Fs	25.0 (2.9)	24.7 (1.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	82.8 (1.8)	82.8 (0.8)	0.9746
	no/mostly & NO/def not true	17.2 (1.8)	17.2 (0.8)	
In the last 30 days, how often have you been bullied?	None	79.3 (1.2)	78.2 (0.6)	0.0524
	At least 1 day	20.7 (1.2)	21.8 (0.6)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	94.0 (0.8)	94.1 (0.4)	0.7216
	At least 1 day	6.0 (0.8)	5.9 (0.4)	
During the past 30 days, on how many days did you smoke cigarettes?	None	93.7 (0.7)	93.3 (0.4)	0.3353
	At least 1 day	6.3 (0.7)	6.7 (0.4)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	82.8 (1.6)	83.8 (0.7)	0.1337
	At least 1 day	17.2 (1.6)	16.2 (0.7)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	79.7 (1.4)	80.3 (0.6)	0.2989
	At least 1 day	20.4 (1.4)	19.7 (0.6)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	89.1 (1.0)	89.5 (0.4)	0.3713
	At least 1 day	10.9 (1.0)	10.5 (0.4)	
Have you ever had sexual intercourse?	No	75.0 (3.1)	76.1 (1.2)	0.4110
	Yes	25.1 (3.1)	23.9 (1.2)	
Which of the following best describes you?	Straight (heterosexual)	81.6 (1.4)	81.8 (0.7)	0.8349
	Gay, lesbian, or not sure	18.4 (1.4)	18.3 (0.7)	

95% confidence interval, p-value significant if less than 0.05

Table 1d: Comparison of student characteristics among 12th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	82.0 (5.4)	80.6 (1.9)	0.5795
	Other language	18.0 (5.4)	19.4 (1.9)	
How far did your mother get in school?	Graduated HS or more	83.2 (4.6)	84.3 (1.6)	0.5740
	Didn't graduate HS	16.8 (4.6)	15.7 (1.6)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	93.9 (0.7)	93.6 (0.3)	0.4601
	Yes	6.1 (0.7)	6.4 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	84.3 (1.8)	85.1 (0.7)	0.3786
	At least once	15.7 (1.8)	15.0 (0.7)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	77.8 (2.7)	77.0 (1.0)	0.4922
	More than a year ago	22.2 (2.7)	23.0 (1.0)	
Do you receive free or reduced price lunches at school?	No	64.7 (7.3)	65.4 (2.6)	0.8268
	Yes	35.3 (7.3)	34.6 (2.6)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	70.8 (2.8)	71.1 (1.3)	0.8285
	Mostly Cs, Ds or Fs	29.2 (2.8)	28.9 (1.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	84.6 (2.1)	84.9 (0.8)	0.7039
	no/mostly & NO/def not true	15.5 (2.1)	15.1 (0.8)	
In the last 30 days, how often have you been bullied?	None	83.1 (1.1)	83.1 (0.5)	0.9634
	At least 1 day	16.9 (1.1)	16.9 (0.5)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	92.5 (1.0)	92.7 (0.5)	0.6460
	At least 1 day	7.5 (1.0)	7.3 (0.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	89.0 (1.5)	89.0 (0.7)	0.9597
	At least 1 day	11.0 (1.5)	11.1 (0.7)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	73.6 (1.8)	74.3 (0.8)	0.3780
	At least 1 day	26.5 (1.8)	25.7 (0.8)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	68.0 (2.3)	67.9 (1.0)	0.9036
	At least 1 day	32.0 (2.3)	32.1 (1.0)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	82.0 (1.6)	82.3 (0.7)	0.6987
	At least 1 day	18.0 (1.6)	17.7 (0.7)	
Have you ever had sexual intercourse?	No	49.0 (2.9)	51.4 (1.4)	0.0860
	Yes	51.0 (2.9)	48.7 (1.4)	
Which of the following best describes you?	Straight (heterosexual)	83.6 (1.5)	82.5 (0.7)	0.6740
	Gay, lesbian, or not sure	16.5 (1.8)	17.5 (0.9)	

95% confidence interval, p-value significant if less than 0.05

White non-Hispanic Students

Census school respondents were more likely to report:

- Non-English language spoken at home (grades 8, 10 and 12)
- Describing themselves as gay, lesbian, bisexual or questioning (grade 8)

Table 2a: Comparison of white non-Hispanic student characteristics among 6th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	96.5 (1.0)	95.7 (0.5)	0.1410
	Other language	3.5 (1.0)	4.3 (0.5)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	89.5 (1.6)	88.4 (0.7)	0.1471
	Mostly Cs, Ds or Fs	10.5 (1.6)	11.6 (0.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	92.2 (1.2)	92.1 (0.4)	0.8114
	no/mostly & NO/def not true	7.8 (1.2)	7.9 (0.4)	
In the last 30 days, how often have you been bullied?	None	74.4 (2.1)	72.6 (0.8)	0.0708
	At least 1 day	25.7 (0.0)	27.4 (0.0)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	97.7 (0.5)	97.2 (0.2)	0.0772
	At least 1 day	2.3 (0.5)	2.8 (0.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.6 (0.2)	99.5 (0.1)	0.3442
	At least 1 day	0.4 (0.2)	0.5 (0.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	99.5 (0.2)	99.4 (0.1)	0.4490
	At least 1 day	0.5 (0.2)	0.6 (0.1)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	98.7 (0.4)	98.5 (0.2)	0.2797
	At least 1 day	1.3 (0.4)	1.5 (0.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	99.2 (0.3)	99.0 (0.1)	0.1902
	At least once	0.8 (0.3)	1.0 (0.1)	

95% confidence interval, p-value significant if less than 0.05

Table 2b: Comparison of white non-Hispanic student characteristics among 8th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	96.8 (0.7)	95.8 (0.4)	0.0240
	Other language	3.2 (0.7)	4.2 (0.4)	
How far did your mother get in school?	Graduated HS or more	93.7 (1.4)	93.8 (0.5)	0.8444
	Didn't graduate HS	6.3 (1.4)	6.2 (0.5)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.8 (0.9)	95.1 (0.3)	0.5154
	Yes	5.2 (0.9)	5.0 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	92.4 (1.3)	91.7 (0.5)	0.3043
	At least once	7.6 (1.3)	8.3 (0.5)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	82.1 (2.9)	82.9 (0.9)	0.5370
	More than a year ago	17.9 (2.9)	17.1 (0.9)	
Do you receive free or reduced price lunches at school?	No	76.5 (5.4)	77.2 (1.7)	0.7730
	Yes	23.5 (5.4)	22.8 (1.7)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	83.8 (2.2)	82.7 (1.0)	0.2861
	Mostly Cs, Ds or Fs	16.2 (2.2)	17.4 (1.0)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	85.7 (2.2)	85.8 (0.7)	0.9190
	no/mostly & NO/def not true	14.3 (2.2)	14.2 (0.7)	
In the last 30 days, how often have you been bullied?	None	71.8 (2.7)	71.1 (0.8)	0.5392
	At least 1 day	28.2 (2.7)	28.9 (0.8)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.7 (0.6)	96.9 (0.2)	0.5788
	At least 1 day	3.3 (0.6)	3.1 (0.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.2 (0.6)	97.3 (0.2)	0.5752
	At least 1 day	2.8 (0.6)	2.7 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	95.6 (1.0)	95.4 (0.4)	0.6363
	At least 1 day	4.4 (1.0)	4.6 (0.4)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	93.8 (0.9)	93.5 (0.4)	0.5855
	At least 1 day	6.2 (0.9)	6.5 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	97.0 (0.6)	97.1 (0.2)	0.5647
	At least 1 day	3.1 (0.6)	2.9 (0.2)	
Have you ever had sexual intercourse?	No	94.0 (1.9)	93.5 (0.7)	0.6078
	Yes	6.0 (1.9)	6.5 (0.7)	
Which of the following best describes you?	Straight (heterosexual)	83.9 (1.7)	81.6 (0.8)	0.0158
	Gay, lesbian, or not sure	16.1 (1.7)	18.4 (0.8)	

95% confidence interval, p-value significant if less than 0.05

Table 2c: Comparison of white non-Hispanic student characteristics among 10th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	97.0 (0.7)	95.6 (0.5)	0.0009
	Other language	3.0 (0.7)	4.4 (0.5)	
How far did your mother get in school?	Graduated HS or more	92.6 (1.3)	92.9 (0.6)	0.6837
	Didn't graduate HS	7.4 (1.3)	7.1 (0.6)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.7 (0.7)	94.5 (0.3)	0.6477
	Yes	5.3 (0.7)	5.5 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	89.6 (1.3)	89.4 (0.6)	0.6734
	At least once	10.4 (1.3)	10.7 (0.6)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	82.6 (1.6)	82.8 (0.8)	0.7655
	More than a year ago	17.5 (1.6)	17.2 (0.8)	
Do you receive free or reduced price lunches at school?	No	78.3 (4.0)	77.5 (1.8)	0.6821
	Yes	21.7 (4.0)	22.5 (1.8)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	79.7 (2.6)	78.8 (1.2)	0.4802
	Mostly Cs, Ds or Fs	20.4 (2.6)	21.2 (1.2)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	85.2 (1.6)	84.6 (0.9)	0.4858
	no/mostly & NO/def not true	14.9 (1.6)	15.4 (0.9)	
In the last 30 days, how often have you been bullied?	None	78.6 (1.4)	77.0 (0.7)	0.0126
	At least 1 day	21.4 (1.4)	23.0 (0.7)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	94.4 (1.0)	94.4 (0.4)	0.9999
	At least 1 day	5.7 (1.0)	5.7 (0.4)	
During the past 30 days, on how many days did you smoke cigarettes?	None	94.0 (0.8)	93.3 (0.5)	0.0998
	At least 1 day	6.0 (0.8)	6.7 (0.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	84.3 (1.8)	84.6 (0.7)	0.6297
	At least 1 day	15.7 (1.8)	15.4 (0.7)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	80.1 (1.7)	80.1 (0.7)	0.9049
	At least 1 day	19.9 (1.7)	20.0 (0.7)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	90.3 (1.1)	90.2 (0.5)	0.8416
	At least 1 day	9.7 (1.1)	9.8 (0.5)	
Have you ever had sexual intercourse?	No	76.7 (2.9)	77.2 (1.3)	0.6951
	Yes	23.3 (2.9)	22.8 (1.3)	
Which of the following best describes you?	Straight (heterosexual)	81.5 (1.7)	82.0 (0.9)	0.5259
	Gay, lesbian, or not sure	18.5 (1.7)	18.0 (0.9)	

95% confidence interval, p-value significant if less than 0.05

Table 2d: Comparison of white non-Hispanic student characteristics among 12th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	97.3 (0.8)	96.2 (0.4)	0.0130
	Other language	2.8 (0.8)	3.8 (0.4)	
How far did your mother get in school?	Graduated HS or more	93.3 (1.3)	92.8 (0.6)	0.3617
	Didn't graduate HS	6.7 (1.3)	7.3 (0.6)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.4 (0.8)	94.2 (0.4)	0.6262
	Yes	5.6 (0.8)	5.8 (0.4)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	86.2 (2.1)	86.9 (0.8)	0.4479
	At least once	13.8 (2.1)	13.1 (0.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	80.3 (3.4)	79.9 (1.2)	0.8084
	More than a year ago	19.7 (3.4)	20.1 (1.2)	
Do you receive free or reduced price lunches at school?	No	78.6 (3.8)	77.3 (1.7)	0.4436
	Yes	21.4 (3.8)	22.8 (1.7)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	74.8 (2.7)	74.3 (1.2)	0.6566
	Mostly Cs, Ds or Fs	25.2 (2.7)	25.7 (1.2)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	85.5 (2.5)	85.9 (0.9)	0.6789
	no/mostly & NO/def not true	14.5 (2.5)	14.1 (0.9)	
In the last 30 days, how often have you been bullied?	None	81.9 (1.4)	82.0 (0.6)	0.8938
	At least 1 day	18.1 (1.4)	18.0 (0.6)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	92.2 (1.3)	92.3 (0.6)	0.8491
	At least 1 day	7.8 (1.3)	7.7 (0.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	88.1 (1.8)	87.8 (0.8)	0.6832
	At least 1 day	11.9 (1.8)	12.2 (0.8)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	73.3 (2.0)	73.5 (0.9)	0.7969
	At least 1 day	26.7 (2.0)	26.5 (0.9)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	66.0 (2.8)	65.6 (1.2)	0.7317
	At least 1 day	34.0 (2.8)	34.4 (1.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	81.1 (2.0)	81.5 (0.9)	0.7131
	At least 1 day	18.9 (2.0)	18.6 (0.9)	
Have you ever had sexual intercourse?	No	49.5 (3.4)	50.1 (1.7)	0.7294
	Yes	50.5 (3.4)	49.9 (1.7)	
Which of the following best describes you?	Straight (heterosexual)	83.3 (1.8)	82.9 (0.9)	0.6617
	Gay, lesbian, or not sure	16.7 (1.8)	17.1 (0.9)	

95% confidence interval, p-value significant if less than 0.05

Hispanic Students

Of the 59 comparison tests conducted, 3 showed statistically significant differences. Given that some associations are expected to be statistically significant just by chance, these results indicate that respondents in the state sample are different from census school respondents for the characteristics assessed.

Census school respondents were more likely to report:

- Describing themselves as gay, lesbian, bisexual or questioning (grade 12)

Census school respondents were less likely to report:

- Low grades in school (grade 8)
- Carrying weapons at school (grade 6)

Table 3a: Comparison of Hispanic student characteristics among 6th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	55.9 (6.2)	52.9 (2.5)	0.3220
	Other language	44.1 (6.2)	47.1 (2.5)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	80.5 (3.0)	79.5 (1.0)	0.4832
	Mostly Cs, Ds or Fs	19.5 (3.0)	20.6 (1.0)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	88.1 (2.0)	89.4 (0.6)	0.1329
	no/mostly & NO/def not true	12.0 (2.0)	10.6 (0.6)	
In the last 30 days, how often have you been bullied?	None	74.0 (2.6)	74.3 (0.9)	0.8095
	At least 1 day	26.1 (2.6)	25.8 (0.9)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	95.5 (1.0)	96.3 (0.3)	0.0471
	At least 1 day	4.5 (1.0)	3.7 (0.3)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.3 (0.4)	99.2 (0.2)	0.7378
	At least 1 day	0.7 (0.4)	0.8 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	98.6 (0.5)	98.8 (0.2)	0.5684
	At least 1 day	1.4 (0.5)	1.2 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	97.6 (0.9)	97.2 (0.4)	0.4304
	At least 1 day	2.4 (0.9)	2.8 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.1 (0.8)	97.8 (0.3)	0.5441
	At least once	1.9 (0.8)	2.2 (0.3)	

95% confidence interval, p-value significant if less than 0.05

Table 3b: Comparison of Hispanic student characteristics among 8th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	44.2 (5.5)	46.7 (2.5)	0.3524
	Other language	55.8 (5.5)	53.4 (2.5)	
How far did your mother get in school?	Graduated HS or more	60.0 (4.9)	62.7 (2.3)	0.2601
	Didn't graduate HS	40.0 (4.9)	37.3 (2.3)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.7 (1.1)	94.4 (0.4)	0.6700
	Yes	5.4 (1.1)	5.6 (0.4)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	87.5 (1.9)	87.4 (0.7)	0.9045
	At least once	12.5 (1.9)	12.6 (0.7)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	70.3 (4.4)	71.4 (1.5)	0.5695
	More than a year ago	29.8 (4.4)	28.6 (1.5)	
Do you receive free or reduced price lunches at school?	No	37.5 (5.8)	36.8 (2.6)	0.8050
	Yes	62.6 (5.8)	63.2 (2.6)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	65.5 (3.3)	69.2 (1.5)	0.0144
	Mostly Cs, Ds or Fs	34.5 (3.3)	30.8 (1.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	81.9 (2.3)	80.8 (1.2)	0.3355
	no/mostly & NO/def not true	18.1 (2.3)	19.3 (1.2)	
In the last 30 days, how often have you been bullied?	None	75.9 (2.1)	75.3 (0.9)	0.5579
	At least 1 day	24.1 (2.1)	24.7 (0.9)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	95.0 (1.2)	95.3 (0.5)	0.6864
	At least 1 day	5.0 (1.2)	4.8 (0.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	96.8 (0.9)	96.7 (0.4)	0.8070
	At least 1 day	3.2 (0.9)	3.3 (0.4)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	90.3 (1.9)	90.1 (0.7)	0.8251
	At least 1 day	9.7 (1.9)	9.9 (0.7)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	89.1 (2.6)	88.8 (0.8)	0.8075
	At least 1 day	11.0 (2.6)	11.3 (0.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	94.1 (1.3)	93.3 (0.5)	0.2301
	At least 1 day	6.0 (1.3)	6.7 (0.5)	
Have you ever had sexual intercourse?	No	89.5 (4.5)	90.4 (1.3)	0.6449
	Yes	10.5 (4.5)	9.6 (1.3)	
Which of the following best describes you?	Straight (heterosexual)	85.2 (2.5)	84.2 (1.2)	0.4185
	Gay, lesbian, or not sure	14.8 (2.5)	15.8 (1.2)	

95% confidence interval, p-value significant if less than 0.05

Table 3c: Comparison of Hispanic student characteristics among 10th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	43.4 (5.5)	45.0 (2.6)	0.4954
	Other language	56.7 (5.5)	55.0 (2.6)	
How far did your mother get in school?	Graduated HS or more	57.8 (5.5)	58.4 (2.5)	0.7952
	Didn't graduate HS	42.2 (5.5)	41.6 (2.5)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	93.5 (1.3)	93.4 (0.5)	0.7652
	Yes	6.5 (1.3)	6.6 (0.5)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	85.4 (1.2)	84.5 (0.8)	0.1189
	At least once	14.6 (1.2)	15.6 (0.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	77.0 (3.0)	75.9 (1.3)	0.4067
	More than a year ago	23.0 (3.0)	24.1 (1.3)	
Do you receive free or reduced price lunches at school?	No	33.7 (7.1)	36.8 (3.1)	0.3109
	Yes	66.3 (7.1)	63.2 (3.1)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	63.9 (3.1)	64.2 (1.4)	0.8239
	Mostly Cs, Ds or Fs	36.1 (3.1)	35.8 (1.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	80.5 (1.9)	80.3 (1.1)	0.8402
	no/mostly & NO/def not true	19.6 (1.9)	19.7 (1.1)	
In the last 30 days, how often have you been bullied?	None	82.4 (1.8)	81.2 (1.0)	0.1366
	At least 1 day	17.6 (1.8)	18.8 (1.0)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	94.2 (1.0)	94.3 (0.5)	0.8049
	At least 1 day	5.8 (1.0)	5.7 (0.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	94.3 (1.1)	93.9 (0.6)	0.4527
	At least 1 day	5.7 (1.1)	6.1 (0.6)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	80.3 (1.9)	80.5 (1.0)	0.7540
	At least 1 day	19.7 (1.9)	19.5 (1.0)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	78.2 (2.3)	77.3 (1.0)	0.3763
	At least 1 day	21.8 (2.3)	22.7 (1.0)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	87.0 (1.8)	86.8 (0.7)	0.7819
	At least 1 day	13.0 (1.8)	13.2 (0.7)	
Have you ever had sexual intercourse?	No	69.5 (3.3)	71.4 (1.6)	0.1972
	Yes	30.5 (3.3)	28.6 (1.6)	
Which of the following best describes you?	Straight (heterosexual)	84.5 (1.9)	84.0 (1.0)	0.5753
	Gay, lesbian, or not sure	15.5 (1.9)	16.0 (1.0)	

95% confidence interval, p-value significant if less than 0.05

Table 3d: Comparison of Hispanic student characteristics among 12th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	45.5 (5.6)	45.0 (2.6)	0.8375
	Other language	54.5 (5.6)	55.0 (2.6)	
How far did your mother get in school?	Graduated HS or more	53.0 (5.7)	55.4 (2.6)	0.3145
	Didn't graduate HS	47.1 (5.7)	44.6 (2.6)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	93.5 (1.5)	93.2 (0.6)	0.5665
	Yes	6.5 (1.5)	6.8 (0.6)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	81.0 (1.7)	81.4 (0.9)	0.5971
	At least once	19.0 (1.7)	18.6 (0.9)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	76.0 (3.0)	74.5 (1.4)	0.2530
	More than a year ago	24.0 (3.0)	25.6 (1.4)	
Do you receive free or reduced price lunches at school?	No	29.7 (8.6)	33.5 (3.4)	0.2990
	Yes	70.3 (8.6)	66.5 (3.4)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	61.9 (3.5)	60.6 (1.5)	0.4400
	Mostly Cs, Ds or Fs	38.2 (3.5)	39.4 (1.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	82.9 (2.1)	83.4 (1.1)	0.6058
	no/mostly & NO/def not true	17.1 (2.1)	16.6 (1.1)	
In the last 30 days, how often have you been bullied?	None	85.8 (1.5)	85.1 (0.9)	0.2943
	At least 1 day	14.2 (1.5)	14.9 (0.9)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	94.2 (1.2)	94.1 (0.6)	0.8086
	At least 1 day	5.8 (1.2)	5.9 (0.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	92.6 (1.4)	91.7 (0.8)	0.1546
	At least 1 day	7.4 (1.4)	8.3 (0.8)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	74.7 (1.9)	74.5 (1.2)	0.7719
	At least 1 day	25.3 (1.9)	25.6 (1.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	70.9 (2.0)	69.0 (1.1)	0.0524
	At least 1 day	29.1 (2.0)	31.0 (1.1)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	82.3 (1.9)	81.8 (0.9)	0.5829
	At least 1 day	17.7 (1.9)	18.2 (0.9)	
Have you ever had sexual intercourse?	No	46.7 (3.9)	49.2 (2.2)	0.1803
	Yes	53.3 (3.9)	50.8 (2.2)	
Which of the following best describes you?	Straight (heterosexual)	87.1 (2.0)	84.8 (1.3)	0.0218
	Gay, lesbian, or not sure	12.9 (2.0)	15.2 (1.3)	

95% confidence interval, p-value significant if less than 0.05

American Indian/Alaska Native non-Hispanic Students

Census school respondents were more likely to report:

- Non-English language spoken at home (grade 6)

Census school respondents were less likely to report:

- Low grades in school (grade 10)
- Ever had sex (grade 10)

Table 4a: Comparison of American Indian/Alaska Native non-Hispanic student characteristics among 6th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	93.3 (2.2)	90.6 (1.4)	0.0334
	Other language	6.7 (2.2)	9.4 (1.4)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	81.6 (3.0)	80.1 (1.2)	0.3231
	Mostly Cs, Ds or Fs	18.4 (3.0)	19.9 (1.2)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	89.1 (2.0)	89.1 (0.8)	0.9471
	no/mostly & NO/def not true	10.9 (2.0)	10.9 (0.8)	
In the last 30 days, how often have you been bullied?	None	73.7 (3.7)	70.8 (1.4)	0.1061
	At least 1 day	26.3 (3.7)	29.2 (1.4)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.5 (1.2)	96.4 (0.5)	0.8306
	At least 1 day	3.5 (1.2)	3.7 (0.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.6 (0.4)	99.2 (0.2)	0.1660
	At least 1 day	0.4 (0.4)	0.8 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	98.8 (0.8)	98.9 (0.3)	0.8901
	At least 1 day	1.2 (0.8)	1.1 (0.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	98.5 (0.7)	98.3 (0.3)	0.6064
	At least 1 day	1.5 (0.7)	1.7 (0.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.9 (0.6)	98.2 (0.3)	0.0701
	At least once	1.1 (0.6)	1.8 (0.3)	

95% confidence interval, p-value significant if less than 0.05

Table 4b: Comparison of American Indian/Alaska Native non-Hispanic student characteristics among 8th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	90.0 (3.6)	91.1 (1.3)	0.4985
	Other language	10.1 (3.6)	9.0 (1.3)	
How far did your mother get in school?	Graduated HS or more	83.6 (4.4)	85.7 (1.5)	0.2997
	Didn't graduate HS	16.4 (4.4)	14.3 (1.5)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	90.1 (3.4)	91.7 (1.1)	0.2703
	Yes	9.9 (3.4)	8.4 (1.1)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	83.1 (4.9)	84.9 (1.4)	0.3876
	At least once	16.9 (4.9)	15.1 (1.4)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	69.1 (7.5)	69.4 (2.5)	0.9186
	More than a year ago	31.0 (7.5)	30.6 (2.5)	
Do you receive free or reduced price lunches at school?	No	56.3 (8.6)	56.9 (3.6)	0.8951
	Yes	43.7 (8.6)	43.1 (3.6)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	68.9 (4.6)	68.2 (2.1)	0.7527
	Mostly Cs, Ds or Fs	31.1 (4.6)	31.8 (2.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	81.6 (3.6)	80.9 (1.5)	0.6871
	no/mostly & NO/def not true	18.4 (3.6)	19.1 (1.5)	
In the last 30 days, how often have you been bullied?	None	67.8 (4.0)	67.7 (1.7)	0.9818
	At least 1 day	32.2 (4.0)	32.3 (1.7)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.8 (1.6)	95.2 (0.8)	0.1041
	At least 1 day	3.2 (1.6)	4.8 (0.8)	
During the past 30 days, on how many days did you smoke cigarettes?	None	94.5 (2.3)	94.8 (0.8)	0.7380
	At least 1 day	5.5 (2.3)	5.2 (0.8)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	91.0 (2.5)	91.1 (1.2)	0.8864
	At least 1 day	9.1 (2.5)	8.9 (1.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	92.2 (2.6)	92.1 (1.0)	0.9013
	At least 1 day	7.8 (2.6)	7.9 (1.0)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	93.9 (2.5)	95.2 (0.8)	0.2108
	At least 1 day	6.1 (2.5)	4.8 (0.8)	
Have you ever had sexual intercourse?	No	92.3 (5.7)	88.3 (2.3)	0.2285
	Yes	7.7 (5.7)	11.7 (2.3)	
Which of the following best describes you?	Straight (heterosexual)	73.1 (4.7)	77.3 (2.2)	0.0695
	Gay, lesbian, or not sure	26.9 (4.7)	22.7 (2.2)	

95% confidence interval, p-value significant if less than 0.05

Table 4c: Comparison of American Indian/Alaska Native non-Hispanic student characteristics among 10th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	89.3 (4.0)	87.4 (2.0)	0.3413
	Other language	10.7 (4.0)	12.6 (2.0)	
How far did your mother get in school?	Graduated HS or more	81.5 (4.6)	82.1 (2.5)	0.7701
	Didn't graduate HS	18.5 (4.6)	17.9 (2.5)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	92.1 (3.4)	91.4 (1.5)	0.6671
	Yes	7.9 (3.4)	8.6 (1.5)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	77.1 (5.0)	77.9 (2.2)	0.7033
	At least once	22.9 (5.0)	22.1 (2.2)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	67.5 (9.1)	70.3 (3.6)	0.4734
	More than a year ago	32.5 (9.1)	29.7 (3.6)	
Do you receive free or reduced price lunches at school?	No	56.5 (12.5)	55.7 (4.6)	0.8835
	Yes	43.5 (12.5)	44.3 (4.6)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	54.4 (5.6)	60.0 (2.8)	0.0279
	Mostly Cs, Ds or Fs	45.6 (5.6)	40.0 (2.8)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	79.1 (5.4)	77.0 (2.2)	0.4162
	no/mostly & NO/def not true	21.0 (5.4)	23.0 (2.2)	
In the last 30 days, how often have you been bullied?	None	71.3 (5.3)	72.5 (2.2)	0.6161
	At least 1 day	28.7 (5.3)	27.5 (2.2)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	90.2 (3.9)	90.4 (1.6)	0.9172
	At least 1 day	9.8 (3.9)	9.6 (1.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	88.5 (4.1)	87.4 (1.8)	0.5767
	At least 1 day	11.6 (4.1)	12.6 (1.8)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	75.6 (5.2)	76.4 (2.4)	0.7447
	At least 1 day	24.4 (5.2)	23.6 (2.4)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	76.0 (5.2)	76.3 (2.3)	0.9052
	At least 1 day	24.0 (5.2)	23.7 (2.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	83.5 (4.6)	84.7 (2.0)	0.5761
	At least 1 day	16.5 (4.6)	15.4 (2.0)	
Have you ever had sexual intercourse?	No	56.2 (9.8)	64.6 (4.4)	0.0490*
	Yes	43.8 (9.8)	35.4 (4.4)	
Which of the following best describes you?	Straight (heterosexual)	74.7 (6.6)	76.8 (2.7)	0.4708
	Gay, lesbian, or not sure	25.3 (6.6)	23.2 (2.7)	

95% confidence interval, p-value significant if less than 0.05

*Not significant when adjusted for gender

Table 4d: Comparison of American Indian/Alaska Native non-Hispanic student characteristics among 12th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	90.1 (5.0)	90.6 (2.2)	0.8457
	Other language	9.9 (5.0)	9.4 (2.2)	
How far did your mother get in school?	Graduated HS or more	83.0 (6.5)	83.6 (2.9)	0.8312
	Didn't graduate HS	17.0 (6.5)	16.4 (2.9)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	90.3 (5.3)	90.9 (2.1)	0.8121
	Yes	9.7 (5.3)	9.1 (2.1)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	80.4 (6.3)	78.5 (2.8)	0.5290
	At least once	19.6 (6.3)	21.5 (2.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	64.1 (10.3)	67.6 (4.6)	0.4607
	More than a year ago	35.9 (10.3)	32.5 (4.6)	
Do you receive free or reduced price lunches at school?	No	56.9 (14.1)	53.0 (6.2)	0.5424
	Yes	43.1 (14.1)	47.0 (6.2)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	57.5 (7.2)	60.1 (3.7)	0.4442
	Mostly Cs, Ds or Fs	42.5 (7.2)	39.9 (3.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	74.7 (7.2)	79.8 (2.7)	0.0782
	no/mostly & NO/def not true	25.3 (7.2)	20.2 (2.7)	
In the last 30 days, how often have you been bullied?	None	77.3 (7.2)	79.1 (2.8)	0.5662
	At least 1 day	22.7 (7.2)	20.9 (2.8)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	90.1 (5.3)	89.1 (2.3)	0.6876
	At least 1 day	9.9 (5.3)	10.9 (2.3)	
During the past 30 days, on how many days did you smoke cigarettes?	None	84.8 (4.9)	81.5 (2.7)	0.2052
	At least 1 day	15.2 (4.9)	18.5 (2.7)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	68.9 (6.7)	66.8 (3.0)	0.5020
	At least 1 day	31.1 (6.7)	33.2 (3.0)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	68.3 (8.3)	67.8 (3.3)	0.8987
	At least 1 day	31.7 (8.3)	32.2 (3.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	80.3 (5.3)	78.8 (2.7)	0.5701
	At least 1 day	19.8 (5.3)	21.2 (2.7)	
Have you ever had sexual intercourse?	No	41.1 (12.0)	41.4 (6.0)	0.9535
	Yes	58.9 (12.0)	58.6 (6.0)	
Which of the following best describes you?	Straight (heterosexual)	79.8 (7.2)	77.9 (3.4)	0.5806
	Gay, lesbian, or not sure	20.2 (7.2)	22.1 (3.4)	

95% confidence interval, p-value significant if less than 0.05

Asian non-Hispanic Students

Census school respondents were more likely to report:

- Non-English language spoken at home (grades 10 and 12)

Census school respondents were less likely to report:

- Low grades in school (grades 8 and 12)
- Feeling unsafe at school (grade 12)
- Current cigarette smoking (grade 12)
- Ever having sex (grade 12)

Table 5a: Comparison of Asian non-Hispanic student characteristics among 6th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	70.4 (5.9)	69.9 (2.4)	0.8494
	Other language	29.6 (5.9)	30.1 (2.4)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	87.6 (3.1)	88.5 (1.1)	0.5125
	Mostly Cs, Ds or Fs	12.4 (3.1)	11.5 (1.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	92.2 (1.6)	91.3 (0.7)	0.2485
	no/mostly & NO/def not true	7.8 (1.6)	8.7 (0.7)	
In the last 30 days, how often have you been bullied?	None	77.6 (2.9)	75.3 (1.1)	0.1005
	At least 1 day	22.4 (2.9)	24.7 (1.1)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.8 (0.8)	97.1 (0.4)	0.4339
	At least 1 day	3.2 (0.8)	3.0 (0.4)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.5 (0.4)	99.6 (0.1)	0.4885
	At least 1 day	0.5 (0.4)	0.4 (0.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	99.7 (0.3)	99.5 (0.2)	0.3158
	At least 1 day	0.3 (0.3)	0.5 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	98.6 (0.7)	98.7 (0.2)	0.5287
	At least 1 day	1.5 (0.7)	1.3 (0.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	99.2 (0.5)	99.0 (0.2)	0.3494
	At least once	0.8 (0.5)	1.1 (0.2)	

95% confidence interval, p-value significant if less than 0.05

Table 5b: Comparison of Asian non-Hispanic student characteristics among 8th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	62.8 (8.1)	60.3 (2.4)	0.5145
	Other language	37.2 (8.1)	39.7 (2.4)	
How far did your mother get in school?	Graduated HS or more	88.2 (4.9)	90.7 (1.5)	0.2264
	Didn't graduate HS	11.8 (4.9)	9.3 (1.5)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.2 (2.2)	95.2 (0.6)	0.3281
	Yes	5.8 (2.2)	4.8 (0.6)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	90.6 (3.3)	92.7 (0.9)	0.1179
	At least once	9.4 (3.3)	7.3 (0.9)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	74.9 (4.4)	78.4 (1.8)	0.0923
	More than a year ago	25.1 (4.4)	21.6 (1.8)	
Do you receive free or reduced price lunches at school?	No	64.3 (9.8)	72.5 (3.4)	0.0581
	Yes	35.8 (9.8)	27.5 (3.4)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	85.6 (3.3)	89.3 (1.3)	0.0097
	Mostly Cs, Ds or Fs	14.4 (3.3)	10.7 (1.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	84.3 (2.0)	85.8 (1.3)	0.1860
	no/mostly & NO/def not true	15.7 (2.0)	14.2 (1.3)	
In the last 30 days, how often have you been bullied?	None	75.1 (3.3)	77.0 (1.3)	0.2188
	At least 1 day	24.9 (3.3)	23.0 (1.3)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	97.2 (1.0)	97.3 (0.4)	0.8425
	At least 1 day	2.8 (1.0)	2.7 (0.4)	
During the past 30 days, on how many days did you smoke cigarettes?	None	98.4 (0.8)	98.4 (0.4)	0.8897
	At least 1 day	1.6 (0.8)	1.7 (0.4)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	97.3 (1.0)	97.3 (0.5)	0.9781
	At least 1 day	2.7 (1.0)	2.7 (0.5)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	95.4 (1.6)	95.9 (0.5)	0.4893
	At least 1 day	4.6 (1.6)	4.1 (0.5)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	97.5 (1.1)	97.7 (0.4)	0.7126
	At least 1 day	2.5 (1.1)	2.3 (0.4)	
Have you ever had sexual intercourse?	No	92.4 (3.7)	95.2 (1.1)	0.0523
	Yes	7.6 (3.7)	4.8 (1.1)	
Which of the following best describes you?	Straight (heterosexual)	80.9 (3.6)	80.7 (1.3)	0.9208
	Gay, lesbian, or not sure	19.1 (3.6)	19.3 (1.3)	

95% confidence interval, p-value significant if less than 0.05

Table 5c: Comparison of Asian non-Hispanic student characteristics among 10th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	64.5 (7.7)	54.6 (2.4)	0.0098*
	Other language	35.5 (7.7)	45.4 (2.4)	
How far did your mother get in school?	Graduated HS or more	88.8 (4.6)	88.2 (2.0)	0.7932
	Didn't graduate HS	11.2 (4.6)	11.8 (2.0)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.7 (1.9)	94.7 (0.7)	0.9782
	Yes	5.3 (1.9)	5.3 (0.7)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	92.2 (2.9)	91.7 (1.0)	0.7280
	At least once	7.8 (2.9)	8.3 (1.0)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	80.8 (5.0)	79.7 (2.0)	0.6620
	More than a year ago	19.2 (5.0)	20.3 (2.0)	
Do you receive free or reduced price lunches at school?	No	73.8 (8.5)	73.5 (3.7)	0.9474
	Yes	26.2 (8.5)	26.5 (3.7)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	86.7 (3.8)	88.3 (1.3)	0.3462
	Mostly Cs, Ds or Fs	13.3 (3.8)	11.7 (1.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	83.0 (3.8)	86.4 (1.4)	0.0485*
	no/mostly & NO/def not true	17.0 (3.8)	13.6 (1.4)	
In the last 30 days, how often have you been bullied?	None	84.4 (3.7)	83.4 (1.2)	0.5986
	At least 1 day	15.6 (3.7)	16.6 (1.2)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.1 (1.8)	96.5 (0.6)	0.6181
	At least 1 day	3.9 (1.8)	3.5 (0.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.0 (1.4)	97.0 (0.5)	0.9199
	At least 1 day	3.0 (1.4)	3.0 (0.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	90.3 (2.9)	92.3 (1.0)	0.1058
	At least 1 day	9.7 (2.9)	7.7 (1.0)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	87.1 (2.7)	89.2 (1.2)	0.0859
	At least 1 day	13.0 (2.7)	10.8 (1.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	93.7 (2.3)	94.9 (0.7)	0.2124
	At least 1 day	6.3 (2.3)	5.1 (0.7)	
Have you ever had sexual intercourse?	No	91.0 (3.7)	87.4 (1.8)	0.0892
	Yes	9.0 (3.7)	12.6 (1.8)	
Which of the following best describes you?	Straight (heterosexual)	82.7 (2.6)	83.7 (1.3)	0.4710
	Gay, lesbian, or not sure	17.3 (2.6)	16.3 (1.3)	

95% confidence interval, p-value significant if less than 0.05

*Not significant when adjusted for gender

Table 5d: Comparison of Asian non-Hispanic student characteristics among 12th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	61.2 (7.5)	53.7 (3.1)	0.0483
	Other language	38.8 (7.5)	46.3 (3.1)	
How far did your mother get in school?	Graduated HS or more	84.5 (5.1)	87.3 (2.5)	0.2500
	Didn't graduate HS	15.5 (5.1)	12.7 (2.5)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	96.4 (1.8)	94.9 (1.0)	0.1660
	Yes	3.6 (1.8)	5.1 (1.0)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	87.5 (3.8)	89.8 (1.3)	0.1720
	At least once	12.5 (3.8)	10.2 (1.3)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	75.9 (6.6)	77.6 (2.4)	0.5956
	More than a year ago	24.1 (6.6)	22.4 (2.4)	
Do you receive free or reduced price lunches at school?	No	64.0 (9.7)	71.7 (4.2)	0.0936
	Yes	36.1 (9.7)	28.3 (4.2)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	78.7 (5.3)	84.4 (2.0)	0.0146
	Mostly Cs, Ds or Fs	21.3 (5.3)	15.6 (2.0)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	84.0 (3.9)	87.5 (1.5)	0.0390
	no/mostly & NO/def not true	16.0 (3.9)	12.5 (1.5)	
In the last 30 days, how often have you been bullied?	None	85.2 (3.3)	86.4 (1.4)	0.4568
	At least 1 day	14.8 (3.3)	13.6 (1.4)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	93.5 (2.9)	95.4 (0.8)	0.1004
	At least 1 day	6.5 (2.9)	4.6 (0.8)	
During the past 30 days, on how many days did you smoke cigarettes?	None	90.9 (2.9)	94.1 (1.0)	0.0073
	At least 1 day	9.1 (2.9)	5.9 (1.0)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	81.4 (4.5)	84.8 (1.6)	0.0955
	At least 1 day	18.6 (4.5)	15.2 (1.6)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	76.7 (4.0)	77.3 (1.8)	0.7503
	At least 1 day	23.3 (4.0)	22.7 (1.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	87.7 (2.6)	89.1 (1.2)	0.2577
	At least 1 day	12.3 (2.6)	10.9 (1.2)	
Have you ever had sexual intercourse?	No	63.2 (9.1)	71.4 (2.7)	0.0408
	Yes	36.8 (9.1)	28.6 (2.7)	
Which of the following best describes you?	Straight (heterosexual)	86.4 (3.5)	83.6 (1.6)	0.1411
	Gay, lesbian, or not sure	13.6 (3.5)	16.4 (1.6)	

95% confidence interval, p-value significant if less than 0.05

Black/African American non-Hispanic Students

Census school respondents were less likely to report:

- Carrying a weapon at school (grade 12)

Table 6a: Comparison of Black/African American non-Hispanic student characteristics among 6th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	87.4 (3.2)	85.8 (1.6)	0.3629
	Other language	12.6 (3.2)	14.2 (1.6)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	80.5 (3.6)	81.2 (1.2)	0.7023
	Mostly Cs, Ds or Fs	19.5 (3.6)	18.8 (1.2)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	88.7 (2.4)	89.5 (0.9)	0.5000
	no/mostly & NO/def not true	11.3 (2.4)	10.5 (0.9)	
In the last 30 days, how often have you been bullied?	None	76.3 (3.4)	74.2 (1.3)	0.2109
	At least 1 day	23.7 (3.4)	25.8 (1.3)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.3 (1.3)	96.4 (0.5)	0.7852
	At least 1 day	3.8 (1.3)	3.6 (0.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.4 (0.5)	99.4 (0.2)	0.9972
	At least 1 day	0.7 (0.5)	0.7 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	99.1 (0.7)	99.1 (0.3)	0.9374
	At least 1 day	0.9 (0.7)	0.9 (0.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	98.7 (0.8)	98.4 (0.3)	0.5829
	At least 1 day	1.3 (0.8)	1.6 (0.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.1 (1.0)	98.1 (0.4)	0.9730
	At least once	1.9 (1.0)	1.9 (0.4)	

95% confidence interval, p-value significant if less than 0.05

Table 6b: Comparison of Black/African American non-Hispanic student characteristics among 8th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	84.4 (6.2)	82.3 (2.1)	0.4857
	Other language	15.6 (6.2)	17.7 (2.1)	
How far did your mother get in school?	Graduated HS or more	86.8 (3.7)	87.4 (1.4)	0.7208
	Didn't graduate HS	13.2 (3.7)	12.6 (1.4)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	92.6 (2.8)	93.1 (1.0)	0.6879
	Yes	7.4 (2.8)	6.9 (1.0)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	87.5 (3.4)	87.2 (1.2)	0.8762
	At least once	12.6 (3.4)	12.8 (1.2)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	71.4 (5.9)	70.9 (2.3)	0.8522
	More than a year ago	28.6 (5.9)	29.1 (2.3)	
Do you receive free or reduced price lunches at school?	No	53.4 (9.0)	53.5 (3.2)	0.9868
	Yes	46.6 (9.0)	46.5 (3.2)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	73.8 (4.5)	73.1 (1.7)	0.7437
	Mostly Cs, Ds or Fs	26.2 (4.5)	26.9 (1.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	81.9 (3.7)	81.1 (1.5)	0.6720
	no/mostly & NO/def not true	18.2 (3.7)	18.9 (1.5)	
In the last 30 days, how often have you been bullied?	None	77.4 (3.0)	75.5 (1.6)	0.2206
	At least 1 day	22.6 (3.0)	24.5 (1.6)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	95.9 (1.5)	95.0 (0.7)	0.2843
	At least 1 day	4.1 (1.5)	5.0 (0.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	96.0 (1.8)	96.2 (0.6)	0.7861
	At least 1 day	4.1 (1.8)	3.8 (0.6)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	92.6 (2.8)	92.5 (1.0)	0.9313
	At least 1 day	7.4 (2.8)	7.6 (1.0)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	93.3 (2.0)	92.7 (0.9)	0.5271
	At least 1 day	6.7 (2.0)	7.3 (0.9)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	94.9 (1.9)	95.2 (0.8)	0.7729
	At least 1 day	5.1 (1.9)	4.8 (0.8)	
Have you ever had sexual intercourse?	No	89.5 (6.9)	87.6 (2.3)	0.6007
	Yes	10.5 (6.9)	12.4 (2.3)	
Which of the following best describes you?	Straight (heterosexual)	81.3 (4.8)	81.9 (1.9)	0.7804
	Gay, lesbian, or not sure	18.8 (4.8)	18.1 (1.9)	

95% confidence interval, p-value significant if less than 0.05

Table 6c: Comparison of Black/African American non-Hispanic student characteristics among 10th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	82.5 (6.6)	79.7 (2.6)	0.3941
	Other language	17.5 (6.6)	20.4 (2.6)	
How far did your mother get in school?	Graduated HS or more	84.1 (4.7)	84.8 (1.8)	0.7576
	Didn't graduate HS	15.9 (4.7)	15.3 (1.8)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	93.1 (2.6)	92.7 (1.0)	0.7406
	Yes	6.9 (2.6)	7.4 (1.0)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	82.5 (4.2)	81.7 (1.7)	0.7189
	At least once	17.6 (4.2)	18.3 (1.7)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	74.6 (5.3)	71.5 (2.6)	0.2464
	More than a year ago	25.4 (5.3)	28.5 (2.6)	
Do you receive free or reduced price lunches at school?	No	56.4 (8.9)	51.6 (3.7)	0.2551
	Yes	43.6 (8.9)	48.4 (3.7)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	64.2 (4.9)	66.5 (2.3)	0.3206
	Mostly Cs, Ds or Fs	35.8 (4.9)	33.5 (2.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	77.5 (5.1)	76.8 (2.0)	0.7552
	no/mostly & NO/def not true	22.5 (5.1)	23.2 (2.0)	
In the last 30 days, how often have you been bullied?	None	79.8 (3.5)	79.5 (1.5)	0.8637
	At least 1 day	20.2 (3.5)	20.5 (1.5)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	89.4 (3.9)	91.8 (1.2)	0.1344
	At least 1 day	10.6 (3.9)	8.2 (1.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	92.6 (3.2)	91.8 (1.1)	0.6056
	At least 1 day	7.4 (3.2)	8.2 (1.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	79.7 (4.9)	80.2 (1.7)	0.8034
	At least 1 day	20.3 (4.9)	19.8 (1.7)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	80.2 (4.1)	81.5 (1.6)	0.4686
	At least 1 day	19.8 (4.1)	18.5 (1.6)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	84.1 (5.6)	88.0 (1.4)	0.0751
	At least 1 day	15.9 (5.6)	12.0 (1.4)	
Have you ever had sexual intercourse?	No	65.9 (13.8)	70.9 (3.5)	0.3863
	Yes	34.1 (13.8)	29.1 (3.5)	
Which of the following best describes you?	Straight (heterosexual)	78.4 (5.5)	80.2 (2.0)	0.4572
	Gay, lesbian, or not sure	21.7 (5.5)	19.8 (2.0)	

95% confidence interval, p-value significant if less than 0.05

Table 6d: Comparison of Black/African American non-Hispanic student characteristics among 12th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	79.6 (4.1)	78.2 (3.1)	0.5492
	Other language	20.4 (4.1)	21.8 (3.1)	
How far did your mother get in school?	Graduated HS or more	84.3 (4.7)	84.0 (2.1)	0.8946
	Didn't graduate HS	15.7 (4.7)	16.0 (2.1)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	88.8 (3.5)	91.2 (1.5)	0.1083
	Yes	11.3 (3.5)	8.8 (1.5)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	81.1 (3.7)	79.7 (2.1)	0.4870
	At least once	18.9 (3.7)	20.3 (2.1)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	69.8 (8.3)	66.8 (3.6)	0.4622
	More than a year ago	30.3 (8.3)	33.3 (3.6)	
Do you receive free or reduced price lunches at school?	No	50.0 (12.5)	48.3 (4.2)	0.7729
	Yes	50.0 (12.5)	51.7 (4.2)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	61.1 (7.7)	65.0 (2.6)	0.2463
	Mostly Cs, Ds or Fs	38.9 (7.7)	35.0 (2.6)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	78.7 (4.6)	79.0 (2.0)	0.9108
	no/mostly & NO/def not true	21.3 (4.6)	21.0 (2.0)	
In the last 30 days, how often have you been bullied?	None	83.0 (5.1)	84.4 (1.8)	0.5490
	At least 1 day	17.0 (5.1)	15.6 (1.8)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	87.3 (4.0)	91.0 (1.5)	0.0257
	At least 1 day	12.8 (4.0)	9.0 (1.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	86.6 (5.1)	88.3 (1.8)	0.4506
	At least 1 day	13.4 (5.1)	11.7 (1.8)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	67.6 (5.9)	71.1 (2.5)	0.1938
	At least 1 day	32.4 (5.9)	28.9 (2.5)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	72.3 (7.0)	73.7 (2.7)	0.6681
	At least 1 day	27.7 (7.0)	26.3 (2.7)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	82.6 (5.6)	83.5 (2.1)	0.7297
	At least 1 day	17.4 (5.6)	16.5 (2.1)	
Have you ever had sexual intercourse?	No	59.2 (9.8)	51.5 (4.1)	0.1113
	Yes	40.8 (9.8)	48.5 (4.1)	
Which of the following best describes you?	Straight (heterosexual)	85.5 (4.5)	81.6 (2.1)	0.1102
	Gay, lesbian, or not sure	14.5 (4.5)	18.4 (2.1)	

95% confidence interval, p-value significant if less than 0.05

Pacific Islander non-Hispanic Students

Census school respondents were more likely to report:

- Mother didn't graduate high school (grade 10)
- Bullied at school (grade 8)

Table 7a: Comparison of Pacific Islander non-Hispanic student characteristics among 6th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	87.2 (4.4)	84.8 (1.9)	0.3110
	Other language	12.8 (4.4)	15.2 (1.9)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	80.9 (4.3)	82.6 (1.3)	0.3899
	Mostly Cs, Ds or Fs	19.1 (4.3)	17.5 (1.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	91.1 (2.7)	90.7 (0.9)	0.7124
	no/mostly & NO/def not true	8.9 (2.7)	9.3 (0.9)	
In the last 30 days, how often have you been bullied?	None	75.9 (4.0)	73.5 (1.5)	0.2418
	At least 1 day	24.2 (4.0)	26.5 (1.5)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	97.2 (1.3)	96.9 (0.5)	0.6506
	At least 1 day	2.8 (1.3)	3.1 (0.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.5 (0.6)	99.5 (0.2)	0.7893
	At least 1 day	0.5 (0.6)	0.5 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	99.6 (0.5)	99.4 (0.2)	0.4767
	At least 1 day	0.4 (0.5)	0.6 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	98.4 (1.0)	98.7 (0.4)	0.3887
	At least 1 day	1.6 (1.0)	1.3 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.7 (1.0)	98.6 (0.4)	0.8594
	At least once	1.3 (1.0)	1.4 (0.4)	

95% confidence interval, p-value significant if less than 0.05

Table 7b: Comparison of Pacific Islander non-Hispanic student characteristics among 8th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	78.4 (8.0)	77.7 (2.6)	0.8553
	Other language	21.6 (8.0)	22.3 (2.6)	
How far did your mother get in school?	Graduated HS or more	86.7 (6.1)	87.0 (2.1)	0.9099
	Didn't graduate HS	13.3 (6.1)	13.0 (2.1)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	91.2 (4.2)	93.4 (1.3)	0.1874
	Yes	8.8 (4.2)	6.6 (1.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	86.3 (5.3)	85.7 (1.7)	0.8146
	At least once	13.7 (5.3)	14.3 (1.7)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	66.2 (10.2)	66.3 (3.3)	0.9871
	More than a year ago	33.8 (10.2)	33.7 (3.3)	
Do you receive free or reduced price lunches at school?	No	48.8 (13.9)	55.5 (4.1)	0.2868
	Yes	51.2 (13.9)	44.5 (4.1)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	74.1 (6.3)	74.9 (2.3)	0.7969
	Mostly Cs, Ds or Fs	25.9 (6.3)	25.1 (2.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	83.8 (3.7)	83.1 (1.7)	0.6805
	no/mostly & NO/def not true	16.2 (3.7)	16.9 (1.7)	
In the last 30 days, how often have you been bullied?	None	80.7 (4.3)	74.0 (2.0)	0.0044
	At least 1 day	19.4 (4.3)	26.1 (2.0)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	95.6 (2.4)	95.4 (0.9)	0.9228
	At least 1 day	4.5 (2.4)	4.6 (0.9)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.3 (1.5)	96.2 (0.9)	0.2256
	At least 1 day	2.7 (1.5)	3.8 (0.9)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	93.2 (3.0)	92.8 (1.1)	0.7704
	At least 1 day	6.8 (3.0)	7.2 (1.1)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	93.2 (3.3)	92.6 (1.2)	0.6731
	At least 1 day	6.8 (3.3)	7.4 (1.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	96.3 (2.1)	95.5 (0.9)	0.4538
	At least 1 day	3.7 (2.1)	4.6 (0.9)	
Have you ever had sexual intercourse?	No	87.9 (7.1)	88.8 (2.7)	0.7911
	Yes	12.1 (7.1)	11.2 (2.7)	
Which of the following best describes you?	Straight (heterosexual)	82.9 (7.4)	80.1 (2.4)	0.4431
	Gay, lesbian, or not sure	17.1 (7.4)	19.9 (2.4)	

95% confidence interval, p-value significant if less than 0.05

Table 7c: Comparison of Pacific Islander non-Hispanic student characteristics among 10th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	78.1 (6.2)	72.0 (3.5)	0.0724
	Other language	22.0 (6.2)	28.0 (3.5)	
How far did your mother get in school?	Graduated HS or more	90.6 (4.4)	84.5 (2.4)	0.0247
	Didn't graduate HS	9.4 (4.4)	15.5 (2.4)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	89.3 (4.4)	90.5 (1.8)	0.5454
	Yes	10.7 (4.4)	9.5 (1.8)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	82.7 (5.3)	80.2 (2.3)	0.3244
	At least once	17.3 (5.3)	19.8 (2.3)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	75.7 (7.6)	68.8 (3.7)	0.0864
	More than a year ago	24.3 (7.6)	31.2 (3.7)	
Do you receive free or reduced price lunches at school?	No	64.3 (9.5)	57.1 (4.7)	0.1396
	Yes	35.7 (9.5)	42.9 (4.7)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	72.6 (5.4)	68.1 (2.9)	0.1091
	Mostly Cs, Ds or Fs	27.4 (5.4)	31.9 (2.9)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	77.2 (6.8)	77.9 (2.5)	0.8292
	no/mostly & NO/def not true	22.8 (6.8)	22.1 (2.5)	
In the last 30 days, how often have you been bullied?	None	78.9 (5.6)	79.2 (2.1)	0.9006
	At least 1 day	21.1 (5.6)	20.8 (2.1)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	90.2 (5.0)	91.4 (1.5)	0.5506
	At least 1 day	9.9 (5.0)	8.6 (1.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	92.8 (4.4)	90.2 (1.7)	0.2896
	At least 1 day	7.3 (4.4)	9.8 (1.7)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	79.8 (6.4)	81.0 (2.1)	0.6891
	At least 1 day	20.2 (6.4)	19.1 (2.1)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	77.2 (6.9)	78.5 (2.3)	0.6843
	At least 1 day	22.8 (6.9)	21.5 (2.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	84.2 (5.6)	87.5 (1.8)	0.1482
	At least 1 day	15.8 (5.6)	12.5 (1.8)	
Have you ever had sexual intercourse?	No	74.0 (10.2)	72.6 (4.0)	0.7639
	Yes	26.0 (10.2)	27.4 (4.0)	
Which of the following best describes you?	Straight (heterosexual)	81.3 (5.9)	80.3 (2.9)	0.7368
	Gay, lesbian, or not sure	18.8 (5.9)	19.8 (2.9)	

95% confidence interval, p-value significant if less than 0.05

Table 7d: Comparison of Pacific Islander non-Hispanic student characteristics among 12th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	76.7 (7.4)	72.8 (4.1)	0.3261
	Other language	23.3 (7.4)	27.2 (4.1)	
How far did your mother get in school?	Graduated HS or more	81.3 (8.3)	83.7 (3.2)	0.5087
	Didn't graduate HS	18.8 (8.3)	16.3 (3.2)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	90.7 (5.0)	91.6 (1.9)	0.6878
	Yes	9.3 (5.0)	8.4 (1.9)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	82.5 (7.1)	78.0 (2.8)	0.2186
	At least once	17.5 (7.1)	22.0 (2.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	64.5 (11.1)	63.3 (5.0)	0.8256
	More than a year ago	35.5 (11.1)	36.7 (5.0)	
Do you receive free or reduced price lunches at school?	No	46.4 (10.8)	49.4 (5.7)	0.5799
	Yes	53.6 (10.8)	50.6 (5.7)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	64.4 (10.4)	62.9 (3.5)	0.7572
	Mostly Cs, Ds or Fs	35.7 (10.4)	37.1 (3.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	80.3 (5.7)	80.7 (2.8)	0.8873
	no/mostly & NO/def not true	19.7 (5.7)	19.3 (2.8)	
In the last 30 days, how often have you been bullied?	None	83.5 (7.4)	85.4 (2.6)	0.5509
	At least 1 day	16.5 (7.4)	14.6 (2.6)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	94.2 (3.7)	92.6 (1.8)	0.4311
	At least 1 day	5.8 (3.7)	7.4 (1.8)	
During the past 30 days, on how many days did you smoke cigarettes?	None	89.5 (5.7)	88.7 (2.4)	0.7759
	At least 1 day	10.5 (5.7)	11.3 (2.4)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	77.1 (7.7)	75.3 (3.0)	0.6328
	At least 1 day	23.0 (7.7)	24.7 (3.0)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	75.0 (9.4)	71.0 (3.6)	0.3802
	At least 1 day	25.0 (9.4)	29.0 (3.6)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	87.1 (6.5)	82.8 (2.8)	0.2159
	At least 1 day	12.9 (6.5)	17.2 (2.8)	
Have you ever had sexual intercourse?	No	51.3 (14.0)	52.6 (5.1)	0.8478
	Yes	48.7 (14.0)	47.4 (5.1)	
Which of the following best describes you?	Straight (heterosexual)	78.3 (7.2)	81.7 (3.0)	0.3123
	Gay, lesbian, or not sure	21.7 (7.2)	18.3 (3.0)	

95% confidence interval, p-value significant if less than 0.05

Other Race non-Hispanic Students

Census school respondents were more likely to report:

- English not spoken at home (grade 6)

Census school respondents were less likely to report:

- Mother didn't graduate high school (grade 8)
- Substance use – current marijuana use (grade 10) and current alcohol drinking (grade 10)

Table 8a: Comparison of other race non-Hispanic student characteristics among 6th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	83.5 (3.2)	80.0 (1.7)	0.0398
	Other language	16.5 (3.2)	20.0 (1.7)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	80.5 (2.5)	80.9 (0.9)	0.7343
	Mostly Cs, Ds or Fs	19.5 (2.5)	19.1 (0.9)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	88.3 (1.5)	88.0 (0.6)	0.7065
	no/mostly & NO/def not true	11.8 (1.5)	12.0 (0.6)	
In the last 30 days, how often have you been bullied?	None	70.3 (2.5)	69.8 (0.9)	0.6718
	At least 1 day	29.7 (2.5)	30.2 (0.9)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.8 (0.7)	96.3 (0.3)	0.2209
	At least 1 day	3.2 (0.7)	3.7 (0.3)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.4 (0.3)	99.2 (0.2)	0.3932
	At least 1 day	0.6 (0.3)	0.8 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	99.4 (0.4)	99.1 (0.2)	0.1206
	At least 1 day	0.6 (0.4)	1.0 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	98.2 (0.5)	98.0 (0.2)	0.6201
	At least 1 day	1.8 (0.5)	2.0 (0.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.3 (0.5)	98.2 (0.2)	0.5969
	At least once	1.7 (0.5)	1.9 (0.2)	

95% confidence interval, p-value significant if less than 0.05

Table 8b: Comparison of other race non-Hispanic student characteristics among 8th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	76.7 (5.6)	77.9 (1.9)	0.6522
	Other language	23.3 (5.6)	22.1 (1.9)	
How far did your mother get in school?	Graduated HS or more	82.8 (4.0)	86.9 (1.3)	0.0139
	Didn't graduate HS	17.2 (4.0)	13.1 (1.3)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	91.9 (2.1)	93.2 (0.7)	0.1476
	Yes	8.1 (2.1)	6.8 (0.7)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	86.0 (2.0)	87.2 (0.9)	0.2185
	At least once	14.0 (2.0)	12.8 (0.9)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	67.4 (3.6)	69.0 (1.8)	0.3700
	More than a year ago	32.6 (3.6)	31.0 (1.8)	
Do you receive free or reduced price lunches at school?	No	55.5 (8.4)	60.8 (2.7)	0.1644
	Yes	44.5 (8.4)	39.2 (2.7)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	70.8 (3.4)	72.2 (1.5)	0.3923
	Mostly Cs, Ds or Fs	29.2 (3.4)	27.8 (1.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	78.4 (2.4)	79.2 (1.2)	0.5138
	no/mostly & NO/def not true	21.6 (2.4)	20.8 (1.2)	
In the last 30 days, how often have you been bullied?	None	71.3 (2.8)	69.0 (1.2)	0.0929
	At least 1 day	28.7 (2.8)	31.0 (1.2)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	95.8 (1.5)	95.7 (0.6)	0.8598
	At least 1 day	4.2 (1.5)	4.3 (0.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	95.8 (1.3)	96.3 (0.5)	0.3507
	At least 1 day	4.2 (1.3)	3.7 (0.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	93.1 (1.9)	93.7 (0.7)	0.5430
	At least 1 day	6.9 (1.9)	6.3 (0.7)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	93.5 (1.6)	92.6 (0.7)	0.3170
	At least 1 day	6.5 (1.6)	7.4 (0.7)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	95.6 (1.6)	95.4 (0.6)	0.7851
	At least 1 day	4.4 (1.6)	4.6 (0.6)	
Have you ever had sexual intercourse?	No	89.9 (4.0)	90.0 (1.5)	0.9500
	Yes	10.1 (4.0)	10.0 (1.5)	
Which of the following best describes you?	Straight (heterosexual)	75.1 (3.8)	74.8 (1.5)	0.8942
	Gay, lesbian, or not sure	24.9 (3.8)	25.2 (1.5)	

95% confidence interval, p-value significant if less than 0.05

Table 8c: Comparison of other race non-Hispanic student characteristics among 10th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	73.4 (5.4)	71.2 (2.7)	0.4235
	Other language	26.6 (5.4)	28.8 (2.7)	
How far did your mother get in school?	Graduated HS or more	83.8 (3.6)	85.0 (1.8)	0.4931
	Didn't graduate HS	16.2 (3.6)	15.0 (1.8)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	91.5 (2.2)	92.2 (1.0)	0.4680
	Yes	8.5 (2.2)	7.8 (1.0)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	86.1 (2.7)	83.3 (1.3)	0.0519
	At least once	13.9 (2.7)	16.7 (1.3)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	71.9 (5.9)	72.0 (2.5)	0.9644
	More than a year ago	28.1 (5.9)	28.0 (2.5)	
Do you receive free or reduced price lunches at school?	No	60.7 (7.7)	60.4 (3.5)	0.9327
	Yes	39.3 (7.7)	39.6 (3.5)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	68.2 (4.5)	69.1 (2.1)	0.6681
	Mostly Cs, Ds or Fs	31.8 (4.5)	30.9 (2.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	73.3 (5.2)	74.9 (1.7)	0.4813
	no/mostly & NO/def not true	26.7 (5.2)	25.1 (1.7)	
In the last 30 days, how often have you been bullied?	None	75.2 (4.0)	73.0 (1.6)	0.2564
	At least 1 day	24.9 (4.0)	27.0 (1.6)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	92.1 (2.3)	91.5 (1.0)	0.6053
	At least 1 day	8.0 (2.3)	8.5 (1.0)	
During the past 30 days, on how many days did you smoke cigarettes?	None	90.6 (2.9)	91.0 (1.2)	0.7732
	At least 1 day	9.4 (2.9)	9.0 (1.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	78.8 (4.2)	83.2 (1.5)	0.0128
	At least 1 day	21.2 (4.2)	16.9 (1.5)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	77.3 (4.0)	81.0 (1.7)	0.0394
	At least 1 day	22.7 (4.0)	19.0 (1.7)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	86.2 (3.4)	88.0 (1.4)	0.2357
	At least 1 day	13.8 (3.4)	12.0 (1.4)	
Have you ever had sexual intercourse?	No	77.9 (6.2)	73.3 (3.1)	0.1497
	Yes	22.1 (6.2)	26.7 (3.1)	
Which of the following best describes you?	Straight (heterosexual)	74.2 (4.4)	75.5 (2.1)	0.5549
	Gay, lesbian, or not sure	25.8 (4.4)	24.5 (2.1)	

95% confidence interval, p-value significant if less than 0.05

Table 8d: Comparison of other race non-Hispanic student characteristics among 12th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	78.7 (5.4)	74.3 (2.9)	0.1156
	Other language	21.3 (5.4)	25.7 (2.9)	
How far did your mother get in school?	Graduated HS or more	81.2 (6.5)	83.0 (2.6)	0.5331
	Didn't graduate HS	18.9 (6.5)	17.1 (2.6)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	92.4 (3.7)	91.0 (1.6)	0.4430
	Yes	7.6 (3.7)	9.0 (1.6)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	81.0 (5.4)	81.9 (2.1)	0.6888
	At least once	19.1 (5.4)	18.1 (2.1)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	64.2 (9.1)	67.1 (3.8)	0.4821
	More than a year ago	35.8 (9.1)	32.9 (3.8)	
Do you receive free or reduced price lunches at school?	No	66.4 (9.0)	61.0 (4.5)	0.2322
	Yes	33.7 (9.0)	39.0 (4.5)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	61.9 (6.3)	64.2 (2.7)	0.4178
	Mostly Cs, Ds or Fs	38.1 (6.3)	35.8 (2.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	78.8 (5.1)	79.2 (2.3)	0.8712
	no/mostly & NO/def not true	21.2 (5.1)	20.9 (2.3)	
In the last 30 days, how often have you been bullied?	None	81.4 (4.9)	80.4 (2.2)	0.6757
	At least 1 day	18.6 (4.9)	19.6 (2.2)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	90.2 (4.6)	90.2 (1.7)	0.9949
	At least 1 day	9.8 (4.6)	9.8 (1.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	87.4 (3.8)	87.8 (1.8)	0.8041
	At least 1 day	12.6 (3.8)	12.2 (1.8)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	77.7 (5.4)	75.6 (2.4)	0.4031
	At least 1 day	22.3 (5.4)	24.4 (2.4)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	73.3 (6.5)	72.4 (2.6)	0.7776
	At least 1 day	26.8 (6.5)	27.6 (2.6)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	82.9 (4.8)	82.8 (2.1)	0.9412
	At least 1 day	17.1 (4.8)	17.2 (2.1)	
Have you ever had sexual intercourse?	No	51.3 (12.5)	53.5 (4.8)	0.7000
	Yes	48.7 (12.5)	46.5 (4.8)	
Which of the following best describes you?	Straight (heterosexual)	72.3 (5.7)	74.2 (2.8)	0.4696
	Gay, lesbian, or not sure	27.7 (5.7)	25.8 (2.8)	

95% confidence interval, p-value significant if less than 0.05

Multi-racial non-Hispanic Students

Census school respondents were more likely to report:

Census school respondents were less likely to report:

- Non-English spoken at home (grade 8)
- Mother didn't graduate high school (grade 8)
- Feeling unsafe at school (grade 8)
- Substance use – current cigarette smoking (grade 10) and binge drinking (grade 10)

Table 9a: Comparison of multi-racial non-Hispanic student characteristics among 6th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	91.7 (2.8)	89.6 (1.2)	0.1558
	Other language	8.3 (2.8)	10.4 (1.2)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	85.8 (2.9)	85.1 (1.0)	0.6179
	Mostly Cs, Ds or Fs	14.2 (2.9)	14.9 (1.0)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	90.2 (2.2)	89.9 (0.8)	0.7605
	no/mostly & NO/def not true	9.8 (2.2)	10.1 (0.8)	
In the last 30 days, how often have you been bullied?	None	70.8 (3.2)	70.2 (1.3)	0.6566
	At least 1 day	29.2 (3.2)	29.9 (1.3)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	97.1 (1.0)	96.9 (0.4)	0.6271
	At least 1 day	2.9 (1.0)	3.1 (0.4)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.3 (0.5)	99.5 (0.2)	0.2468
	At least 1 day	0.7 (0.5)	0.5 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	98.9 (0.6)	99.2 (0.2)	0.3509
	At least 1 day	1.1 (0.6)	0.9 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	98.1 (0.8)	98.3 (0.3)	0.6993
	At least 1 day	1.9 (0.8)	1.7 (0.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.6 (0.7)	98.4 (0.3)	0.4870
	At least once	1.4 (0.7)	1.7 (0.3)	

95% confidence interval, p-value significant if less than 0.05

Table 9b: Comparison of multi-racial non-Hispanic student characteristics among 8th graders in the state sample to census schools.

Question	Options	State Sample Percent (\pm CI)	Census Percent (\pm CI)	Difference p-value
What language is usually spoken at home?	English	86.6 (2.9)	89.4 (1.0)	0.0201
	Other language	13.5 (2.9)	10.6 (1.0)	
How far did your mother get in school?	Graduated HS or more	85.9 (4.0)	90.1 (1.2)	0.0074
	Didn't graduate HS	14.1 (4.0)	9.9 (1.2)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	92.7 (2.7)	93.2 (0.9)	0.6792
	Yes	7.3 (2.7)	6.8 (0.9)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	88.2 (2.9)	87.2 (1.2)	0.5107
	At least once	11.8 (2.9)	12.8 (1.2)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	74.9 (5.8)	76.8 (2.1)	0.4945
	More than a year ago	25.1 (5.8)	23.3 (2.1)	
Do you receive free or reduced price lunches at school?	No	61.9 (9.6)	62.9 (3.1)	0.8314
	Yes	38.1 (9.6)	37.1 (3.1)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.3 (3.9)	78.5 (1.5)	0.0657
	Mostly Cs, Ds or Fs	24.7 (3.9)	21.5 (1.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	77.2 (3.9)	81.6 (1.5)	0.0106
	no/mostly & NO/def not true	22.8 (3.9)	18.4 (1.5)	
In the last 30 days, how often have you been bullied?	None	70.2 (3.7)	69.9 (1.3)	0.9040
	At least 1 day	29.9 (4.3)	30.1 (2.0)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.2 (1.5)	95.9 (0.6)	0.7552
	At least 1 day	3.8 (1.5)	4.1 (0.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.3 (1.3)	96.6 (0.6)	0.3304
	At least 1 day	2.7 (1.3)	3.4 (0.6)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	92.0 (2.9)	93.1 (0.8)	0.3300
	At least 1 day	8.1 (2.9)	6.9 (0.8)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	93.3 (2.1)	92.4 (0.8)	0.3652
	At least 1 day	6.7 (2.1)	7.6 (0.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	96.5 (1.5)	95.9 (0.6)	0.3931
	At least 1 day	3.5 (1.5)	4.1 (0.6)	
Have you ever had sexual intercourse?	No	93.0 (5.5)	90.9 (1.8)	0.4905
	Yes	7.0 (5.5)	9.1 (1.8)	
Which of the following best describes you?	Straight (heterosexual)	75.7 (4.4)	77.5 (2.0)	0.3965
	Gay, lesbian, or not sure	24.3 (4.4)	22.5 (2.0)	

95% confidence interval, p-value significant if less than 0.05

Table 9c: Comparison of multi-racial non-Hispanic student characteristics among 10th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	91.8 (2.7)	90.2 (1.2)	0.2168
	Other language	8.2 (2.7)	9.8 (1.2)	
How far did your mother get in school?	Graduated HS or more	89.6 (2.4)	89.8 (1.3)	0.8787
	Didn't graduate HS	10.4 (2.4)	10.2 (1.3)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.2 (2.1)	92.8 (1.0)	0.2153
	Yes	5.8 (2.1)	7.2 (1.0)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	84.7 (2.8)	85.0 (1.4)	0.8409
	At least once	15.3 (2.8)	15.0 (1.4)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	80.1 (5.8)	80.0 (2.0)	0.9427
	More than a year ago	19.9 (5.8)	20.1 (2.0)	
Do you receive free or reduced price lunches at school?	No	66.3 (7.9)	67.6 (3.4)	0.7192
	Yes	33.7 (7.9)	32.4 (3.4)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	77.2 (4.3)	75.8 (1.9)	0.5009
	Mostly Cs, Ds or Fs	22.8 (4.3)	24.2 (1.9)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	80.4 (4.4)	80.7 (1.7)	0.8824
	no/mostly & NO/def not true	19.6 (4.4)	19.3 (1.7)	
In the last 30 days, how often have you been bullied?	None	75.6 (3.4)	75.6 (1.6)	0.9988
	At least 1 day	24.4 (3.4)	24.4 (1.6)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	93.5 (2.0)	93.2 (1.0)	0.7897
	At least 1 day	6.6 (2.0)	6.8 (1.0)	
During the past 30 days, on how many days did you smoke cigarettes?	None	91.5 (2.4)	93.5 (0.9)	0.0357
	At least 1 day	8.6 (2.4)	6.6 (0.9)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	80.9 (3.4)	82.7 (1.6)	0.2556
	At least 1 day	19.1 (3.4)	17.3 (1.6)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	77.2 (4.3)	79.7 (1.7)	0.1777
	At least 1 day	22.9 (4.3)	20.3 (1.7)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	86.5 (2.6)	90.0 (1.1)	0.0014
	At least 1 day	13.5 (2.6)	10.1 (1.1)	
Have you ever had sexual intercourse?	No	73.8 (4.9)	74.1 (2.8)	0.8833
	Yes	26.2 (4.9)	25.9 (2.8)	
Which of the following best describes you?	Straight (heterosexual)	76.7 (5.0)	76.1 (1.9)	0.8042
	Gay, lesbian, or not sure	23.3 (5.0)	23.9 (1.9)	

95% confidence interval, p-value significant if less than 0.05

Table 9d: Comparison of multi-racial non-Hispanic student characteristics among 12th graders in the state sample to census schools.

Question	Options	State Sample Percent (±CI)	Census Percent (±CI)	Difference p-value
What language is usually spoken at home?	English	93.5 (2.7)	92.8 (1.2)	0.6000
	Other language	6.5 (2.7)	7.2 (1.2)	
How far did your mother get in school?	Graduated HS or more	90.1 (3.1)	90.9 (1.5)	0.5780
	Didn't graduate HS	9.9 (3.1)	9.1 (1.5)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	91.4 (2.9)	92.8 (1.1)	0.2761
	Yes	8.6 (2.9)	7.2 (1.1)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	82.1 (4.0)	82.7 (1.8)	0.7620
	At least once	17.9 (4.0)	17.3 (1.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	72.5 (7.2)	74.1 (2.9)	0.6235
	More than a year ago	27.5 (7.2)	25.9 (2.9)	
Do you receive free or reduced price lunches at school?	No	71.9 (7.3)	65.4 (3.8)	0.0832
	Yes	28.1 (7.3)	34.6 (3.8)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	74.4 (4.5)	73.8 (2.3)	0.7695
	Mostly Cs, Ds or Fs	25.6 (4.5)	26.3 (2.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	84.1 (2.9)	83.7 (1.7)	0.8083
	no/mostly & NO/def not true	15.9 (2.9)	16.3 (1.7)	
In the last 30 days, how often have you been bullied?	None	84.0 (4.1)	82.4 (1.6)	0.3961
	At least 1 day	16.0 (4.1)	17.7 (1.6)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	91.3 (3.1)	91.7 (1.2)	0.7849
	At least 1 day	8.7 (3.1)	8.3 (1.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	89.3 (4.3)	90.1 (1.5)	0.6725
	At least 1 day	10.7 (4.3)	9.9 (1.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	71.8 (5.6)	73.1 (2.0)	0.5941
	At least 1 day	28.2 (5.6)	26.9 (2.0)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	67.8 (5.8)	67.5 (2.3)	0.8971
	At least 1 day	32.2 (5.8)	32.5 (2.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	84.5 (4.3)	83.6 (1.7)	0.6778
	At least 1 day	15.5 (4.3)	16.4 (1.7)	
Have you ever had sexual intercourse?	No	50.0 (8.6)	49.3 (3.8)	0.8701
	Yes	50.0 (8.6)	50.7 (3.8)	
Which of the following best describes you?	Straight (heterosexual)	80.2 (4.3)	77.8 (2.2)	0.2758
	Gay, lesbian, or not sure	19.8 (4.3)	22.2 (2.2)	

95% confidence interval, p-value significant if less than 0.05