
CHAPTER 13

Presentation Of 1999 and 2002 Pemi-Baker School District TAP Survey Data

Background

The Teen Assessment Project survey has been administered twice in the Pemi-Baker School District. On December 14, 1999, a total of 659 9th through 12th grade students participated in the TAP survey. This represented 85% of the students enrolled in those grades. The identical TAP survey was administered again on November 1, 2002 to 9th through 12th grade students. The final sample of 666 surveys represented responses from approximately 79% of the student population enrolled at the high school in November 2002. A request was made to present similar information from each survey. Some of the selected results can be found in Figures 13-1 through 13-4.

Methodology

The first consideration in this task was to ensure that each dataset was comparable. Different data cleaning checks were run on the 2002 dataset. Before providing this comparative information, data from the 1999 survey were subject to the same 5 data checks run on the 2002 data. As described earlier, examples of these checks included: students who reported that they used all drugs listed daily; students who reported either none or all time use activities, students who reported on one question that they did not use alcohol and then reported on another they they engaged in binge drinking, etc.

Another consideration was the distribution of students by gender and grade level at each survey time. Research suggests that substance use increases with age and can vary by gender (Johnston, O'Malley & Bachman, 2002). For example, a higher percentage of twelfth grade males in the either sample could inflate certain results. To eliminate this concern a weighting factor was applied to estimate what the overall percentages of occurrence for each behavior would have been if the percentages of male and female students in each grade level at each survey time had been equal.

Results

The behaviors chosen to report here are those that are usually reported within the context of results from other surveys such as the Youth Risk Behavior Surveillance Survey and the TAP Multi-Community Report.

Table 13-1 shows the comparison of Alcohol and Other Drug Use behaviors at the *any use at all* level. There were 2 significant findings. *Any use at all* of marijuana and inhalants were significantly higher in 2002 than in 1999.

In examining the differences between 1999 and 2002 in Alcohol and Other Drug Use behaviors at the *monthly or more often* use level, Table 13-2 shows that three behaviors were significantly higher in 2002 than in 1999. In 2002 a greater percentage of students reported *monthly use or more often* of marijuana, cocaine, and inhalants.

Table 13-3 shows a comparison of alcohol related behaviors. A greater percentage of students reported in 2002 than in 1999 that they had ridden with a driver who had been drinking or using drugs at least once in the past month.

Mental health and sexuality data are presented in Table 13-4. The only significant difference seen there is in the percentage of students who reported having voluntarily had sexual intercourse. In 2002 44.7 % of students reported ever having had sexual intercourse as compared with 38.4 % of the students in 1999.

Discussion

Caution in interpretation of these results is urged for a number of reasons. The data are cross-sectional, meaning that this is a snapshot of student behaviors at two different times. The two samples are not the same respondents as would be the case in a longitudinal study. Another possible influence on the results, in fact, may be that many of the 11th and 12th grade students in 2002 took the TAP survey in 1999. This may have affected how they answered the survey in 2002.

There may be a cohort effect. Each class in a high school can be considered to have its own personality. If there is one class in particular that exhibits unusually high amounts of risky behavior, this could inflate the overall summary of risky behavior. Conclusions may be drawn that a certain behavior has increased considerably when really the result is due to the behaviors of one class.

Use of general surveys at two points in time is not recommended as a means to evaluate programs. In the classic research design text, Campbell and Stanley (1963) point out there are many events that occur between the two points in time. Any change in the behaviors studied could be due to a number of factors, not just the new program initiated. There are other evaluation designs that could better answer that type of question. Use of a control group would be important.

Data in two points in time cannot provide enough information to declare that a behavior is increasing or decreasing. In order to examine trends in behaviors, information at three or more points of time is essential.

Finally, although these results show that there are statistically significant differences in some behaviors from 1999 to 2002, the question of whether these differences are of practical significance must be asked. In the case of some behaviors the actual number of students reporting them is small. For example, in 1999 six students (.9%) reported using inhalants on a *monthly or more often* basis. In 2002 inhalant use at the *monthly or more often* level was reported by nineteen students (3%). Although this is a statistically significant change, creating a school-wide intervention program based on this result would not be advised. A more clear cut case can be made that the significant difference

in monthly marijuana use from 1999 to 2002 is also of practical significance as the difference was 9%.

Presentation Of Comparable Data

The Pemi-Baker data are compared with data from the *Youth Risk Behavior Surveillance Survey* (CDC, 1999; CDC, 2001) and the *TAP 2000-2001 Multi-Community Report* (Teen Assessment Project, 2002).

The *Youth Risk Behavior Surveillance Survey* monitors six categories of priority health-risk behaviors among youth and adults — behaviors that contribute to unintentional and intentional injuries; tobacco use; alcohol and other drug use; sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases (STDs); unhealthy dietary behaviors; and physical inactivity (Centers for Disease Control and Prevention, 1999 & 2001). It is administered every other year and includes a national school-based survey conducted by the CDC as well as state, territorial, and local school-based surveys conducted by education and health agencies. Although the goal is to obtain a representative sample, the overall response rate in New Hampshire was less than the minimum criterion of 60%. Thus, the YRBS data could not be weighted for nonresponse and selection probability. Unweighted data represent the 2,213 students surveyed in 1999 and the 1,303 students surveyed in 2001.

The *2000-2001 TAP Multi-Community Report* is a multi-community report based on data from ten New Hampshire SAUs surveyed from January 2000 through December 2001 (Teen Assessment Project, 2002). These data represent 9,458 teens. Due to the nature of TAP, the survey process is not random. Therefore, the results cannot be generalized to the population of New Hampshire teens

Although there were a few indications of increasing frequencies of health risk behaviors from Time 1 to Time 2, the increases were small, and the Pemi-Baker sample still tended to have lower frequencies of risky behaviors than the overall TAP survey or the YRBS sample. The comparison must be interpreted cautiously because some part of the difference might be due to question wording, but at least, the students of the Pemi-Baker School District do not seem to be experiencing a high rate of health risk behaviors relative to the available comparison group.

**Table 13-1: Alcohol and Other Drug Use Comparison: Any Use At All
(Grades 9-12 only)**

Substance	YRBS Natl. N.H. 1 1999 %	YRBS Natl. N.H. 2 2001 %	TAP Multi- Community 3 2000-2001 %	TAP Pemi- Baker 4 1999 (weighted) %	TAP Pemi- Baker 5 2002 (weighted) %
Cigarettes YRBS: Ever tried cigarette smoking, even one or two puffs TAP: Ever used smoking tobacco	70.4 66.7 -	63.9 NA -	- 51	- 47.1	- 44.0
Alcohol YRBS: Ever had ≥ 1 drinks of alcohol TAP: Ever used alcohol (beer, wine/wine coolers, hard liquor)	81.0 82.9 -	78.2 78.9 -	- 71	- 67.2	- 67.9
Marijuana YRBS: Ever used marijuana TAP: Ever used marijuana (pot)	47.2 49.8 -	42.4 44.6 -	- 45	- 39.9*	- 45.8*
Cocaine YRBS: Ever tried any form of cocaine (e.g. powder, “crack”, or “freebase”) TAP: Ever tried cocaine or crack	9.5 9.9 -	9.4 10.9 -	- 8	- 5.9	- 7.9
Inhalants YRBS: Ever sniffed or breathed contents of aerosol spray cans or inhaled any paints or sprays TAP: Ever used inhalants (like glue, White Out correction fluid, contents of spray cans, etc.)	14.6 19.4 -	14.7 15.3 -	- 10	- 6.2**	- 10.6**

***p<.001 The p value (the probability of error) is a statistic to quantify certainty about whether a result is due to chance. A p value of .05 indicates that in 5 of 100 times this result would be due to chance.
 **p<.01
 *p<.05

¹Youth Risk Behavior Surveillance Survey--CDC, 1999.

²Youth Risk Behavior Surveillance Survey--CDC, 2001.

³Teen Assessment Project, 2002.

⁴Teen Assessment Project, 1999.

⁵Teen Assessment Project, 2003.

Note: Due to wording differences, the results of YRBS and TAP are not directly comparable.

Table 13-2: Alcohol and Other Drug Use Comparison: In the Past 30 Days/Monthly or More Often Use (Grades 9-12 only)

Substance	YRBS Natl. N.H.¹ 1999 %	YRBS Natl. N.H.² 2001 %	TAP Multi- Community³ 2000-2001 %	TAP Pemi- Baker⁴ 1999 (weighted) %	TAP Pemi- Baker⁵ 2002 (weighted) %
Cigarettes YRBS: Smoked cigarettes on \geq 1 of the 30 days preceding the survey TAP: Uses smoking tobacco at least once per month	34.8 34.1	28.5 NA	- 26	- 21.4	- 21.7
Alcohol YRBS: Drank alcohol on \geq 1 of the 30 days preceding the survey TAP: Uses alcohol at least once per month	50.0 52.5	47.1 52.5	- 43	- 36.8	- 37.5
Marijuana YRBS: Used marijuana on \geq 1 of the 30 days preceding the survey TAP: Uses marijuana at least once per month	26.7 30.3	23.9 28.4	- 24	- 19.0***	- 28.0***
Cocaine YRBS: Used cocaine on \geq 1 of the 30 days preceding the survey TAP: Uses cocaine at least once per month	4.0 3.4	4.2 4.7	- 2	- 1.2*	- 2.9*
Inhalants YRBS: Used inhalants on \geq 1 of the 30 days preceding the survey TAP: Uses inhalants at least once per month	4.2 5.2	4.7 5.6	- 2	- .9**	- 3.0**

***p<.001 The p value (the probability of error) is a statistic to quantify certainty about whether a result is due to chance. A p value of .05 indicates that in 5 of 100 times this result would be due to chance.
**p<.01
*p<.05

¹Youth Risk Behavior Surveillance Survey--CDC, 1999.

²Youth Risk Behavior Surveillance Survey--CDC, 2001.

³Teen Assessment Project, 2002.

⁴Teen Assessment Project, 1999.

⁵Teen Assessment Project, 2003.

Note: Due to wording differences, the results of YRBS and TAP are not directly comparable.

**Table 13-3: Comparison of Alcohol Related Behaviors
(Grades 9-12 only)**

Behavior	YRBS Natl. N.H.¹ 1999 %	YRBS Natl. N.H.² 2001 %	TAP Multi- Community³ 2000-2001 %	TAP Pemi- Baker⁴ 1999 (weighted) %	TAP Pemi- Baker⁵ 2002 (weighted) %
YRBS: Drank \geq 5 drinks of alcohol on \geq 1 of the 30 days preceding the survey	31.5 33.2	29.9 32.1	-	-	-
TAP: Drank 5 or more alcoholic drinks at one time during the past month	-	-	40	38.4	37.6
YRBS: Drove after drinking alcohol one or more times during the 30 days preceding the survey	13.1 11.7	13.3 9.7	-	-	-
TAP: Drove after drinking or using drugs at least once during the past month	-	-	14	13.8	15.1
YRBS: Rode with driver who had been drinking alcohol one or more times during the 30 days preceding the survey	33.1 29.3	30.7 27.5	-	-	-
TAP: Rode with driver who was drinking alcohol or using drugs at least once during past month	-	-	Not Available	27.2**	33.8**

***p<.001

**p<.01

*p<.05

The p value (the probability of error) is a statistic to quantify certainty about whether a result is due to chance. A p value of .05 indicates that in 5 of 100 times this result would be due to chance.

¹Youth Risk Behavior Surveillance Survey--CDC, 1999.

²Youth Risk Behavior Surveillance Survey--CDC, 2001.

³Teen Assessment Project, 2002.

⁴Teen Assessment Project, 1999.

⁵Teen Assessment Project, 2003.

Note: Due to wording differences, the results of YRBS and TAP are not directly comparable.

**Table 13-4: Mental Health and Sexuality Comparisons
(Grades 9-12 only)**

Behavior	YRBS Natl. N.H.¹ 1999 %	YRBS Natl. N.H.² 2001 %	TAP Multi- Community³ 2000-2001 %	TAP Pemi- Baker⁴ 1999 (weighted) %	TAP Pemi- Baker⁵ 2002 (weighted) %
YRBS: Made a suicide plan in the 12 months preceding the survey	14.5 15.7	14.8 16.8	-	-	-
TAP: Ever made a plan to kill yourself? (coded as within past year)	-	-	12	9.5	11.5
YRBS: Attempted suicide one or more times in the 12 months preceding the survey	8.3 7.7	8.8 NA	-	-	-
TAP: Ever actually tried to kill self (coded as during past year)	-	-	6	5.4	7.3
YRBS: Have you ever had sexual intercourse?	49.9 42.9	45.6 38.8	-	-	-
TAP: Have you ever voluntarily had sexual intercourse?	-	-	40	38.4*	44.7*

***p<.001

**p<.01

*p<.05

The p value (the probability of error) is a statistic to quantify certainty about whether a result is due to chance. A p value of .05 indicates that in 5 of 100 times this result would be due to chance.

¹Youth Risk Behavior Surveillance Survey--CDC, 1999.

²Youth Risk Behavior Surveillance Survey--CDC, 2001.

³Teen Assessment Project, 2002.

⁴Teen Assessment Project, 1999.

⁵Teen Assessment Project, 2003.

Note: Due to wording differences, the results of YRBS and TAP are not directly comparable.