

APPENDIX A:
2000-2002 Comparisons

2000-2002 Comparisons

In this section of the report, we compare the results for many of the items included in the 2002 NCHA against the results for those same items in the 2000 NCHA. In this way, it will be possible to determine if there have been any significant changes in the health, health related behaviors, or perceptions of MSU students over the two-years between surveys.

In making these comparisons, we will be using statistical tests of significance to conclude whether there was a difference in results between the two surveys that was greater than is likely to be simply the result of sampling error. Typically such decisions are made when the probability of finding as much difference in the results as was observed is less than 5% or less than 5 times out of 100. That is, in fewer than 5 random samples of the same population would you be expected to find as much difference between the two samples as was observed. When that much difference is found, we typically conclude that the two samples are not really samples from the same population, but rather are samples from two different populations, or the population changed, i.e., the difference is real rather than just sampling error. That is because the probability of finding as much difference as observed on a single comparison is quite small, e.g., .05 or .01, or .001. However, when we make a large number of separate comparisons between two samples, the chances of finding at least one comparison where the difference appears to be statistically significant increases, such that if we make 20 comparisons, by chance, we would expect at least one significant difference even if the samples did come from the same population or there was no change in the population. Consequently, in reviewing the comparisons between the 2000 NCHA and the 2002 NCHA, it is important not to give too much weight to any one comparison among the many. Rather, individual comparisons should viewed in the context of the other comparisons in each set and interpreted based on the overall pattern the comparisons in the set suggests as to whether change occurred or not.

We have not made comparisons on all items in the questionnaire. Rather, we have focused on those that are probably of greatest interest, those that reflect areas of programmatic activity, and those that might most directly assess whether the student population changed in terms of its general health independent of programmatic efforts. For the most part, we will present the comparisons in the order that the questions appeared in the questionnaire.

Use of Various Substances

Table I presents the comparisons of results between the two surveys regarding the use of tobacco products, alcohol, and other drugs. The table indicates that there were no significant differences between 2000 and 2002 regarding the use of smokeless tobacco, marijuana, cocaine, rohypnol, and miscellaneous other drugs. However, the table does show that there were statistically significant differences in the results between 2000 and 2002 on the remaining substances. Specifically, Table I indicates that:

- The percentage of respondents who indicated that they have never used cigarettes increased in 2002 compared to 2000, while the percentage who reported smoking cigarettes on more days also declined.
- Fewer respondents reported ever having smoked cigars in 2002 than in 2000, and those who did smoke cigars tended to reported smoking them less often.
- A larger percentage of respondents in 2002 reported never drinking alcohol than in 2000, and, among those who did drink alcohol, smaller percentages of respondents reported drinking very frequently than in 2000.
- The percentages of respondents who reported using amphetamines increased slightly from 2000 to 2002.

Thus, Table I suggests that, in general, the use of harmful substances – especially the most commonly used substances – declined between the 2000 survey and the 2002 survey among MSU students.

Table II focuses on respondents' perceptions of the use of these substances by other students at MSU. Table II indicates that there were no differences in the perceived use of cigarettes, cigars, smokeless tobacco, or amphetamines between the two surveys, despite the fact that prevalence for two of these appears to have declined. For all the remaining substances asked about, respondents in 2002 perceived that use was more common than respondents perceived it to be in 2000. That is, respondents in 2002 perceived that other MSU students use alcohol, marijuana, cocaine, rohypnol, and other drugs to be more commonly than respondents did in 2000. Thus, actual use may have declined but perceived use has increased or failed to recognize the decline.

Other Alcohol-Related Behaviors

Table IIIa and Table IIIb compare the results for 2000 and 2002 on a variety of alcohol-related behaviors. Table IIIa indicates that:

- Fewer respondents in 2002 reported driving after drinking alcohol in the previous month than reported doing so in 2000.
- There was no difference between 2000 and 2002 regarding the percentages of respondents who reported driving at least once in the previous month after drinking five or more drinks (8.5% in 2000 vs. 7.2% in 2002).

Table IIIb focuses on questions as to how often those who drink take each of various steps to protect themselves from alcohol poisoning, intoxication, or injuries. The table indicates that there were no significant differences in the responses to any of these items between 2000 and 2002 except regarding alternating non-alcohol and alcohol beverages or drinking alcohol look-alikes. On nearly all of the items, the percentage of respondents who reported always or usually doing the self-protecting behavior was

slightly greater in 2002 than in 2000 but the difference was not sufficiently great to be statistically significant. The difference was significant regarding alternating types of beverages, with respondents in 2002 being more likely to report more often alternating non-alcohol beverage when they drank alcohol during this past school year. The difference was also significant regarding how often respondents drank alcohol look-alikes, but in this case, the percentage who reported always or usually doing this declined from 2000 to 2002.

Table IV compares the average number of hours respondents reported spending drinking on the most recent social occasion, the number of drinks they had, and the number they believed a “typical” MSU student had on his or her last social occasion. The table indicates that:

- The average number of hours respondents reported spending socializing was roughly 1/3 of an hour less in 2002 than in 2000 (i.e., 3.22 hrs. vs. 3.54 hrs.).
- There was no difference in the average number of drinks respondents reported consuming between 2000 and 2002.
- And, there was no significant difference in the average number of drinks respondents believed the “typical” MSU student consumed from 2000 to 2002.

Table V compares the percentages of respondents who reported experiencing various health-threatening consequences of their drinking during the school year. The table indicates that there were no statistically significant differences in responses between the two surveys for any of the items except the last one listed – having unprotected sex. The table indicates 5% fewer respondents reported having had unprotected sex as a consequence of their drinking in 2002 than in 2000 (16.5% vs. 21.1%).

Sexual Behavior

Table VI presents the comparisons of results from the two surveys regarding oral, vaginal, and anal sexual behavior and regarding condom use among those who engaged in these sexual activities in the previous month. Table VI indicates that:

- From 2000 to 2002, there was a significant decrease in the percentage of students who reported ever engaging in oral sex, and in past month in particular, but there was no significant difference in the results regarding the prevalence of vaginal intercourse or anal intercourse between the two years.
- Among those who had engaged in each type of sexual behavior during the previous month, there were no significant differences from 2000 to 2002 regarding how often respondents said they used condoms during these sexual acts.

Table VII presents the comparisons regarding the use of various methods to prevent pregnancy the last time respondents had vaginal intercourse. The table indicates

that there were no statistically significant differences between 2000 and 2002 regarding the percentage of respondents who used these with only one exception. Table VII indicates that in 2002 a somewhat greater percentage of respondents (3.2% vs. 0.5%) reported using some form of contraceptive method other than one of the eight methods already listed when they last had intercourse. Since there was no follow-up question asking respondents to specify what they “other” method was, we have no way of knowing if this is simply respondent error in answering or if they are referring to a new technology not included in the other eight categories.

Table VIIIa reports the results of the comparisons between 2000 and 2002 regarding the prevalence of other outcomes of sexual behaviors. The table indicates that there were no significant differences between the two surveys regarding the percentage of respondents who reported having used emergency contraception (i.e., the ‘morning-after’ pill), the percentage reporting getting pregnant or getting someone else pregnant unintentionally, or the percentage who reported ever having been tested for HIV. The percentages of respondents who reported having done each of these were actually smaller in 2002 than in 2000 but not sufficiently so to be statistically significant.

Table VIIIb compares the distributions of responses between the two surveys regarding respondents’ sexual preferences or orientations. The table indicates that there was no difference in these distributions between the two surveys.

Health Problems

Table IX compares the prevalence of each of 29 different health problems students might experience for the two surveys. The table shows the percentage of respondents who said they had had each of the problems during the current academic year. The table indicates that there were no significant differences in the percentages of respondents who had these various problems between 2000 and 2002. Other than what might be attributable to sampling error, virtually the same percentages of respondents reported having had each of these health problems in 2002 as did so in 2000.

Table X shows the percentages of respondents who reported experiencing some type of academic difficulty as a consequence of 28 different health, family, social or behavioral problems. The table indicates that there were no significant differences in the responses between 2000 and 2002 on 25 of the 28 different health problems. The only items on which there were statistically significant differences between 2000 and 2002 had to do with the consequences of colds, influenza, or sore throats, internet use or computer games, and pregnancies. The table indicates that:

- A smaller percentage of respondents in 2002 reported having some type of academic problem as a result of a cold, influenza or sore throat than did so in 2000 (19.4% vs. 23.5%).

- A larger percentage of respondents in 2002 reported having some type of academic problem as a consequence of using the internet or playing computer games than did so in 2000 (12.9% vs. 8.9%).
- And, fewer respondents reported academic problems as a result of a pregnancy (their own or their partner's) in 2002 than reported this in 2000 (0.3% vs. 1.6%).

In general, there appears to have been little change in the general health experience of students at MSU in 2002 compared to 2000 or in the impacts of those experiences. However, where there was apparent change, the apparent change mirrored actual changes on campus (i.e., the increasingly pervasive use and availability of computer technologies) or findings regarding other health behavior changes among students (i.e., reduced sexual activity).

Mental Health

Table XI compares responses to the seven mental health questions between the 2000 and 2002 surveys. The questions asked respondents how many times they felt a particular way or thought or attempt various things which reflect on their mental health status. For this comparison, we have collapsed the response options into only three categories: never, 1-2 times, and 3 or more times. The table indicates that there were no statistically significant differences in the distributions of responses to any of these seven items between 2000 and 2002. That is, there is no evidence of a significant change in the overall mental health status of students between the two years.