

**MSU STUDENT HEALTH ASSESSMENT:**

**SPRING 2002**

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July, 2002

Conducted for Olin Health Center and the American College Health Association by the Office for Survey Research, a division of the Institute for Public Policy and Social Research, Michigan State University.

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## **Executive Summary**

In the Spring of 2002, Michigan State University participated in the National College Health Assessment Survey through Olin Student Health Center's membership in the American College Health Association (ACHA). Optically scannable questionnaires designed by the CORE Institute and the ACHA were mailed to a disproportionate, stratified random sample of MSU students in February, 2002, at the same time the same survey was being administered on more than 100 other campuses across the nation as well. At MSU, minority students were over-sampled to facilitate more meaningful analyses based on racial or ethnic background. At MSU, the mailing and receiving of questionnaires was carried out by the Office for Survey Research within the Institute for Public Policy and Social Research. A total of 994 students completed and returned questionnaires.

Table 1 provides a profile of the demographic characteristics of the respondents. Because some segments of the student body were somewhat over- or under-represented among respondents, the data set has been weighted based on gender, race/ethnicity, and undergraduate/graduate student status so that the final weighted sample more nearly mirrors the representation of these groups in the MSU student body as a whole. Table 1 also shows the profile of this final weighted sample. The analyses summarized here have been made based on this final weighted sample.

The questionnaire covered a diverse set of health-related topics including: perceived health status, sexual behaviors and beliefs, alcohol-tobacco-drug behavior and beliefs, injury prevention, disease prevention and screening, victimization, exercise and rest, depression, incidents of disease or injury, incidents of stressors, sources and credibility of health information, and background questions. This executive summary will point out some of the more noteworthy findings of the survey with respect to these.

## **Perceived Health Status**

Table 2 shows the percentages of respondents who rated their health as excellent, very good, good, fair or poor. The table indicates that:

- Overall, 64.5% of the respondents rated their health as excellent (22.7%) or very good (41.8%).
- Males were more likely to rate their health as excellent or very good than were females.
- Whites were more likely than other racial/ethnic groups to rate their health as excellent or very good. There were no statistically significant differences in ratings among age groups, or whether respondents lived on-campus or off-campus.
- Respondents who reported having higher grade point averages tended to rate their health more highly than did those who reported having lower grade point averages. A *possible* implication of this is that, for at least some students, lower academic performance is a consequence of health problems they experience as students.

## **Weight Status, Exercise, and Rest**

Respondents were asked to indicate their height, weight, how many days in the past week they exercised either vigorously for 20 minutes or moderately for 30 minutes, how many days in the past week they got enough sleep so that they awoke feeling rested, and how many servings of fruits and vegetables they usually eat per day. The respondents' heights and weights were converted into Body Mass Index (BMI) scores (kilograms/meters<sup>2</sup>) and then categorized into weight statuses with BMI scores of 25.0 - 29.9 coded as overweight and 30.0 or greater coded as obese. The results for these questions are presented in Table 3 along with the comparisons on each between males and females, white and other racial/ethnic group respondents, those living on- and those living off-campus, and among GPA categories. The table indicates that:

- 36.1% of the respondents were overweight (27.1%) or obese (9.0%) based on BMI scores;
- Males were more likely to be overweight or obese than females were (43.5% vs. 29.4%).
- There were no statistically significant differences in BMI categories based on race/ethnicity.
- Respondents with lower GPA's were somewhat more likely to be overweight or obese than were their counterparts.

- 43.5% of respondents indicated that they exercised three or more days during the previous week. White respondents were more likely than respondents of other races/ethnicities to exercise three or more days per week.
- 38.2% of the respondents did muscle strengthening or toning exercises three or more days in the previous week. White respondents were more likely than their counterparts to report doing strengthening/toning exercises three or more times per week.
- Nearly four out of ten respondents (38.2%) reported getting enough sleep so that they felt rested fewer than four days out of the previous seven.
- Only 5.7% of all respondents reported eating five or more servings of fruits and vegetables per day – the minimum recommended for good health by nutritionists - - and 62.3% reported eating two or fewer servings per day.
- Females tended to report eating more fruits and vegetables than males did, but 92.2% of the female respondents still fell short of the five per day recommendation.
- On-Campus respondents were more likely to report eating at least three servings of fruits and vegetables each day. However, approximately 94% of both on-campus and off-campus respondents fell short of the five per day recommendation.

The questionnaire include several questions regarding how respondents perceive their own weight status, what they were currently trying to do, if anything, about their weight, and if they had used any of several weight loss strategies in the previous 30 days. Table 4 shows the percentages of respondents giving each of the possible answers and then also compares the percentage distributions of responses among respondents categorized by their BMI-based weight status. The table indicates that:

- Only 10.7% of those in the “Not Overweight” category described themselves as either slightly or very overweight.
- 36.2% of those who were “overweight” and 7.1% of those who were “Obese” described themselves as about the right weight or slightly underweight; only 29.4% of those who were categorized as obese described themselves as ‘very overweight.’
- Overall, 46.9% of respondents said they were trying to lose weight.
- 66.7% of those classified as overweight and 81.0% of those classified as obese said they were trying to lose weight, as were 32.7% of those in the “Not Overweight” BMI score range.

- 29.8% of those classified as overweight and 13.1% of those classified as obese said they were either doing nothing about their weight (11.1%; 4.8% respectively) or were trying to stay at the same weight (18.7%; 8.3% respectively).
- 55.8% of all respondents reported that they had exercised to lose weight in the previous 30 days; however, 74.3% of those overweight and 72.9% of those obese reported doing this.
- 32.4% of all respondents claimed to have dieted to lose weight in the previous 30 days, but this was claimed by 45.9% of those classified as overweight and 54.1% of those classified as obese compared to only 23.6% of those classified as not overweight.
- Only 1.9% of respondents reported engaging in purging activities to lose weight.
- Approximately one in twenty (5.9%) reported using diet pills to lose weight, but this was 7.4% among those classified as overweight and 9.3% among those classified as obese.

### **Injury Prevention**

Respondents were asked to indicate how often within the last school year they wore seatbelts when riding in a car or wore a helmet when bicycling, motorcycling, or inline skating. Table 5 shows the percentages of respondents who indicated having done the various activities who claimed to have taken the step to prevent injuries never, rarely, sometimes, most of the time, or always. Table 5 indicates that:

- Nearly all students indicated having ridden in a car and only 5.1% of these said they wore a seatbelt less than most of the time. 75.9% said they always wear a seatbelt when riding in a car.
- Although roughly 70% of the respondents appear to indicate having ridden a bicycle during the last school year, 81.0% indicated that they never wear a helmet.
- Despite being required by law to wear a helmet when riding on a motorcycle, only seven out of ten (72.6%) of those who rode a motorcycle as a driver or passenger during the school year claimed to always wear a helmet – 14.8% claimed to never wear a helmet.
- 88.4% of respondents who have been in-line skating in the last year reported that they never wear a helmet. Only 2.3% said that they always wear a helmet when in-line skating.

### **Disease Prevention and Screening**

The questionnaire asked respondents to indicate whether or not they had been vaccinated against various diseases and whether they had recently had preventive health screening exams such as dental exams and cleaning, breast exams (females only), gynecological exams (females only), testicular exams (males only), blood pressure checks, cholesterol checks, or used sunscreens. Table 6 shows the percentage of all respondents who said that they had done each of these and the percentage who indicated not knowing.<sup>1</sup> The table also compares the percentage of respondents who said they had done each of these across various demographic groups of respondents, i.e., males vs. females, white and other students, respondents living on-campus vs. those living off-campus, and respondents reporting their cumulative GPA is an A, a B, or a C or lower. The table indicates that:

- Only between 46% and 63% of respondents claimed to have been vaccinated against hepatitis B, meningococcal, and varicella; about 80% of respondents said they were vaccinated against measles, mumps and rubella, while only 22.7% claimed to be vaccinated against influenza last year.
- Approximately eight out of ten (80.3%) claimed to have had a dental checkup and cleaning in the past year and nine out of ten (90.1%) claimed to have had their blood pressure checked in the past two years.
- Only 38.4% of males claimed to perform monthly testicular exams.
- Nearly two-thirds of females (64.7%) said they had a gynecological exam in the past year but only 40.0% said they perform monthly breast self-exams.
- Only 40.7% of all respondents claimed to have had their cholesterol checked in the past five years.
- Females were more likely than males to report having been vaccinated against hepatitis B, meningococcal disease, varicella, and influenza. Additionally, females were more likely than males to have had a dental exam, have their blood pressure checked, have their cholesterol checked and to use sunscreen daily.
- White respondents generally were more likely than other respondents to report having been vaccinated against influenza, to have had a dental exam last year, to perform testicular exams monthly, to have had a gynecological exam in the last year, and to have had their blood pressure checked in the last two years. However, non-White respondents were more likely to report having been vaccinated against varicella.
- Respondents living on-campus were somewhat more likely than their off-campus counterparts to report having been vaccinated against hepatitis B, meningococcal disease, and influenza, while also being more likely to report having had a recent

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<sup>1</sup> The percentage who said they had not done each of these is not reported in the table but can easily be calculated by summing the percentage who said they had done it and the percentage who said they did not know if they had done it and then subtracting this sum from 100%. The result is the percentage of respondents who said they had not done this.

dental checkup; female respondents living off-campus were more likely than their on-campus counterparts to report having had a gynecological exam in the past year and to report performing monthly breast exams.

### **Alcohol, Tobacco, and Other Drugs**

The questionnaire included a series of questions on the use of tobacco, alcohol and other drugs. Respondents were asked to report the number of days they had used each of nine different categories of substances over the previous 30 days. Table 7 shows the percentage distribution of responses for each of these nine categories of substances. The table indicates that:

- Approximately 60% of the respondents reported never having smoked cigarettes at all and another 18.9% reported not having smoked in the previous 30 days; only 13.1% of respondents claimed to have smoked cigarettes 6 or more days out of the previous 30.
- Over 70% of respondents said they had never smoked cigars and 87.6% said they have never used smokeless tobacco; only 3.6% of respondents claimed to have used smokeless tobacco in the previous 30 days, while 6.4% claimed to have smoked cigars.
- By contrast, only 14.5% claimed never to have drunk alcohol and another 10.0% claimed not to have drunk alcohol in the previous 30 days; however, more than one third (36.4%) claimed to have drunk alcohol on six or more of the previous 30 days.
- 95.6% of respondents claimed to have never used cocaine, 98.8% claimed to have never used Rohypnol, 90.3% claimed to have never used amphetamines, 91.8% claimed to have never used other drugs than those listed.
- 63.4% claimed never to have used marijuana and another 22.3% reported not having used it in the previous month; however, 5.9% reported having used it on six or more days in the previous month.

Table 8 shows the overall percentages of respondents who reported using these various drugs one or two days in the previous month or three or more days. The table also compares the percentages of respondents using these drugs one or more days by gender, race/ethnicity, campus residence, and cumulative GPA. The table indicates that:

- Males were much more likely than females to report using alcohol and other drugs, having smoked cigars, and having used smokeless tobacco, but did not differ from females with respect to smoking cigarettes (at least once in the previous month).

- White respondents and those living off-campus were more likely than their respective counterparts to have drunk alcohol in the previous 30 days.
- Respondents claiming to have an “A” GPA were less likely than those with a “B” or “C” or less to have smoked cigarettes, and were much less likely to report having used marijuana. Additionally, students with a “C” or less GPA were more likely to use amphetamines and other drugs, as compared to students with higher GPA’s.

Respondents were also asked to indicate whether they thought the “typical” student at MSU had never used each of these substances in the previous month, used each one or more days, or used each of these daily. Table 9 shows the results for these two sets of questions. To gauge the extent to which respondents see themselves as “typical” or the extent to which they may misperceive what the behavioral norm is at MSU, the table also indicates what percentage of respondents indicated they believed that the “typical” student used each of the drugs more often than they did personally. The table indicates that:

- Respondents, on all types of substances, tended to believe “typical” students were more likely to be more frequent users than they were themselves.
- Non-users and those who had not used substances in the past month were more likely than users to over-estimate typical use.
  - **78.9% over-estimate cigarette usage, 72.7% over-estimated marijuana usage, and 45.2% over-estimated even alcohol usage.**

Respondents were also asked to indicate what percentage of their fellow students at MSU used each cigarettes, alcohol, and Rohypnol in the previous 30 days.

- While only 21.9% of respondents reported smoking cigarettes in the past month, 76.8% of respondents believed that more than 30% of their fellow students smoked in the past month. In fact, the average estimate among respondents was that 48% of their fellow students smoked in the previous month.
- 75.4% of respondents reported drinking alcohol in the previous month on at least one occasion. The average estimate among respondents was that 72.2% of their fellow students drank in the previous 30 days.
- While only 0.3% of respondents reported using Rohypnol at all in the previous month, 87.6% of respondents believed that more than 1% of their fellow students used these drugs in the previous month with 29.3% of the respondents believing that more than 10% of their fellow students used these drugs in the previous month.

The questionnaire asked respondents if, in the previous 30 days, they had driven after drinking any alcohol and if after having had five or more drinks. The survey found that:

- 30.9% of the respondents reported having driven after drinking at least some alcohol at least once in the previous 30 days; of these, 23.4% (7.2% of all respondents) reported driving after having five or more drinks at least once in that time.
  - Males were much more likely than females to report driving after drinking five or more drinks (10.6% vs. 4.3%)
  - White respondents were more likely than their counterparts to report driving after drinking five or more drinks (7.9% vs. 4.7%), and those living off-campus were more than three times as likely compared to those living on-campus to report driving after drinking five or more drinks (11.3% vs. 2.8%).
  - There were no significant differences based on GPA and those under age 20 were less likely than their counterparts to report such driving.

Respondents were asked to indicate for how many hours they drank alcohol the last time they “partied” and then the number of alcoholic drinks they consumed during this time.

- Respondents reported that they drank alcohol for an average of 3.22 hours (sd = 2.57) the last time they “partied.” During this time, on average, respondents reported consuming 5.08 alcoholic drinks (sd = 4.74). In fact, 61.9% of the respondents reported drinking five or fewer drinks the last time they “partied.”
  - Males reported drinking an average of 6.61 drinks compared to females 3.82 drinks the last time they “partied.”

The questionnaire asked respondents to indicate how many times in the previous two weeks they had drunk the same amount of alcohol or more as they had indicated they consumed the last time they “partied.”

- 34.1% of the respondents reported that there were two or more occasions when they drank a comparable number of drinks in the two weeks prior to completing the survey.
- Those who reported more occasions in that time period also reported having consumed greater numbers of drinks.

Respondents were also asked to indicate how many alcoholic drinks they thought the “typical” MSU student had the last time he or she partied.

- More than 75% of the respondents thought that the “typical” student at MSU drank four or more alcoholic drinks the last time he/she “partied.” The average number of drinks respondents believed the “typical” student drank was 6.31 (sd = 3.37) and 27.9% of the

respondents thought the “typical” student drank between 7 and 20 drinks the last time he/she partied.

- 61.2% of the respondents perceived that the “typical” student at MSU consumes more drinks than they do personally.
- Younger respondents tended to believe that students typically consume greater numbers of drinks. There was not a significant correlation between GPA and the number of drinks believed to be consumed by typical students.

The questionnaire asked respondents how many times in the previous two weeks they had drunk five or more alcoholic drinks at a sitting. The survey found that:

- 44.7% of respondents claimed to have had five or more alcoholic drinks at a sitting at least once in the previous two weeks with 6.3% of respondents claiming to have done it five or more times.
- 56.3% claimed not to have done it at all.

The questionnaire also included a series of questions regarding how often the respondent did various things to drink responsibly, e.g., having a designated driver, eating food before or while drinking, setting a drink limit in advance, pacing consumption to one or fewer drinks per hour, etc. Table 10 shows the percentages of respondents who reported doing each of ten different strategies for drinking responsibly either always, usually, sometimes, rarely, or never. The table indicates that:

- Respondents were least likely to say they ever drank an alcohol look-alike beverage (45.8%) instead and most likely to report always using a designated driver (45.4%).
- Nearly all respondents indicated that they at least occasionally eat food before or while drinking and 65.5% claimed to either usually or always do this.
- 53.8% said they usually or always keep track of how many drinks they are having and 36.7% claim they usually or always avoid drinking games.
- However, about 40% never or only rarely alternate non-alcoholic with alcoholic beverages or determine in advance the maximum number of drinks they will drink, or have a friend let them know when they have had enough, or pace their drinking so as not to get drunk.

Table 11 compares the responses to these based on gender, race, age, residence location, GPA, and membership in Greek organizations. Table 11 shows the percentage of respondents who said they always or usually do the various responsible drinking steps. Table 11 indicates that:

- Females were more likely than males to report always or usually alternating non-alcoholic and alcoholic beverages, choosing not to drink at all, using a designated driver, having a friend tell them when they have had enough, keep track of the drinks they have had, and to pace themselves to consume no more than one drink per hour.
- White respondents were less likely than their counterparts to determine a limit on the number of drinks to have in advance, to chose not to drink, to have a friend tell them when they've had enough, to keep track of how many drinks they've had, and to drink alcohol look-alike beverages.
- However, white respondents were more likely to use a designated driver.
- Younger respondents were less likely to avoid drinking games and to pace their drinking to one drink per hour or less, but they were more likely than their older counterparts to use a designated driver. Respondents ages 22-23 were least likely to alternate alcoholic and non-alcoholic beverages, to chose not to drink, and to use a designated driver.
- Respondents living on-campus were more likely than their off-campus counterparts to report choosing not to drink, using a designated driver, to have a friend tell them when they have had enough, and to keep track of the number of drinks they have consumed. On the other hand, they were less likely to avoid drinking games and to pace themselves to consume no more than one drink per hour.
- Respondents with "B" grade point averages were less likely than those with higher or lower GPA's to avoid drinking games. This was the only significant difference in this table based on grade point average.
- Members of fraternities or sororities were less likely to keep track of the number of drinks they have consumed and much less likely to avoid drinking games.

The questionnaire asked respondents to indicate if they had experienced, at least once, any of seven different undesirable events during the last school year as a consequence of their drinking. Table 12 shows the results for each of these events. The table shows the percentage of respondents who drink at least sometimes who reported that the event in question did happen to them during the last school year. The table also compares the likelihood of experiencing these events by gender, race/ethnicity, age group, residence location, GPA, and membership in a Greek organization. The table indicates that:

- 42.5% of the respondents reported having done something when drinking that they later regretted; more than a third (36.4%) reported at least once having drunk to the point where they did not know where they were or what they did; nearly a quarter (21.6%) reported having injured themselves at least once as a consequence of their drinking; and more than one in five (21.1%) reported having had unprotected sex as a consequence of their drinking.
- Males were more likely than females to report having injured another person, having been in a fight, and to have forgotten where they were as a result of drinking.

- Whites were more likely to report injuring themselves and forgetting where they were as a result of drinking.
- Younger respondents who drink were more likely to report being injured, injuring others, being involved in a fight, and forgetting where they were or what they did. However, respondents ages 22-23 were most likely to report doing something they later regretted and having unprotected sex as a result of drinking.
- Off-campus respondents were more likely to report engaging in unprotected sex as a result of drinking.
- Members of fraternities or sororities were more likely to report being involved in a fight, doing something they later regretted, forgetting where they were/what they were doing, and engaging in unprotected sex as a result of drinking.

### **Sexual Behavior and Beliefs**

The questionnaire also include another long series of questions regarding sexual behaviors, steps to prevent conception and sexually transmitted diseases, and perceptions of these behaviors by a “typical” student at MSU. Table 13 shows the percentage distribution of the number different partners, if any, respondents reported having sex with (oral, vaginal, or anal) during the last school year. The table indicates that:

- Roughly a quarter of respondents (25.2%) reported having no sexual partners during the last school year and 46.0% reported only a single partner.
- 8.0% of respondents reported having had four or more sexual partners during the past school year.

Table 13 also shows the percentage distribution regarding the number of sex partners respondents believed the “typical” student had at MSU. The table indicates that respondents overwhelmingly misperceive what is, in fact, typical. The table indicates that:

- 17.6% of respondents believed the “typical” student had four or more sex partners.
- 11.1 % of respondents believed that the “typical” student had one or fewer sex partners.
- Comparing the respondent’s belief about the typical student’s number of partners to his or her own, the table indicates that 77.5% of the respondents believed that the “typical” student had more sexual partners than the respondent did himself or herself.
- Based on the fact that the “typical” student actually had only a single partner or less, 89.0% of respondents over-estimated what is “typical” compared to what is actually typical.

The questionnaire asked respondents to indicate how many times in the previous 30 days they had engaged in each oral sex, vaginal sex, and anal sex. They were then asked to respond to a similar question about the “typical” MSU student. Table 14 shows the percentage distribution of responses for each of these. The table indicates that:

- Anal sex is relatively rare: 77.5% of respondents reported never having done this and another 18.7% reported not having done it in the previous 30 days. 5.5% of respondents believed that the “typical” MSU student had done this at least once in the previous month.
- Oral sex is as common as vaginal sex with 48.7% of respondents reporting having engaged in oral sex at least once in the past month compared to 48.8% for vaginal sex, but those engaging vaginal sex report having done it more times.
- 71.3% of respondents believed that the “typical” MSU student had had oral sex a greater number of times than the respondent did personally, and, since the most common actual responses were “not in the past 30 days, or never, 96.7% of respondents over-estimated what is actually normal or most common.
- 68.8% of respondents believed the “typical” MSU student had vaginal sex at least once in the previous month when actually only 48.8% claimed to have done so, and 42.0% of respondents thought the “typical” MSU student had vaginal intercourse three or more times in the previous month compared to the 40.3% who actually reported having done so. That is, 64.4% of respondents over-estimated how many times the “typical” student had vaginal sex compared to themselves and 68.8% over-estimated what is typical compared to the actual average number of times.
- 89.2% of respondents believed that the “typical” student had not had anal sex in the past month and approximately one in ten believed that the “typical” student had engaged in this activity in the past month.. 88.3% of respondents over-estimated what is “typical” compared to their own behavior and 54.8% over-estimated what is typical compared to the actual norm.

Respondents were asked to indicate how often they had used a condom when having each oral, vaginal, and anal sex of the times they did this in the past 30 days. They were asked to respond to a similar question regarding the “typical” MSU student as well. Table 14 shows the results for these questions also. The table indicates that:

- Only 2.2% of respondents reported ever using a condom during oral sex, but more than half (51.4%) said they believed the “typical” student does at least rarely or more often.
- Of those who claimed to have had vaginal sex at least once in the previous month, 31.5% claimed they or their partner always used a condom, while 37.2% said they never used a condom; however, 63.6% of respondents said they believed the “typical” student mostly or always used a condom.

- Of those who claimed to have had anal sex at least once in the previous month (n=90), nearly two-thirds (63.7%) said they never used a condom while only one in five (20.0%) said they always did.
- Compared to what is actually the most common behavior, 51.8% of respondents over-estimate the use of condoms by the “typical” student during oral sex, 99.3% with respect to vaginal sex, and 93.4% with respect to condom using during anal sex.

The questionnaire also asked respondents to indicate whether or not they or their partner had used a condom the last time they had oral, vaginal, and anal sex. Table 14 indicates that 50.8% of those who had vaginal intercourse said a condom was used the last time, 2.7% of those who had oral sex said a condom was used, and 31.8% of those who had anal sex said a condom was used the last time. That is, except for those respondents who have had sex with only a single partner and with a partner who has had sex only with the respondent, a large portion of these sexually active respondents are having unprotected sex and are at-risk for a variety of STD's.

For those who were sexually active, the questionnaire included another series of questions regarding the method the respondent and partner used to prevent pregnancy the last time they had vaginal intercourse. Respondents could use several methods simultaneously so multiple responses were possible. Table 15 shows the percentage of sexually active respondents who claimed using each of the various methods the last time they had intercourse. The table also compares the reported use of these across respondents of different backgrounds. The table indicates that:

- 56.2% of these respondents claimed to use birth control pills, 53.4% claimed to use condoms, 26.0% reported relying on “withdrawal,” 5.2% reported using no method, and 7.0% reported using the “morning after” pill.
- Females were more likely than males to report they or their partner used birth control pills, (suggesting that some of the males did not know their female partners were using birth control pills) and condoms. Males were more likely to report relying on Depo Provera and spermicides.
- White respondents were more likely than their counterparts to report using birth control pills, while other racial/ethnic group respondents were more likely to report using Norplant or nothing.
- On-campus respondents were more likely than their counterparts to report using condoms, while off-campus respondents were more likely to report using other methods.
- Members of fraternities or sororities were more likely than their non-Greek counterparts to report using “withdrawal” and diaphragms/cervical caps/sponges to prevent pregnancy.

Of those sexually active, 1.8% reported to have unintentionally become pregnant or gotten someone else pregnant during the last school year. Members of fraternities or sororities were much more likely to report that this happened.

Respondents were also asked whether or not they had ever been tested for HIV. Since sexual activity is only one of several possible ways in which someone can contract HIV, all respondents, whether sexually active or not, were asked this question. Table 15 shows the results for this as well. The table indicates that 22.8% of respondents claimed to have been tested for HIV. Off-campus respondents were more likely than their counterparts to report having been tested, but there were no significant differences among other groups of respondents.

### **Victimization**

A section of the questionnaire asked respondents to indicate whether or not they had been involved in each of a variety of potentially harmful or troubling events during the last school year. Table 16 lists the nine different types of situations asked about and shows the percentage of respondents who reported that they had been involved or victimized in that way at least once during the last school year. The table also compares the experience of each of these across various categories of respondents. The table indicates that:

- 8.5% of respondents indicated having been sexually touched against their will and 9.7% reported having been in an emotionally abusive relationship at least once during the school year.
- 6.5% claimed to have been in at least one fight, 4.7% to have been assaulted and 2.8% to have been threatened for sex against their will; 2.0% reported what amounts to an attempted rape, and nearly 1% reported having been raped.
- Males were more likely than their counterparts to report having been involved in a physical fight and members of fraternities or sororities were more likely to report having been assaulted.
- Females were more likely than males to report having been touched sexually against their will, to have been the victim of an attempted rape, and to have been in an emotionally abusive relationship.

### **Emotional Well-Being**

To measure the experience of depression, stress, anxiety, and other markers of emotional well-being, the questionnaire asked respondents to indicate how many times over the last school year, they experienced various feelings, each of which in the list represented an increasingly intense emotion difficulty – from “felt overwhelmed by all you had to do” to “attempted suicide.” Table 17 indicates the percentage distribution of responses to each of the different emotional states. That table indicates that:

- More than a third of the respondents indicated having felt overwhelmed and exhausted nine or more times during the last school year; 18.8% said they had felt very sad that many times, and 12.4% said they had felt things were hopeless that many times.
- 42.7% said they had felt so depressed that it was difficult to function at least once during the school year; 6.7% said they had seriously considered attempting suicide at least once; and slightly less than 1% said they had attempted suicide at least once.

To explore the experience of such emotional difficulties within the student population, we have constructed an overall index score represented by the combined responses to each of the seven items. Scores could range from 0 for respondents who said they never had any of these troubled feelings to a score of 84 for respondents who said they had felt or done each of these 11 or more times during the last school year. The overall average index score was 22.3 with a standard deviation of 15.9. Table 18 compares these average index scores across demographic groups and indicates females tended to report having experienced more emotionally troubled times than males (24.8 vs. 19.3), but there were no statistically significant differences by race/ethnicity, residence location, or membership in a Greek organization. There was a statistically significant difference in the index scores across age groups of respondents but there was no clear pattern to the difference. Additionally, students with a “B” grade-point average had a lower mean index score than their counterparts with higher and lower GPA’s.

We have also compared these index scores across individuals based on their experience of various types of victimization. These are also shown in Table 18. The table indicates that:

- Those who had been verbally threatened for sex against their will, sexually touched against their will, the victim of an attempted rape, had been involved in an emotionally abusive relationship, or had been involved in a sexually abusive relationship all had higher index scores – meaning they reported more times feeling emotionally troubled in the seven ways listed – than those who had not be victimized in these ways.
- There was no significant difference between those who said they were raped and those not and between those who had been in a physically abusive relationship and those not, although the pattern and magnitude of the differences in mean index scores in both cases were comparable to those where the differences were significant; however, in both of the situations, there were so few reporting having been victimized that the differences in means was not quite significant statistically.
- There was no significant difference in mean index scores between those who had been involved in a physical fight and those who had not.

### **Incidents of Disease**

Respondents were asked to report whether or not they had any of 29 different health problems during the last school year and then whether or not they had ever been diagnosed with having the problem. Table 19 shows the percentages of all respondents who reported ever

having been diagnosed with each of the problems and the percentage who reported having the problem during the last school year. The table indicates that:

- More than four out of ten reported having had allergy problems (41.2%) and back pain (44.1%) during the last school year; 28.8% reported having had a sinus infection; and between 9 and 13% reported having had bronchitis, an ear infection, or strep throat.
- 16.1% reported having had depression – more than had ever been diagnosed with the problem.
- Females were more likely than males to report having had a problem during the last school year with anorexia, anxiety disorder, bulimia, chronic fatigue syndrome, depression, genital herpes, an ear infection, sinus infection, and strep throat. Males were more likely than females to report having had a substance abuse problem in the last year.
- White respondents were more likely than their other race counterparts to report having had a broken bone/fracture, bronchitis, and a sinus infection during the last school year. Non-White respondents were more likely to report having had Hepatitis B or C, high blood pressure, and Chlamydia during the last school year.
- Those living off-campus were more likely to report having had Seasonal Affective Disorder, bronchitis, and a sinus infection during the last school year. On-campus respondents were more likely to report back pain during the last school year.
- Respondents with C/D/F grade-point averages were more likely to report having had anxiety disorder, bulimia, depression, endometriosis, genital herpes, HIV infection, substance abuse problems, Chlamydia, and Gonorrhea.

Across all respondents, the average number of these various health problems they reported having during the last school year was 2.77 (standard deviation = 1.81), but 20.6% of the respondents reported having none of these health problems and 29.1% reported having had only one. Roughly eight percent reported having had six or more of these health problems during the last school year. There were no significant differences based on gender, race/ethnicity, residence location, or age group. However, respondents with lower grade-point averages had a higher mean number of health problems during the last school year than their counterparts.

### **Impediments to Academic Performance**

Another section of the questionnaire asked respondents if they had had each of 27 different kinds of problems -- some disease, some substance abuse, some victimization, some emotional, and some other behavioral -- during the last school year and, if so, the extent to which the experience affected their academic performance. Table 20 shows the percentage of all respondents who reported not having had each of the various problems, the percentage who said they had the problem but that it did not affect their academic performance, and the percentage

who said they had the problem and that it either caused them to get a lower grade on an exam or important project, to get a lower grade in a course, or to take an incomplete or drop a course. The table indicates that:

- Nearly eight out of ten respondents reported having had a cold, flu, or sore throat or experiencing stress during the last school year.
- 27.0% said they experienced stress to the point that their academic performance was impaired, while nearly a fifth of respondents (19.4%) said their academic performance was impaired as a result of a cold, flu or sore throat.
- Nearly a quarter (23.2%) said their academic performance was impaired by sleep difficulties, 15.7% by relationship difficulties, 14.6% by concerns for a troubled friend or family member.
- 9.1% of respondents said their academic performance was impaired by alcohol use; 10.9% by depression, an anxiety disorder or seasonal affective disorder; and 7.7% by a sinus/ear infection, bronchitis, or strep throat.
- 12.9% said their academic performance had been impaired as a result of problems they experienced because of internet use or computer games.

Table 20 also compares the percentages who reported impaired performance between males and females, white and other racial/ethnic group respondents, those living on-campus and those living off-campus, and those who reported a cumulative GPA's of "A," "B," and "C" or lower. The table indicates that:

- Males were more than twice as likely than females to report impairment as a result of internet use or computer games and drug use.
- Females were more likely than males to report academic impairment due to cold/flu/sore throat, chronic illness, death of a friend or family member, sleep difficulties, and stress.
- Non-White respondents were more likely than white respondents to report academic impairment as a result of sleep difficulties and white respondents were more likely to report impairment due to alcohol use.
- Off-campus respondents were more likely than their on-campus counterparts to report academic impairment as a result of mononucleosis, while those on-campus were more likely than those off-campus to report impairment as a result of internet use or computer games.
- ***There were statistically significant differences in the percentages who reported academic impairment on 17 out of 27 problem types among respondents with different grade point averages.*** In all of these cases, respondents with lower grade point averages were more likely than their counterparts to report having been academically impaired as a result of the problem. For virtually all of the problems where the differences were not

statistically significant, this same pattern was observed but, in nearly all these cases, the numbers of individuals experiencing the problem was so few that the magnitude of the differences among percentages did not achieve a conventional level of significance to rule out sampling error as an alternative explanation.

The consistency of the latter set of comparisons suggests that the academic performance of students could be improved by reducing the transmission of some communicable diseases, by moderating some excessive behaviors, by reducing victimization, and by helping students cope with stress and relationships more effectively.

### **Distribution of Health Information on Campus**

Respondents were asked to indicate whether or not they had ever received health-related information from MSU on each of a variety of health topics. Table 21 shows the percentages of all respondents, for each topic, who claimed to have received information from MSU. The table indicates that:

- Nearly two-thirds (63.4%) reported receiving information on alcohol and other drug use prevention and more than half reported receiving information on sexual assault/relationship violence prevention (56.3%).
- Only four out of ten (46.8%) reported receiving information about preventing STD's or AIDS/HIV (39.0%).
- 17.6% reported receiving information about safety and preventing injuries and 12.8 % received information on preventing suicides.
- Fewer than one in five respondents (16.0%) reported receiving no health information from MSU on any of these topics.
- Among those who did claim to have received information on at least one of these, the average number of topics on which they claimed to receive information from MSU was 3.9 (standard deviation = 3.0).

Respondents were also asked to indicate whether health information from various sources listed were, in their opinion, believable or unbelievable, and from which sources they usually get their health information. Table 22 shows the results. The sources are listed in Table 22 in descending order based on the percentage of respondents who said the source was believable. That table indicates that:

- Health center medical staff (90.1%) and health educators (92.0%) were most often judged to be believable sources, followed by parents (70.6%). By contrast, roughly a quarter of respondents judged health information from friends (26.2%) to be believable. Nearly one in five respondents found health information from the internet/world wide web (21.1%), or television (19.0%) to be believable.

- Leaflets, pamphlets, and flyers were the source fourth most frequently judged to be believable.
- Parents were most often identified as a usual source of health information (72.9%), followed by friends (59.5%).
- Although few had judged health information from friends as believable, they were the second most commonly identified source of health information (59.5%).
- More respondents identified television (49.9%), magazines (53.1%), and the internet (51.7%) as identified health center medical staff (48.9%) or health educators (40.8%) as their usual sources of health information despite the fact that only about a third or fewer of the respondents judged any of the former sources as believable.

TABLE 1. Profile of the Sample of Survey Respondents (n=994)

	n	%	Weighted n	Weighted %
<b>Gender</b>				
Male	292	29.4	451	45.4
Female	682	68.6	523	52.6
<b>Age</b>				
17	2	0.2	1	0.1
18	136	14.0	113	11.5
19	229	23.5	223	22.9
20	172	17.7	161	16.5
21	158	16.2	159	16.3
22	86	8.8	83	8.5
23	42	4.3	48	4.9
24	36	3.7	47	4.8
25+	113	11.6	139	14.3
<b>Race</b>				
White	747	74.0	814	80.9
African American	186	18.4	85	8.5
Hispanic	10	0.9	15	1.5
Asian, Pacific Islander	31	3.1	47	4.7
Native American	9	0.9	6	0.6
Other	27	2.7	38	3.8
<b>Year in School</b>				
First	229	23.0	207	20.8
Second	191	19.2	180	18.1
Third	207	20.8	199	20.0
Fourth	112	11.3	112	11.2
Fifth or more	66	6.6	59	5.9
Graduate Student or other	131	13.2	180	18.1
<b>Cumulative GPA</b>				
A	328	33.6	365	37.3
B	470	48.1	468	47.8
C	154	15.8	121	12.4
D/F	11	1.1	11	1.1
Not Applicable	14	1.4	13	1.3
International Student	17	1.7	17	1.8
Full-time Student	917	93.0	909	92.3
<b>Residence</b>				
Residence Hall	481	48.7	448	45.4
Other University Housing	24	2.4	23	2.3
Fraternity/Sorority	12	1.2	12	1.2
Off-Campus	408	41.3	436	44.2
With Parents or other	63	6.3	39	3.9
Member of Fraternity/Sorority	70	7.1	75	7.6

TABLE 1. (Continued)

	n	%	Weighted n	Weighted %
Have Health Insurance				
Yes	864	87.6	870	88.2
No	63	6.4	62	6.2
Not Sure	59	6.0	55	5.6
Employed weekly	583	59.0	581	59.8
Volunteer Weekly	349	36.4	354	36.0
Sexual Orientation				
Heterosexual	950	96.7	947	96.5
Gay/Lesbian	12	1.2	13	1.3
Bisexual	10	1.0	12	1.2
Transgendered	1	0.1	2	0.2
Unsure	9	0.9	8	0.8

TABLE 2. Perceived Health Status of Student Respondents

How would describe your general health?	n	Excellent	Very Good	Good	Fair	Poor
Overall	982	22.7	41.8	26.8	7.8	0.7
Gender***						
Males	446	28.7	42.6	21.3	6.7	0.4
Females	519	17.5	41.4	31.2	8.7	1.2
Race*						
White	790	23.8	42.5	26.1	6.7	0.9
Other	192	18.2	39.1	29.7	12.0	0.5
Age						
18-19	330	23.0	43.6	27.3	5.5	0.6
20-21	319	26.0	41.7	23.5	7.8	0.9
22-23	129	21.7	39.5	29.5	9.3	0.0
24 or older	186	18.3	40.3	29.6	10.2	1.1
Residence						
On-campus	465	22.8	42.6	27.5	6.2	0.6
Off-campus	516	22.7	41.3	26.2	9.1	0.8
GPA*						
A	363	25.1	43.3	22.9	7.7	0.8
B	459	21.8	43.1	28.5	6.3	0.2
C or less	131	20.6	32.8	32.1	13.0	1.5

\*  $p(\Pi^2) < .05$ ; \*\*  $p(\Pi^2) < .01$ ; \*\*\*  $p(\Pi^2) < .001$

TABLE 3.% Distribution of Weight Status, Exercise, and Fruit and Vegetable Intake Among Respondents, by Background Characteristics

Health Problem	n	%	GENDER		RACE		RESIDENCE		CUMULATIVE GPA		
			Male	Female	White	Other	On	Off	A	B	C/D/F
Weight Status	948										
Obese		9.0%	9.7%	8.4%***	9.1%	8.2%	7.2%	10.6%	8.9%	7.1%	16.9%*
Overweight		27.1%	33.8%	21.0%	26.4%	30.6%	25.4%	28.7%	25.8%	29.5%	21.8%
Acceptable/Not Overweight		63.9%	56.6%	70.7%	64.5%	61.2%	67.4%	60.8%	65.3%	63.4%	61.3%
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Participate in vigorous exercise for 20 minutes or moderate exercise for 30 minutes. . .	939										
0 days per week		24.8%	24.6%	25.4%	22.9%	33.0%**	24.8%	24.8%	24.3%	23.0%	32.8%
1-2 days per week		31.7%	28.6%	34.0%	31.3%	33.0%	31.1%	32.3%	31.6%	30.9%	34.4%
3 or more days per week		43.5%	46.7%	40.6%	45.8%	34.0%	44.1%	42.9%	44.1%	46.0%	32.8%
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Do exercises to strengthen/tone muscles. . .	947										
0 days per week		32.0%	33.1%	30.8%	31.7%	33.0%*	29.2%	34.5%	33.2%	30.2%	36.2%
1-2 days per week		29.8%	26.3%	32.6%	28.3%	36.3%	29.7%	29.9%	29.8%	29.8%	32.3%
3 or more days per week		38.2%	40.6%	36.6%	39.9%	30.8%	41.1%	35.7%	37.0%	40.0%	31.5%
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Get enough sleep so feel rested when wake up in the morning . . .	906										
< 4 days per week		38.2%	35.7%	40.4%	34.9%	52.3%***	39.5%	36.9%	31.6%	44.1%	39.2%***
4-5 days per week		33.9%	34.0%	33.5%	34.6%	30.8%	34.0%	33.8%	35.2%	29.7%	43.2%
6-7 days per week		27.9%	30.3%	26.0%	30.5%	16.9%	26.5%	29.4%	33.1%	26.2%	17.6%
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Number of servings of fruits and vegetables eat per day	961										
None		4.1%	4.8%	3.3%**	4.2%	3.3%	2.6%	5.3%*	3.3%	3.7%	6.9%***
1-2		58.2%	63.5%	53.6%	57.0%	63.6%	55.5%	60.9%	51.0%	62.4%	66.4%
3-4		32.0%	28.4%	35.3%	32.8%	28.3%	36.3%	28.1%	37.3%	30.4%	22.1%
5 or more		5.7%	3.2%	7.8%	5.9%	4.9%	5.5%	5.7%	8.4%	3.5%	4.6%
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

\*  $p(\Pi^2) < .05$ ; \*\*  $p(\Pi^2) < .01$ ; \*\*\*  $p(\Pi^2) < .001$

TABLE 4. % Distribution of Perceived Weight Status, Diet and Exercise Behavior, by BMI-Based Weight Status

ITEM	% Overall	BMI-Based Weight Status		
		Not Overweight	Overweight	Obese
How describe own weight ***				
Very underweight	0.4%	0.7%	0.0%	0.0%
Slightly underweight	9.7%	15.1%	1.2%	0.0%
About the right weight	56.5%	73.5%	35.0%	7.1%
Slightly overweight	29.9%	10.7%	61.4%	63.5%
Very overweight	<u>3.6%</u>	<u>0.0%</u>	<u>2.4%</u>	<u>29.4%</u>
	100.0%	100.0%	100.0%	100.0%
Currently trying to . . . ***				
Doing nothing about weight	19.9%	25.6%	11.1%	4.8%
Stay the same weight	25.6%	31.7%	18.7%	8.3%
Lose weight	46.9%	32.7%	66.7%	81.0%
Gain weight	<u>7.7%</u>	<u>10.1%</u>	<u>3.6%</u>	<u>6.0%</u>
	100.0%	100.0%	100.0%	100.0%
Within last 30 days, did . . .				
Exercise to lose weight***	55.8%	46.9%	74.3%	72.9%
Diet to lose weight***	32.4%	23.6%	45.9%	54.1%
Vomit or take laxatives to lose weight	1.9%	2.0%	0.8%	3.5%
Take diet pills to lose weight	5.9%	4.5%	7.4%	9.3%
None of the above***	36.7%	46.6%	18.3%	15.1%

\*  $p(\Pi^2) < .05$ ; \*\*  $p(\Pi^2) < .01$ ; \*\*\*  $p(\Pi^2) < .001$

TABLE 5. % of Respondents Who Wore Protective Equipment to Prevent Injury During Last School Year (Of Those Engaging in the Activity)

Within last school year, how often did you . . .	n	Never	Rarely	Sometimes	Most of the Time	Always
Wear a seatbelt when rode in a car	991	0.5	1.1	3.5	18.9	75.9
Wear a helmet when rode a bicycle	705	81.0	6.7	3.6	3.5	5.1
Wear a helmet when rode a motorcycle	144	14.8	0.7	3.2	8.6	72.6
Wear a helmet when in-line skating	414	88.4	3.8	2.4	3.2	2.3

TABLE 6. % of Respondents Who Report Having Done Various Disease Prevention or Early Detection Procedures, by Background

Prevention/Early Detection Step			% Who Answered Yes								
	% Yes	% Don't Know	GENDER		RACE		RESIDENCE		CUMULATIVE GPA		
			Male	Female	White	Other	On	Off	A	B	C/D/F
Vaccinated against hepatitis B	62.7	14.3	64.9	69.1*	68.2	63.2	75.6	59.5***	65.7	68.1	67.9
Vaccinated against meningococcal disease	55.0	11.3	51.8	57.6**	55.7	52.1	65.3	45.8***	51.6	59.7	50.0
Vaccinated against varicella	46.1	9.2	47.4	44.9*	44.2	53.4***	48.6	43.8	39.0	49.2	55.3***
Vaccinated for measles, mumps, rubella	81.9	11.2	81.6	82.6	84.2	72.7	83.4	80.8	85.2	80.9	80.2
Vaccinated against influenza in last year	22.7	6.2	21.4	24.1**	22.8	22.2*	26.5	19.1**	23.1	23.2	19.7
Had dental exam & cleaning in last year	80.3	0.9	75.1	85.2***	82.8	70.3***	84.2	76.9*	79.9	83.3	74.0
Perform testicular exam monthly (males)	38.4	2.3	42.6	n/a	44.6	29.5*	44.6	39.9	44.6	42.7	36.7*
Perform breast exam monthly (females)	40.0	1.0	n/a	40.8	41.6	38.3	34.6	46.5**	39.2	41.3	46.6
Had gynecological exam in last year (females)	64.7	1.0	n/a	66.5	68.3	57.9*	53.7	77.0***	67.6	63.6	69.9
Had blood pressure checked in last 2 years	90.1	0.5	87.0	92.9***	92.0	82.5***	89.4	90.7	91.1	89.1	91.5
Had cholesterol checked in last 5 years	40.7	11.4	39.2	41.7**	39.8	44.1	40.6	40.7*	37.4	41.9	43.1
Used sunscreen daily	12.3	0.7	6.5	17.0***	12.7	10.1	11.3	13.2	14.2	12.8	6.2

\*  $p(\Pi^2) < .05$ ; \*\*  $p(\Pi^2) < .01$ ; \*\*\*  $p(\Pi^2) < .001$

TABLE 7. % of Respondents Having Used Various Kinds of Drugs, Alcohol and Tobacco in the Past 30 Days

In past 30 days, on how many days did you use:	n	Never	Not in Past Month	1-2 Days	3-5 Days	6 or More Days
Cigarettes	989	60.2	18.9	5.2	2.6	13.1
Cigars	992	71.1	22.5	5.3	0.4	0.7
Smokeless tobacco	989	87.6	8.8	1.3	0.3	2.0
Alcohol (beer, wine, liquor)	991	14.5	10.0	16.8	22.2	36.4
Marijuana	989	63.4	22.3	5.6	2.9	5.9
Cocaine	992	95.6	3.7	0.5	0.2	0.0
Amphetamines	993	90.3	5.7	0.8	1.0	2.2
Rohypnol	993	98.8	0.9	0.0	0.3	0.1
Other drugs	932	91.8	5.6	1.3	0.3	1.1

TABLE 8. % of Respondents Using Various Drugs, Alcohol or Tobacco in Past 30 Days, by Background

Substance	% 1-2 Days	% 3 or More Days	% Who Answered 1 or More Days								
			GENDER		RACE		RESIDENCE		CUMULATIVE GPA		
			Male	Female	White	Other	On	Off	A	B	C/D/F
Cigarettes	5.2	15.7	21.3	20.5	22.5	14.4*	17.1	24.3**	13.2	24.2	28.2***
Cigars	5.3	1.1	12.0	1.5***	7.3	2.6*	7.0	5.9	5.2	6.0	12.1*
Smokeless tobacco	1.3	2.3	6.5	1.0***	4.3	0.5*	3.2	4.0	2.8	4.9	0.8*
Alcohol (beer, wine, liquor)	16.8	58.6	80.5	71.6**	80.3	55.2***	70.7	79.7**	72.6	77.9	75.0
Marijuana	5.6	8.8	16.9	11.7*	14.6	13.4	14.3	14.4	9.3	15.0	23.7***
Cocaine	0.5	0.2	0.7	0.6	0.8	0.0	0.4	1.0	0.8	0.4	1.5
Amphetamines	0.8	3.2	3.3	4.4	4.1	3.1	3.4	4.6	1.9	5.3	6.1*
Rohypnol	0.0	0.4	0.4	0.2	0.4	0.0	0.0	0.6	0.3	0.2	1.5
Other drugs	1.3	1.4	3.8	1.4*	2.7	2.2	2.5	2.7	3.3	1.6	5.6*

\*  $p(\Pi^2) < .05$ ; \*\*  $p(\Pi^2) < .01$ ; \*\*\*  $p(\Pi^2) < .001$



TABLE 9. % of Respondents Having Used Various Kinds of Drugs, Alcohol and Tobacco in the Past 30 Days and % Believing Typical Students Used Various Kinds of Drugs, Alcohol and Tobacco in Past 30 Days

	In past 30 days, on how many days did you use:			How often do you think typical student used:			% Who Perceive Typical Use > Own Use
	Never, Not in Past 30	1 or More Days	Daily	Never, Not in Past 30	1 or More Days	Daily	
Cigarettes	79.1	16.3	4.6	6.2	57.0	36.9	78.9
Cigars	93.6	6.3	0.1	41.5	55.8	2.7	53.6
Smokeless tobacco	96.4	3.1	0.5	45.3	47.9	6.8	52.9
Alcohol (beer, wine, liquor)	24.6	74.9	0.5	1.2	66.2	32.6	45.2
Marijuana	85.7	13.9	0.4	15.9	66.8	17.3	72.7
Cocaine	99.3	0.7	0.0	71.0	27.3	1.7	28.6
Amphetamines	96.0	3.5	0.5	52.7	41.8	5.6	44.3
Rohypnol	99.7	0.3	0.0	72.0	27.1	0.9	27.6
Other drugs	97.4	2.4	0.2	56.4	40.8	2.9	41.1

TABLE 10.% Distribution How Often Respondents Who Partied Took Various Steps to Drink Responsibly

During the last school year, if you partied, how often	Always	Usually	Sometimes	Rarely	Never	n
Alternated non-alcoholic with alcoholic beverages	8.1	14.4	21.1	17.7	22.2	984
Determined in advance not to exceed a set number drinks	13.5	15.3	17.2	14.7	23.3	989
Chose not to drink alcohol	6.4	15.5	46.0	14.8	5.8	989
Used a designated driver	45.4	19.4	8.6	3.6	4.7	986
Ate before/during drinking	25.9	39.6	14.7	2.3	1.3	986
Have friend let you know when you've had enough	12.9	12.4	13.4	19.1	23.3	989
Kept track of how many drinks were having	31.2	22.6	13.1	9.7	7.0	987
Paced drinks to 1 or fewer per hour	7.5	14.8	17.1	21.1	22.5	987
Avoided drinking games	17.8	18.9	17.9	15.7	12.6	988
Drank an alcohol look-alike	1.3	1.6	13.6	15.2	54.2	988

TABLE 11. % of Respondents Who Partied Who Always or Usually Took Various Steps to Drink Responsibly, by Background Characteristics

During the last school year, if you partied, how often did you	Alternate Alc. & Non-Alc. Drinks	Determine Drink Limit Ahead	Choose Not to Drink	Use Designated Driver	Ate Before/ During Drinking	Have Friend Tell When Had Enough	Track How Many Drinks	Paced Drinks ≤ 1 Per Hour	Avoid Drinking Games	Drank Alcohol Look-Alikes
<b>Gender</b>										
Males	23.2	28.9	16.3	73.2	79.4	24.3	60.7	19.2	41.3	2.3
Females	30.1*	38.7**	31.4***	84.4***	77.0	37.7***	68.1*	33.6***	47.1	4.2
<b>Race</b>										
White	26.2	31.5	20.9	80.7	79.5	29.4	62.6	26.1	43.4	2.6
Other	31.4	48.2***	41.9***	72.6*	72.3	41.2**	73.5*	30.6	48.9	7.5**
<b>Age</b>										
18-19	27.3	33.2	29.2	87.4	75.3	32.0	64.1	19.2	31.4	5.0
20-21	23.7	33.9	22.7	82.4	78.4	37.3	64.5	22.1	36.1	2.9
22-23	19.8	27.8	14.4	67.3	83.6	27.2	61.2	21.6	47.4	0.8
24 or older	36.6**	42.6	25.9*	68.0***	79.2	21.0**	67.3	53.0***	81.0***	2.5
<b>Residence</b>										
On-campus	29.2	35.6	30.3	82.9	78.0	35.3	68.5	22.4	34.6	3.9
Off-campus	25.0	33.1	19.9***	76.4*	78.4	27.8*	61.1*	30.6**	52.5***	2.8
<b>GPA</b>										
A	29.1	33.1	25.6	82.0	79.7	28.4	67.9	31.0	50.5	3.0
B	25.1	34.5	25.2	78.2	77.6	31.3	62.8	24.8	39.8	2.9
C or less	31.0	36.4	22.1	75.9	78.3	34.2	59.0	21.7	42.2*	5.9
<b>Member of Fraternity or Sorority</b>										
YES	19.4	27.9	17.4	79.1	79.1	28.4	50.7	19.4	23.9	2.9
NO	27.7	35.0	25.2	79.2	78.1	31.6	65.6*	27.5	46.1***	3.5

\*  $p(\Pi^2) < .05$ ; \*\*  $p(\Pi^2) < .01$ ; \*\*\*  $p(\Pi^2) < .001$

TABLE 12. % of Respondents Who Drink Who Report Experiencing Various Health Threatening Consequences of Their Drinking Within the Last School Year, Overall and by Background

Within the last school year, have you experienced . . . as a consequence of your drinking?	Injured Self	Injured Other	Involved in Fight	Did, later Regretted	Forgot Where, What	Forced Sex	Unprotected Sex
Overall	21.6	6.0	8.6	42.8	36.4	1.0	16.5
Gender							
Males	22.4	9.5	14.7	45.4	42.5	0.8	17.1
Females	21.3	3.0***	3.5***	40.7	31.3**	1.2	16.2
Race							
White	22.8	6.4	8.4	43.8	39.0	0.9	17.1
Other	15.0*	4.5	9.8	37.6	22.6***	1.5	12.9
Age							
18-19	26.4	8.6	11.2	47.2	44.2	1.9	9.0
20-21	22.7	6.5	10.5	45.1	38.6	1.1	19.9
22-23	25.9	6.9	7.0	55.6	42.2	0.0	26.7
24 or older	7.9***	0.0**	2.6*	22.4***	14.4***	0.0	17.1***
Residence							
On-campus	24.5	6.1	9.3	45.1	38.5	1.3	10.5
Off-campus	19.1	5.8	8.0	40.9	34.6	0.7	21.6***
GPA							
A	20.8	6.9	8.0	37.4	30.3	0.7	15.6
B	21.1	5.5	8.3	46.1	41.0	0.5	16.7
C or less	26.5	6.8	13.0	44.0	37.1*	2.6	19.8
Member of Fraternity or Sorority							
YES	29.4	10.3	18.8	57.4	55.1	0.0	26.1
NO	20.8	5.6	7.8**	41.5*	34.7**	1.1	15.7*

\*  $p(\Pi^2) < .05$ ; \*\*  $p(\Pi^2) < .01$ ; \*\*\*  $p(\Pi^2) < .001$

TABLE 13. % of Respondents Involved in Various Sexual Behaviors and Perceptions of These in “Typical” MSU Student

Behavior	% Within Last School Year Self	“Typical” Student	% Perceive Typical > Self
In last school year, number of partners with whom had sex (oral, vaginal, or anal)			
0	25.2	0.8	
1	46.0	10.3	
2	14.2	32.0	
3	6.7	27.7	
4	3.1	10.0	
5 or More	4.9	7.6	
	100.0%	100.0%	
	Mean=1.45 sd=2.18	Mean=3.48 sd=4.39	77.5% <sup>Z</sup>

<sup>Z</sup> This is the percentage of respondents who believe the “typical” student had more sexual partners than the respondents did. The percentage of respondents who believe that the “typical” student had more sexual partners than the average number (1.45) or the modal number (1.0) actually reported is 89.0%.



Compared to Self (Of those doing in past 30 days) n=	4.1% 295	23.9% 369	15.3% 12
% Over-Estimating Typical Compared to Mean/Mode	51.8%	99.3%	93.4%
Used a condom the last time you had. . . (Of those who have done this) n=	2.7% 746	50.8% 690	31.8% 164

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\*  $p(\Pi^2) < .05$ ; \*\*  $p(\Pi^2) < .01$ ; \*\*\*  $p(\Pi^2) < .001$

TABLE 15.% of Respondents Who Experienced . . . Regarding Contraception, HIV Testing, by Background

	% Who Answered Yes												
	Overall	GENDER		RACE		RESIDENCE		CUMULATIVE GPA			Member Frat./Sor.		
	N	% Yes	Male	Female	White	Other	On	Off	A	B	C/D/F	Yes	No
(IF HAD VAGINAL INTERCOURSE)													
Used what method to prevent pregnancy													
the last time (multiple responses allowed)													
Birth Control Pills	690	56.2	51.9	59.4*	59.9	40.2***	52.5	58.9	58.7	55.0	51.1	62.9	55.3
Depo Provera (shots)	690	2.9	4.3	1.3*	2.8	3.1	3.5	2.5	3.2	2.4	3.3	4.8	2.7
Norplant (implant)					690	0.6	0.3	1.3	0.0	3.1***	1.4	0.2	1.6
					0.0	0.0*	1.6	0.5					
Condoms					690	53.4	45.4	62.8***	53.1	54.3	62.7	47.0***	48.6
					55.6	56.0	56.5	53.3					
Diaphragm/Cervical cap/sponge					690	0.3	0.0	0.5	0.2	0.8	0.0	0.5	0.0
					0.3	1.1	1.6	0.2*					
Spermicide (e.g., foam)					690	6.1	9.3	3.2**	6.4	4.7	7.0	5.4	5.7
					5.9	7.7	4.8	6.0					
Fertility awareness (calendar, Mucous, basal temperature)					690	2.6	3.2	2.2	2.3	3.9	2.8	2.5	0.8
					4.1	1.1*	1.6	2.7					
Withdrawal					690	26.0	28.2	24.7	27.0	21.3	26.1	25.9	19.9
					30.5	25.3*	38.7	24.6*					
Other Method					690	3.3	2.6	4.0	3.7	1.6	1.4	4.7*	4.0
					3.0	3.3	1.6	3.5					
Nothing					690	5.2	5.1	5.4	3.6	12.5***	6.0	4.7	7.7
					3.0	7.6*	3.2	5.4					
You or partner used emergency contra- last school year	633	7.0	5.2	8.6	6.2	10.3	7.9	6.3	4.2	8.2	8.4	8.3	6.7
Unintentionally became pregnant or got someone else pregnant in the last school year	655	1.8	1.0	2.5	1.7	1.7	0.8	2.5	1.3	1.9	3.4	6.7	1.3**

Ever Tested for HIV (all respondents)	977	22.8	22.5	23.0	22.5	23.8	16.7	28.2**	22.5	21.2	27.9	27.0	22.5
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\*  $p(\Pi^2) < .05$ ; \*\*  $p(\Pi^2) < .01$ ; \*\*\*  $p(\Pi^2) < .001$

TABLE 16.% of Respondents Victimized in Various Ways During the Last School Year, by Background

	% Who Answered Yes											
	Overall N	% Yes	GENDER Male	Female	RACE White	Other	RESIDENCE On	Off	CUMULATIVE ABC/D/F	GPAMember Yes	rat./Soror. No	
Were in a physical fight	989 6.2	6.5	11.4	2.3***	6.5	6.7	7.2	6.0	5.2	6.5	11.4	10.5
Were physically assaulted	989 4.2**	4.7	6.0	3.8	4.7	4.6	4.7	4.8	4.1	3.9	7.6	12.0
Verbally threatened for sex against will	991 2.7	2.8	2.2	3.5	2.8	3.1	3.0	2.7	1.9	3.4	3.8	
Sexually touched against will				991 6.6	8.5 13.7*	6.2 8.0	10.7* 8.3	8.6	8.3	12.3	5.0***	9.3
Attempted sexual penetration against will				989 1.9	2.0 4.6	0.7 2.7	3.1** 2.0	2.1	1.6	3.2	1.0*	1.6
Sexually penetrated against will				988 0.4	0.9 2.3	0.7 1.3	1.2 0.9	1.1	0.0	1.3	0.6	0.8
In emotionally abusive relationship				987 10.5	9.7 10.7	6.2 14.5	12.9** 9.4	8.9	13.0	10.5	9.1	8.5
In physically abusive relationship				987 1.3	1.2 3.1	0.4 0.0	1.7 1.3	1.1	1.6	1.1	1.4	0.5
In sexually abusive relationship				987 0.4	0.9 3.1*	0.7 0.0	1.0 1.0	1.0	0.5	0.9	1.0	0.8

\*  $p(\Pi^2) < .05$ ; \*\*  $p(\Pi^2) < .01$ ; \*\*\*  $p(\Pi^2) < .001$

TABLE 17. How Often Respondents Felt Emotionally Troubled in Various Ways During the Last School Year

Within last school year, how many times have you . . .	n	% of Respondents					
		Never	1-2	3-4	5-6	7-8	9 or More
Felt things were hopeless	985	37.0	29.3	12.6	4.9	3.7	12.4
Felt overwhelmed by all you had to do	985	5.3	15.1	17.1	12.9	11.2	38.3
Felt exhausted (not from physical activity)	985	8.1	18.1	15.3	13.2	9.5	35.8
Felt very sad	981	17.5	31.0	15.7	10.1	6.9	18.8
Felt so depressed that it was difficult to function	983	58.3	21.3	5.0	4.5	3.4	7.5
Seriously considered attempting suicide	984	93.3	4.5	0.8	1.0	0.1	0.3
Attempted suicide	984	99.2	0.8	0.0	0.0	0.0	0.0

TABLE 18. Mean Response to Number Times Emotionally Troubled During Last School Year, by Background and Victimization Experience

Characteristic		n	Mean	sd	F	
	Overall	Min=0, Max=84	958	22.3	15.9	--
Gender	Males	441	19.3	15.0	28.8***	
	Females	517	24.8	16.3		
Race	White	788	22.1	15.7	0.0	
	Other	187	22.4	17.0		
Age	18-19	334	22.1	16.1	0.7	
	20-21	316	22.0	15.4		
	22-23	129	24.2	16.5		
	24 or older	178	22.2	16.4		
Residence	On-campus	462	22.2	16.0	0.0	
	Off-campus	512	22.1	16.0		
GPA	A	358	20.9	16.0	3.7*	
	B	460	15.4	15.4		
	C or less	131	25.3	16.9		
Member of Fraternity or Sorority	YES	73	24.7	15.8	2.0	
	NO	898	22.0	16.0		
Involved in physical fight last school year	NO	905	22.2	15.8	0.0	
	YES	65	22.6	18.4		
Physically assaulted last school year	NO	923	22.1	15.7	3.5	
	YES	47	26.5	19.7		
Verbally threatened for sex against will	NO	944	22.1	15.8	1.3	
	YES	28	25.6	19.7		
Sexually touched against your will	NO	888	21.8	15.8	4.7*	
	YES	84	25.7	16.7		
Victim of Attempted rape	NO	950	22.0	15.9	4.0*	
	YES	20	29.2	15.1		
Raped	NO	960	22.1	16.0	1.1	
	YES	9	27.7	13.1		
In emotionally abusive relationship	NO	873	21.2	15.5	38.5***	
	YES	95	31.6	17.0		
In physically abusive relationship	NO	957	22.1	15.9	1.6	
	YES	12	28.1	16.8		

TABLE 19. % of Respondents Who Had Various Health Problems in Last School Year, Ever Diagnosed as Having Various Health Problems, by Background

Health Problem	n	% Had Last Year	% Ever Diagnosed	% Who Had During Last School Year								
				GENDER		RACE		RESIDENCE		CUMULATIVE GPA		
				Male	Female	White	Other	On	Off	A	B	C/D/F
Allergy Problems	974	41.2	37.6	41.5	41.2	41.1	41.4	39.8	42.4	38.6	42.7	43.8
Anorexia	968	1.7	1.1	0.7	2.7*	2.0	0.5	2.4	1.2	1.7	1.3	3.1
Anxiety Disorder	967	7.8	5.3	5.2	9.7**	8.4	5.3	6.5	9.0	7.0	6.7	13.2*
Asthma	967	10.5	14.7	8.5	12.0	10.6	9.9	10.9	10.1	10.0	10.8	9.9
Bulimia	968	1.5	0.6	0.0	2.9***	1.5	1.1	1.5	1.4	2.3	0.4	3.8*
Chronic Fatigue Syndrome	968	2.5	1.3	1.1	3.7*	2.9	0.5	1.7	3.1	0.8	3.3	3.8
Depression	970	16.1	9.2	13.4	18.4*	15.7	17.9	15.9	16.3	13.2	13.9	31.3***
Diabetes <sup>969</sup>	0.9	1.0	1.6	0.4	1.0	0.0	0.9	1.0	0.6	0.7	2.3	
Endometriosis	968	0.9	1.5	0.5	1.2	0.8	1.1	0.4	1.2	0.3	0.7	3.1*
Genital herpes	968	1.3	1.5	0.5	1.9*	0.9	2.6	1.3	1.2	1.4	0.4	3.1*
Genital warts/HPV	967	1.3	2.8	1.4	1.4	1.4	1.1	1.5	1.2	0.8	1.1	3.1
Hepatitis B or C	967	0.4	0.7	0.5	0.4	0.1	1.6**	0.4	0.4	0.9	0.2	0.0
High blood pressure	967	3.1	2.9	4.1	2.3	2.4	5.2*	2.8	3.3	1.7	3.0	5.4
High cholesterol	970	2.4	2.7	2.7	2.3	2.6	2.1	1.9	2.9	2.8	2.2	3.1
HIV infection	971	0.2	0.5	0.5	0.0	0.3	0.0	0.4	0.0	0.0	0.0	1.5**
Repetitive stress injury (e.g., carpal tunnel)	963	5.3	4.9	4.5	5.8	4.7	7.3	4.8	5.7	4.3	5.4	6.1
Seasonal Affective Disorder	965	7.1	2.9	6.4	7.4	6.5	9.4	4.8	9.2**	5.7	7.6	7.6
Substance abuse problem	965	3.3	1.9	4.8	2.1*	3.7	2.1	3.5	3.3	1.4	3.0	7.6**
Back pain	966	44.1	22.6	42.1	46.2	43.4	46.9	47.6	41.0*	45.1	42.1	50.8
Broken bone/fracture	969	5.8	22.7	7.5	4.7	6.6	2.6*	6.5	5.3	4.8	5.6	7.6
Bronchitis	969	10.2	24.4	8.4	11.7	11.1	6.3*	7.1	12.9**	8.2	11.0	9.1
Chlamydia	964	1.0	1.5	1.1	1.0	0.6	2.6*	0.9	1.2	0.3	0.2	4.5***
Ear infection	970	9.6	31.2	6.8	12.0**	10.3	6.4	8.0	11.1	10.2	7.8	12.9
Gonorrhea	963	0.4	0.6	0.7	0.2	0.5	0.0	0.4	0.4	0.3	0.0	1.5*
Mononucleosis	966	2.8	9.9	2.7	2.9	2.9	2.1	3.0	2.5	1.7	2.6	3.8
Pelvic inflammatory disease	963	0.5	0.7	0.7	0.4	0.6	0.0	0.4	0.8	0.6	0.0	1.5
Sinus infection	973	28.8	36.3	22.7	34.1***	31.3	18.8**	25.1	32.1*	32.1	27.8	24.2
Strep throat	971	12.4	36.9	9.5	14.9*	12.6	11.5	13.0	11.9	11.5	12.1	16.7
Tuberculosis	961	0.6	1.2	0.7	0.6	0.6	0.5	0.6	0.6	0.3	0.2	1.5

\*  $p(I^2) < .05$ ; \*\*  $p(I^2) < .01$ ; \*\*\*  $p(I^2) < .001$

TABLE 20. % of Respondents Who Had Various Health Problems in Last School Year That Did or Did Not Affect Academic Performance

Health Problem	% Who Had and Academic Performance Affected											
	% Did Not Have	% Had, No Effect	% Had, Some Effect	GENDER		RACE		RESIDENCE		CUMULATIVE GPA		
				Male	Female	White	Other	On	Off	A	B	C/D/F
Alcohol use	38.8	52.1	9.1	10.2	7.9	9.9	5.2*	7.9	10.2	5.2	9.2	19.4***
Allergies	59.6	37.3	3.1	3.3	2.7	3.1	3.1	2.6	3.6	3.0	3.0	2.3
Assault (physical)	95.1	4.3	0.6	0.7	0.4	0.5	1.0	0.6	0.4	0.5	0.4	1.5
Assault (sexual)	96.5	3.4	0.2	0.4	0.0	0.3	0.0	0.4	0.0	0.0	0.0	1.5**
Attention Deficit Disorder	92.3	3.9	3.7	4.2	3.1	4.3	1.6	4.1	3.3	0.5	3.6	11.6***
Cold/Flu/Sore Throat	22.1	58.4	19.4	16.7	21.7*	19.3	19.8	18.2	20.5	12.1	21.5	33.1***
Concern for a troubled friend or family member	35.7	49.3	15.0	14.9	15.4	14.3	17.8	13.2	16.5	9.3	17.8	20.9***
Chronic illness (diabetes, asthma, etc.)	90.5	7.8	1.7	0.4	2.3*	1.5	2.1	1.3	1.9	1.6	1.5	2.3
Chronic pain	87.1	11.6	1.3	0.7	1.9	1.1	2.1	0.9	1.7	1.1	0.9	2.3
Death of friend or family member	69.2	22.1	8.7	6.7	10.6*	8.9	8.4	8.1	9.2	6.1	10.7	10.1
Depression/Anxiety Disorder/Seasonal Affective Disorder	74.5	14.7	10.9	8.9	12.5	10.4	12.5	11.9	10.0	8.2	9.0	22.5***
Drug use	87.2	10.9	1.9	3.3	0.6**	1.9	2.1	2.1	1.5	1.1	1.1	6.2***
Eating disorder/problem	92.6	6.3	1.1	0.7	1.5	1.3	0.5	1.3	1.0	1.1	0.6	3.1
HIV infection	98.5	1.3	0.2	0.4	0.0	0.3	0.0	0.4	0.0	0.0	0.0	1.5**
Injury	75.0	21.9	3.0	2.7	3.5	3.3	2.1	3.9	2.3	2.5	2.8	4.7
Internet use/computer games	41.2	45.9	12.9	19.1	7.5***	12.7	13.6	16.0	10.0**	9.6	14.1	17.7*
Learning disability	95.7	2.5	1.9	1.8	1.9	2.0	1.0	2.3	1.3	0.5	1.1	7.7***
Mononucleosis	96.0	2.5	1.5	1.6	1.4	1.6	1.0	0.4	2.7**	1.1	1.1	4.7
Pregnancy (self or partner)	97.7	2.0	0.3	0.0	0.6	0.3	1.0	0.2	0.6	0.0	0.2	2.3**
Relationship difficulty	52.8	31.8	15.4	13.3	17.5	15.5	15.1	13.9	16.7	8.8	19.0	20.9***
Sexually transmitted disease	95.9	3.5	0.6	0.4	0.8	0.6	0.5	0.9	0.4	0.3	0.4	2.3*
Sinus/ear infection, bronchitis, strep throat	65.3	27.0	7.7	6.0	9.2	8.1	6.2	7.0	8.1	4.7	9.4	10.8*
Sleep difficulties	38.6	38.1	23.3	20.4	25.7*	21.6	30.1*	25.8	21.1	15.9	26.1	34.6***
Stress	22.4	50.6	27.0	20.2	32.8***	25.7	32.3	29.3	24.7	17.1	29.8	45.0***
Other	80.5	5.9	13.6	13.6	14.0	11.7	20.9	14.1	13.1	5.7	15.6	21.9*

\*  $p(\Pi^2) < .05$ ; \*\*  $p(\Pi^2) < .01$ ; \*\*\*  $p(\Pi^2) < .001$



## Health Topics

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Health Topic	n	% Who Ever Received Information
Tobacco use prevention	994	25.2
Alcohol and other drug use prevention	994	63.4
Sexual assault/relationship violence prevention	994	56.3
Violence prevention	994	27.4
Injury prevention and safety	994	17.6
Suicide prevention	994	12.8
Pregnancy prevention	994	31.1
AIDS or HIV prevention	994	39.0
Sexually transmitted disease (STD) prevention	994	46.8
Dietary behaviors and nutrition	994	31.6
Physical activity and fitness	994	38.1
None of the above	994	16.0

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TABLE 22. Believability of Health Information from Various Sources and Their Prevalence as an Information Source

Source of Information	n	% Believability			% Who Usually Get Info From Source
		Believable	Neither	Unbelievable	
Health center medical staff	968	90.1	9.1	0.8	48.9
Health educators	963	92.0	7.4	0.7	40.8
Parents	977	70.6	27.4	2.0	72.9
Leaflets, pamphlets, flyers	977	61.3	34.6	4.1	55.6
Faculty/coursework	960	57.0	41.0	1.9	30.1
Campus newspaper articles	976	57.2	36.0	6.8	43.2
Campus peer educators	951	37.0	56.5	6.5	11.5
Magazines	977	29.9	56.3	13.9	53.1
Resident assistants/advisors	958	33.3	59.5	7.2	18.3
Religious center	956	33.1	51.8	15.1	11.7
Friends	965	26.2	62.8	11.0	59.5
Internet/World Wide Web	970	21.1	61.9	17.0	51.7
Television	975	19.0	62.0	19.0	49.9
Other	53	42.0	46.3	11.7	30.6