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DRUG USE AND LIFESTYLE
AT A NEBRASKA TWO-YEAR COLLEGE

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ABSTRACT

This study records drug use and lifestyle among students at a Midwestern community college. The study provides the first set of data on the levels of drug use at this college and makes some comparisons to drug use levels found in other studies. Alcohol was found to have the highest percentage of student use, 84%, with 41% using at least weekly. Forty-nine percent of students reported using marijuana making it the second most popular drug. Weekly use of marijuana was reported by 11% of students. The levels of use for most drugs were similar to those reported at other colleges though some differences exist. Lifestyle parameters with some relationship to the level of drug use include level of sexual activity and failure of a class. A more complex relationship, age and living situation, appears to influence the level of alcohol use. The positive correlation between increased drug use and increased sexual activity found in other studies were found in this study as well.

Community colleges are a mix of traditional college students, technical degree-bound students and non-traditional students (over 25 years of age). Due to this more varied student population, one might expect student drug use at a community college to differ when compared to a traditional 4-year college. Drug availability between colleges likely varies as will the financial ability to obtain drugs. Similarities will suggest that these factors do not have much influence on drug use trends.

In order to make some comparisons to another college we rely on the most recent report of a long-term analysis of drug use and lifestyle among Harvard University students (Pope et al. 2001). Adolescent (Johnston et al. 2002) and nationwide college student data (Johnston et al. 2003) are compared as well.

MATERIALS AND METHODS

Survey distribution and collection

Questionnaires were handed out to students of Southeast Community College, Lincoln, Nebraska, throughout one week during the beginning of the winter term 2003. Of the 500 questionnaires distributed 248 were returned of which eleven were thrown out due to incompleteness for a total of 237. This number represented approximately 5% of the student population.

Southeast Community College has no Institutional Review Board (IRB), but the college administration approved the survey. An IRB is meant to safeguard the welfare of study participants. This study was conducted via a questionnaire and thus no physical intervention or any physical risk to the study participants.
Table 1. Drug use as reported by college students at Southeast Community College. Values are percentage of users out of 237 study participants.

<table>
<thead>
<tr>
<th>Drug</th>
<th>Ever use in past year</th>
<th>Single or no</th>
<th>Monthly</th>
<th>Weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>84</td>
<td>15</td>
<td>69</td>
<td>42</td>
</tr>
<tr>
<td>Marijuana</td>
<td>49</td>
<td>29</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Opioids (including Heroin)</td>
<td>11</td>
<td>10</td>
<td>0.8</td>
<td>None</td>
</tr>
<tr>
<td>Cocaine</td>
<td>12</td>
<td>10</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>9</td>
<td>6</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>Amphetamine</td>
<td>11</td>
<td>11</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>LSD</td>
<td>11</td>
<td>10</td>
<td>0.8</td>
<td>None</td>
</tr>
<tr>
<td>Any illicit drug use (excluding marijuana)</td>
<td>52</td>
<td>29</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Any illicit drug use (excluding marijuana)</td>
<td>28</td>
<td>22</td>
<td>4</td>
<td>0.4</td>
</tr>
</tbody>
</table>

was involved. In addition, measures were taken to ensure privacy and confidentiality in this study. To maintain anonymity names were not included and the surveys were not marked. Completed surveys were returned into a locked-box. Informed consent was provided before subjects opted to participate in the study, which was entirely voluntary.

**Survey questions**

Respondents were asked the following direct questions: age, gender, years in college, current job status, living situation, GPA, class failures in past year, political affiliation, parents educational level, sexual preference, whether they have visited a psychiatrist, Rave attendance, if they smoke cigarettes and whether they believe smoking marijuana should be legalized.

Respondents were asked to rank the following: level of sexual activity, amount of drug use by friends, stress level and physical health. The sexual activity in this survey concerns number of partners (range from none to multiple partners).

Frequency of drug use by respondents was a ranked scale as follows: never used, single use, used but not in last year, monthly use, weekly use, and use several times a week. Drugs included were: alcohol, marijuana, heroin, cocaine, opium, barbiturates, LSD (lysergic acid diethylamide), ecstasy, PCP (phencyclidine), amphetamine, ketamine, and steroids. Finally students were asked to write in any illicit drug they had used that was not included on the survey.

**Statistical analyses**

Non-parametric statistical analyses were used to compare most survey data in the form of lifestyle parameter vs. level of drug use. Kendall’s correlation (coefficient of rank) was used to show the degree of relationship between ordinal variables. Contingency tables were used to compare the categorical data of nonusers vs. users. Other categorical data were compared with Kolmogorov-Smirnov tests when two groups existed or Kruskal-Wallis if multiple groups were analyzed. A nonparametric two-way analysis on living situation and age vs. alcohol use was done using Friedman’s test.

Statistical analyses were performed using Stata 6.0 (Stata Corp. 2000) with the exception of the Friedman’s test, which was performed using Statview 5.01 (SAS Institute Inc. 1998). No statistical analyses were performed on drug use parameters if the number of users was fewer than twenty (<10% of survey respondents).

**RESULTS**

The mean age of respondents was 23.8, range 18–50, most having been in college for 2 years with a range of 1–5 years. There were 101 male respondents and 136 females. Average reported GPA of respondents was 3.0 with a range of 1.5–4.0. Approximately 35% of
Drug use at a community college

Figure 1. Illicit drug use (excluding marijuana) found among SCC students. Ordinate shows the number of students reporting use. Abscissa shows drug use levels from 0–5. (0) is no use, (1) is single use, (2) used but not in past year, (3) monthly use, (4) weekly use, and (5), many uses a week.

female respondents and 29% of male respondents reported that they smoke cigarettes.

Alcohol is the most heavily used drug with 84% of respondents having used and 41% using at least weekly. Marijuana was the second most popular drug with 49% reporting some lifetime use and 11% reporting use weekly. LSD, amphetamine, heroin and cocaine had lifetime use levels close to 10%. Reported lifetime use of all other drugs on this survey was less than 5% as follows: barbiturates 4%, steroids 2%, ketamine 2%, and PCP 0.8%. Very few students reported heavy use (at least weekly) of drugs other than alcohol and marijuana. These data are summarized in Table 1 as overall percentage of students reporting use. In the write-in space on the survey students did not report use of any additional drugs.

The number of users of illicit drugs (excluding marijuana) is shown in Fig. 1. The figure illustrates the number of users at each level of use. Comparing years in college to years of first drug use 14 students (6%) were found to have first used illicit drugs while in college.

Relationships

A significant positive relationship (p < 0.05) exists between the level of sexual activity and the level of drug use (Fig. 2). The degree of relationship was similar for both sexes based on probability values and best-fit lines when analyzed as parametric data. No significant relationship was found between age and the level of drug use or age and the level of sexual activity. A significant relationship between drug use and class failure did not exist, though the probability value is suggestively close (p = 0.06).

Dual Relationships

Although no age-related relationship was found, a more complex relationship between age, living situation and drug use was found to be significant (p < 0.05). Specifically, younger students living with friends showed higher levels of alcohol consumption.

DISCUSSION

Alcohol use was found to be much higher than any other drug. This was expected, alcohol being the most accepted and easiest to obtain drug. Marijuana follows as the second most used drug with 49% reporting some
Figure 2. Relationship between level of alcohol use (top graph) and marijuana use (bottom graph) and the level of sexual activity. All axes values are nominal data higher numbers indicating higher use/activity. Ordinate shows the drug use level (alcohol or marijuana) and abscissa shows level of sexual activity. Drug use level ranges from 0–5. (0), is no use, (1), is single use (2), used but not in past year (3), monthly use (4), weekly use and (5), many uses a week. Sexual activity ranged from 0–4; (0) none, (1) not currently active, (2) activity with single partner, (3) activity with several partners, (4), activity with many partners. Numbers within graph indicate the number of students in that category.

The level of use. The level of any use of cocaine, opioids, ecstasy, LSD and amphetamine ranged from 9–12%. Very few students reported heavy use (at least weekly) and most of those reporting using an illicit drug were not current users or had only tried the drug once. Figure 1 illustrates illicit drug use levels excluding marijuana. This graph is typical of the illicit drugs reported on in this study. Most students have not used illicit drugs with decreasing numbers of students as the level of drug use increases. Recording the level of drug use and not just noting whether students have ever used a drug will reveal better information on drug use and abuse among college students.

**Gender differences**

Percentage differences that existed between sexes in some drug use categories, though not statistically different, may still indicate actual trends. If so some aspects are of concern, for example, males when active in drinking or smoking marijuana generally go beyond the more moderate use shown by females. This would seem to put males at a higher risk of developing abuse problems with these drugs. While the use of ecstasy was higher in males, the use of amphetamine was higher in females. We speculate that the higher amphetamine use in females is due to attempts to use them for weight loss.

**Users vs. nonusers**

The questionnaire was similar to those used by Pope et al. (Pope et al. 2001) and comparisons between that study and the current study are instructive. Pope compared lifestyle of nonusers to users. To compare the current study with Pope (Pope et al. 2001) we did the same type of analysis. We do feel, however, that by grouping students into non-use and use over simplifies the data particularly, because an individual that has tried a drug, even once, is placed into the user category. Several relationships between level of drug use and lifestyle parameters are outlined below. Most of the lifestyle parameters showed no significant relationship to drug use.

A significant relationship between drug use and class failure was not readily apparent as found by other researchers (Pope et al. 2001), though the probability value is suggestively close ($p = 0.06$). A larger sample may have shown a significant relationship.

**Sexual activity**

A positive relationship between sexual activity and alcohol use level as well as sexual activity and the level of marijuana use were found in this study (Fig. 2). The surveys at Harvard (Pope et al. 1981, 1990, 2001) have shown that heterosexual activity distinguished users from nonusers, drug users being more sexually active. Though on the surface the similarity between these two colleges may indicate the same trend, it is possible that student age had an effect on the results. The average age of students in this study was nearly 24 and the eldest study participant was 50. Still, no significant relationship between age and the level of drug use or age and the level of sexual activity was found.

The positive relationship between drug use and sexually activity is of concern due to the prevalence of HIV and other sexually transmitted diseases and the likelihood of risky sexual behavior due to impaired judgment (Mondanaro 1987). Much concern lies with injected drugs due to the associated HIV risk.
Due to its increasing use among college students (Cuoma et al. 1994, Strote at al. 2002, Walters et al. 2002) ecstasy has become a drug of concern and is one drug, along with other club drugs, that showed some regional differences in the national data (Johnston et al. 2003). Ecstasy use reported by SCC students was similar to but slightly lower than overall nationwide data and similar to midwest regional data (nationwide 11%, midwest 8%, SCC 9%). Ecstasy use at Harvard (Pope et al. 2001) was also similar at 10%.

When does drug use begin?
Do most students begin using in college? The similarity to adolescent data (Johnston et al. 2002) suggest otherwise. When considering age of first illicit drug use and years in college our data suggest otherwise as well. Only 14 students (6%) reported first time illicit drug use while in college.

Use and non-use
Before quickly categorizing drug use levels into use and non-use categories, we must consider a more comprehensive picture. As mentioned earlier any use of a drug constituted including it in the overall percentage of use. Consider ecstasy use for example. Few students, reported current ecstasy use, and most (over 50% of those reporting use) had only used the drug once or had not used in the past year. Heavy use of any drug other than alcohol and marijuana was low. The overall picture of the level of drug use other than alcohol and marijuana is illustrated in Fig. 1.

Study limitations
The methods used in this study have limitations. Due to the volunteer survey method the sampling is not random and thus bias may exist. Similar biases exist in other campus surveys so the data are best used for comparisons to other such studies.

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LITERATURE CITED


