Drug Use Exposure Among Seattle University Students

Drug use on college campuses is a large problem. Because people tend to associate with others who engage in similar behaviors as they themselves do, measuring exposure to drugs can give a picture of what drug use on a college campus is like. This study examines the drug use exposure of 218 undergraduate students at Seattle University, and measures demographic factors and lifetime, last month, and last week exposure to drugs. It was found that class standing is related to recent exposure and current living arrangements influence total exposure overall (lifetime and recent.)

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For most students, going to college is a chance to experiment with new things and experiences and an opportunity to enjoy the freedoms that come with being an adult. For many, freedom allows access to new experiences. In most cases, this can include parties and exposure to drugs and alcohol. Drug use among college students is not a new phenomenon and has been studied by a variety of different researchers. It is important, however, to make an effort to understand these behaviors and what motivates them in an effort to better understand what draws students to these practices which can be potentially detrimental to their academic performance and, more importantly, their health.

Alcohol and Drug Use

It is well known that adolescents seem to be familiar with drugs. Much research has been done between adolescents and the use of alcohol, as in Getz and Bray’s (2005) study of alcohol use among adolescents in relation to quantity of drinking as a predicting factor for future drinking habits. Furthermore, research of alcohol use in college students is also widespread. Grekin and Sher (2006) looked at prevalence levels of alcohol dependence among college freshmen in terms of how prevalent it is in a college sample as well as students’ membership in Greek systems as a determinant for alcohol dependence. Another study, conducted by Caudill, Crosse, Campbell, Howard, Luckey and Blaine and colleagues (2006) also looked at alcohol in college students and the Greek systems. Wechsler and Kuo’s 2003 study on the moderating effects that female, minority and older students have on binge drinking also shows evidence that alcohol in relation to college adolescents is a popular topic among researchers.

When looking at drug use, above and beyond alcohol, the research on college students dwindles significantly. The majority of studies have been conducted on alcohol and its link to marijuana. Simons, Correia, Carey and Borsari’s (1998) have found that the motives for alcohol use and marijuana use are different when looking at different types of measures. Simons, Gafer, Correia, Hansen, and Christopher (2005) have also found, in a similar alcohol and marijuana study that the motives were different for the use of alcohol and marijuana. Interestingly, they also found that 99% of participants who used marijuana had also used alcohol.

Motivations

There are various factors that have an effect on drug use such as parenting styles (Patock-Peckham &
Morgan-Lopez, 2006), availability of drugs (McCabe, Teter, & Boyd, 2006), athletic involvement (Rockafellow & Saules, 2006), participation in the Greek system (Grekin & Sher, 2006), location of event for drug use (Quintero, Peterson, & Young, 2006; Clapp, Reed, Holmes, Lange & Voas 2006) and emotional reasons (Simons et al, 2005). Because each student uses drugs (including alcohol) for different reasons, it is necessary to study what has an effect on drug use in order to understand the motivations behind it. When a variety of factors relating to drug use are examined, a better understanding of what motivates drug use can be obtained, both on an individual and a more general scale.

**Theoretical Basis**

When taking into account previous research concerning young adults and drug use, this study attempts to expand the work of others concerning drug use among college students. This study focuses on drug exposure of college students in relation to their demographic and academic categories (class standing, major, etc). Because there seems to be no research to date conducted on students’ exposure to drug use, this is the main focus of the current study. There is little focus on the impact of demographic variables of college students on exposure to drugs and it is important to take these factors into account when looking at this kind of data. With the exception of the Greek system, academics and academic life is occasionally mentioned in previous studies (Getz et al., 2005; Flory, Brown, Lynam, Leukefeld & Clayton, 2006; Caudill et al., 2006; Rockafellow & Saules, 2006). With the exception of Caudill and colleagues’ study on alcohol and fraternity members (2006), academic performance is not prevalent in these previous studies.

The current study seeks to describe the drug use behaviors among Seattle University students. Seattle University is a private Jesuit college located in the heart of Seattle, Washington. With a campus population of under 7,500 (including staff, faculty, and undergraduate/graduate/law students), this university is a small community. The drug culture differs at private universities as opposed to public universities, and it is the small community that makes the drug use different at private universities. (Mohamed & Fritsvold, 2006). Campuses that are smaller and more tightly knit (as private universities often are) and have different social mores that allow for different behaviors. While on public campuses with well known Greek systems, alcohol might be a far more acceptable drug of choice, on private campuses, where discipline is generally handled on campus and the students generally come from higher income families, other drugs might be more available and more widely used. In light of this, we wanted to examine the drug culture among the Seattle University students. There are several goals to the current study. First, to determine if above and beyond other demographic variables, class standing has an effect on drug exposure (lower class standing predicts greater recent exposure while upper class standing predicts greater lifetime exposure). Second, we are seeking to determine if gender has a predictive effect on drug exposure. Third, determine if marital status predicts drug exposure. Fourth, determine if academic major makes a difference on drug exposure. Fifth, determine if living arrangements have an effect on drug exposure. Finally, determine if students who transferred to Seattle University had more or less exposure prior to their transfer.

Drug use is affected by many different variables. This study seeks to describe the different variables that have an effect on the drug use exposure among Seattle University’s student body. Previous studies have not sought to describe the exposure to drug use in the same way that this study does. This study examines lifetime exposure, last month exposure, and last week exposure and then seeks to gain an estimate into the average student’s drug use patterns (how often they use, and how recently they’ve used). In addition, this study tries to determine if there has been any excessive behavior associated with drug use (arrests due to drug use or treatment for drug use). With a better insight into the types of drugs students are being exposed to and how often, steps can be taken to minimize the effects of this harmful behavior on the lives of those who choose to participate in it.

**Method**

**Participants**

A total of 233 people were approached for participation in the study. From that number, 223 people agreed to take the survey. Five participants were dropped from analysis, four because they reported recent exposure but had not indicated what drugs they had been exposed to and one because they were a graduate student. The final sample included 218 participants (93% of those approached).

**Measure**

The investigators wrote a 21-question descriptive survey for the purposes of assessing demographic variables, drug exposure, and prior experience with drug exposure. (See Appendix)

**Demographic information.** The survey assessed the following demographic variables: age, gender, ethnicity, class standing (freshman, sophomore, junior, and senior); these variables were further broken down
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for analysis into lower classmen and upper classmen), academic major, marital status (single, married, divorced, partnered, or widowed), average yearly income, and current living arrangements (with parents, on campus, or off campus).

Drug exposure. In an effort to account for the errors in self-report brought on by asking about illegal behaviors, this study sought to examine the drug use behaviors that students had been exposed to, rather than personally participated in. The idea behind this is that people tend to associate with people who have similar behavior patterns (Wolfson, 2000). Though there are potential problems with assuming direct behaviors from indirect sources (McRae, Beebe, & Harrison, 2001) this method of assessment allows for a variety of information on drug use behaviors even when taken from a respondent who is not themselves a drug user. There has been, however, some validation of self-reporting of drug use (Stacy, Widaman, Hays, & DiMatteo, 1985) so this method can be used with reservations. Therefore, the survey asked several questions about drug exposure. It began by asking if students had ever been in a social situation with alcohol and/or a social situation with drugs. The survey then asked what drugs (including alcohol) students had been exposed to at three different time points: lifetime at Seattle University, last month, and last week. The drug exposure questions for each timeframe were in a check box format, with the choices being: alcohol, marijuana, cocaine, heroin, amphetamines, ecstasy, hallucinogens, prescription drugs, inhalants, morphine, IV drugs, PCP, and other (with lines for providing the drug name), with the hope that the participant would check all that they had been exposed to.

The next section on drug exposure asked participants to estimate the average usage of a Seattle University student, with options ‘abstinent more than 12 months’ to ‘current use more often than weekly (high quantity).’ The participants had seven average usage options, with several options broken down by ‘low quantity’ and ‘high quantity’ usage. Low quantity was defined as 1-2 drinks, 1 joint or 1 drug use and high quantity was defined as 3 or more drinks and/or multiple drug use (including binging).

The next question in this section asked the participants how long it had been since they had witnessed drug use during their time at Seattle University.

The final questions in the drug exposure section were about consequences of drug use. The questions asked if the participant knew of any Seattle University students that had been arrested for their drug use and if they knew of any Seattle University students that had received treatment for their drug use.

Prior experience with drug exposure. This section was used to assess if students who transferred to Seattle University had more or less exposure prior to their transfer. The question that the investigators used as a filter was whether or not the participant was a transfer student. If the participant answered in the affirmative, they were asked if they had transferred from a public or private university and if they had witnessed drug use more frequently prior to their transfer. The final question asked them to explain their perceptions of the difference.

Procedure

The investigators contacted several professors at Seattle University to request permission to distribute the survey during their class periods. Fifteen professors agreed to participate, though the survey was only distributed to fourteen of those fifteen (the last professor’s class was not used due to the amount of participants within the same major).

Once permission was received, the investigators scheduled a time with the professors to either attend the class in order to distribute the survey or, as some professors opted to do, receive the surveys and consent forms in two separate envelopes and distribute the surveys themselves. In the classes, the investigators explained the purpose of the study and told the potential participants that it was a confidential study and that it was completely voluntary.

Once collected, the consent forms and surveys were separated and the consents were filed. The surveys were each assigned a number and then the data was entered into SPSS for analysis.

Results

Demographic Characteristics

The sample was made up of 157 females (72%) and 60 males (27.5%) with one participant who did not indicate gender. The sample had an age range of 18-51 (M=22.08, SD=4.682) and was made up of 140 Caucasians (64.2%), 24 Asians (11%), 12 African-Americans (5.5%), 14 Hispanics (6.4%), 2 Native Americans (0.9%), and 26 Other (11.9%). The overwhelming majority of the sample was single (n=182, 83.5%) with the remaining percentage divided up between divorced (n=2, 0.9%), married, (n=15, 6.9%), and partnered (n=19, 8.7%). One hundred ninety one participants, 87.6% of the sample, had an aver-
age yearly income of under $20,000, and 5.5% (n=12) were between $20,000-$29,999, 2.8% (n=6) were between $30,000-$39,999, 1.4% (n=3) were between $40,000-$49,999, 0.9% (n=2) were between $50,000-$59,999, and 0.5% (n=1) was between $70,000-$79,999, with three participants not reporting an average income. The sample consisted of 11.9% freshmen (n=36), 9.6% sophomores (n=21), 25.7% juniors (n=56), and 52.8% seniors (n=115; see Table 1). One hundred ninety two participants (88.1% of the sample) reported being in a social situation where other Seattle University students were drinking alcohol and 69.7% of the sample (n=152) reported being in a social situation where Seattle University students were using drugs. The range of drugs, including alcohol, (assessed by counting the number of drug-type boxes each participant checked for each time frame) that the participants had been exposed to during their lifetime was from 0 – 8 (M=2.77, SD=1.97). Last month exposure ranged from 0 – 7 (M=1.49, SD=1.28) and last week exposure ranged from 0 – 4 (M=.91, SD=.93). (See Table 2).

### Drug Use Exposure and Class Standing

An independent samples t-test was conducted to compare the total number of lifetime, last month, and last week exposure by class standing (upper classmen versus lower classmen). There was no significant difference between drug exposure and class standing for lifetime exposure, $t(216) = 1.32, p=.19$, despite upper-classmen (M=2.68, SD=1.95) being slightly more exposed to drug use than lower classmen (M=3.11, SD=1.97). However, there was a significant difference between upper classmen (M=2.15, SD=1.47) and lower classmen (M=1.30, SD=1.16) for lifetime exposure, $t(216) = 4.162, p < .01$, for last month exposure. There was a significant difference, as well, between upper classmen (M=0.79, SD=0.86) and lower classmen (M=1.34, SD=1.03), $t(215) = 3.34, p = .001$, for last week exposure.

### Drug Use Exposure and Gender

An independent samples t-test was conducted to compare the differences in total number of lifetime, last month, and last week exposure by gender. For lifetime, there was no significant difference between males (M=2.77, SD=1.78) and females, (M=2.75, SD=2.03), $t(215) = .05, p = .96$. The difference between males (M=1.53, SD=1.28) and females (M=1.46, SD=1.28), $t(215) = .39, p = .70$, for last month exposure was not significant. Finally, the last week exposure for males (M=.97, SD=.99) and females (M=.88, SD=.90), $t(214) = .58, p = .56$, was not significant.
Drug Use Exposure and Marital Status

An independent samples t-test was done to compare the differences of lifetime, last month and last week drug exposure in relationship to marital status. The marital status was divided into “single” or “not single”. There was no significance in lifetime exposure, \( t(46.33)=1.75, p=.087 \). Mean lifetime exposure for singles was 2.87 (SD=1.96) and 2.24 (SD=1.94) for those not single. However, there was a significant difference at the last month exposure, \( t(216)=2.72, p=.009 \), and last week exposure, \( t(49.8)=2.89, p=.006 \). The mean exposure within the last month for singles was 1.59 (SD=1.26) and .94 (SD=1.28) for those not single. Similarly, the mean exposure within the last week for singles was .98 (SD=.93) and .53 (SD=.83) for those not single.

Drug Use Exposure by Academic Major

A one-way ANOVA was conducted to compare the difference of lifetime, last month and last week exposure in relationship to academic major. There were 31 majors listed, which the investigators divided into six overarching categories including Social Science, Science, Liberal Studies, Business, Art, and Pre-Major. No significant difference for drug exposure by major was found for lifetime exposure, \( F(5, 209)= .55, p=.74 \), last month exposure, \( F(5, 209)=1.54, p=.18 \), or last week exposure, \( F(5, 208)=.61, p=.693 \).

Drug Use Exposure and Living Arrangements

An independent samples t-test was conducted to compare lifetime, last month, and last week drug exposure by living arrangements (defined as living with parents or not living with parents). For lifetime exposure, there was a significant difference between those who lived with their parents (M=1.48, SD=1.56) and those who do not (M=2.92, SD=1.96), \( t(216)= -3.42, p = .001 \). The difference between people who lived with their parents (M=.83, SD=1.02) and those who do not (M=1.56, SD=1.28) is significant for last month exposure, \( t(216) = -2.66, p = .009 \). For last week exposure, the difference between people who live with their parents (M=.36, SD=.66) and those who do not (M=.97, SD=.93) was significant, \( t(215) = -2.99, p = .003 \).

Drug Use Exposure Prior to Transfer From a Public University

A chi square was done to test for a significant difference between drug use exposure prior to transferring to Seattle University from a public university. An assumption was violated during this test, as one cell had an expected count of less than five; however, the test was run anyway because the expected count was 4.90. There was no significant difference between drug use exposure prior to transfer and current drug use exposure at Seattle University, \( \chi^2 (1, N=84) = .22, p > .05 \).

Other Interesting Results

Participants were asked to provide their estimate as to how often the average Seattle University student uses drugs. There was a tie for the most common estimate: less than weekly but more than monthly, low quantity (low quantity = 1 drink, 1 joint, or 1 drug use) and more than weekly, low quantity. (The frequency for both was 48 occurrences, with 200 responses.) Seventy-six participants (34.9% of the sample who responded to this particular question) had witnessed drug use within the last week.

Forty-nine participants (22.5% of the sample) have known a Seattle University student that had been arrested as a result of their drug use. Fifty-two participants (23.9%) have known a Seattle University student that has received treatment for their drug use.

Across all three time period assessments (lifetime, last month, last week) alcohol was the most common drug followed by marijuana and then prescription drugs. For lifetime, the fourth most common drug was ecstasy followed by hallucinogens. For last month, the fourth most common drug was cocaine followed by ecstasy (n=10, 4.6%). For last week, the fourth most common drug was ecstasy followed by cocaine. (See Figures 1-3).

Discussion

There are many things that have an effect on drug use and with a larger sample it is possible that the curr...
rent study would have found more significant relationships between variables. As it was, there was a significant relationship between class standing and recent exposure, a significant relationship between marital status and recent exposure, and a significant relationship between living arrangements and overall exposure.

Class standing is related recent exposure. For lifetime exposure, there was no significant relationship between class standings, however for recent exposure there was a difference. Lower classmen had higher recent exposure at both the last month and last week exposure assessment points. It is possible that this is because upper classmen have more academic responsibilities than lower classmen do and/or lower classmen have more recent exposure as they are entranced with their new found freedom of experiences.

There was no relationship between drug use exposure at any assessment point and gender. It is possible that there would be a significant difference had the sample been larger and contained more male participants (as it was, the sample was only 27.5% male, though in the autumn quarter of 2006 the total male population of undergraduate students at Seattle University was only 39%).

Though there was no significant relationship between marital status and lifetime drug exposure, there was a relationship between marital status and recent drug exposure. People who were single (those who were single, divorced, or widowed) had higher exposure at the last month and last week assessment periods. This makes sense as those people who are not single (those who were married or partnered) generally have more responsibilities and attend fewer parties than their single counterparts.

There was no significant relationship between academic major and drug use exposure at any assessment period. It is possible that, were a larger sample obtained, a significant relationship could be found. This sample contained a larger percentage of psychology and criminal justice majors than other academic majors and it’s possible that this had an effect on the outcomes.

A significant relationship was found for living arrangements and drug use exposure across all three assessment points. Participants were given three choices (with parents, on campus, and off campus) which were further broken down into with parents and not with parents. Participants who did not live with their parents had higher instances of drug use exposure. This is not surprising, as students who live with their parents while attending college often do not have the same freedoms that students who live away from their parents do.

There was not a significant difference between drug use exposure prior and after transfer to Seattle University for lifetime and recent exposure. It is possible that with a larger sample of transfer students, a significant relationship could be found. Mohamed & Fritsvold (2006) commented on the differences in drug use at private universities and because Seattle University is a private university it was hoped that there would be a significant difference in drug exposure between public (transferred from) universities and Seattle University.

To date, there is no research on drug use exposure so this study is groundbreaking in that area. However, with self-reporting of drug use or, in this case, drug use exposure, it is hard to judge the accuracy of
the responses. It is the hope of the researchers that because the participants were reporting drug use they had witnessed rather than their own personal drug use they would be more accurate in reporting because they would not have to deal with any stigmas attached to drug use. The accuracy of the self-report was one of the major limitations of the study; however when it comes to drug use self-report is the only measure of drug use short of giving every student a drug test.

Another limitation of the current study was the large percentage of criminal justice and psychology major and the higher number of upper classmen in the sample. The investigators of this study are both double majors in criminal justice and psychology and both upper classmen. This led to an access bias, as both investigators had easier access to students who were of those majors and upper classmen. It would more beneficial and the results would be more applicable if an even number of upper and lower classmen were obtained and an equal number of different academic majors.

This research was conducted at a single university in the Northwest region of the United States so it is unclear as to the generalizability of the results to other universities. If this or a similar study was conducted at several universities across the country (both public and private) the results would be more applicable across a wider variety of universities.

Further research into this area would help to better understand the relationship between college students and drug use. With an increase of information, it is possible that a plan could be developed to eradicate drug use on campus or, at the very least, decrease drug use on campus. It would be beneficial for further research to assess personal drug use as well as drug use exposure in an effort to compare the differences in order to gain a clearer picture of drug use among Seattle University students. Perhaps with further development of this current study at Seattle University, this study could also be conducted at other universities, public and private, to better understand drug use among college students in general (as opposed to specifically at Seattle University).

Though this study has limitations, it does provide an interesting look into the drug culture among Seattle University students. Though very little of the previous research supports the findings of this study, it does form a helpful theoretical basis for understanding the results. Drug use is not unexpected on college campuses and this study helps to better understand what drugs are being used by Seattle University students. With further research, students and administrators could work together to increase awareness and decrease drug use.

References
APPENDIX

Survey Number:

**PLEASE READ BEFORE BEGINNING**

This survey is completely anonymous. As such, we request that you provide honest answers. Your answers will help us track drug use patterns within the student population at Seattle University. For our intent, we include alcohol in our definition of drugs.

1. Age: _____ 2. Gender:  □ Male  □ Female

3. Ethnicity:  □ Asian  □ Native American
□ African-American  □ Caucasian (non-Hispanic)
□ Hispanic  □ Other: ____________________________________

4. Class standing:  □ Freshman  □ Sophomore
□ Junior  □ Senior
□ Graduate Student

5. Major: _________________________________________________

6. Martial status:  □ Single  □ Married
□ Divorced  □ Partnered
□ Widowed

7. Average yearly income:  □ Under $20,000  □ 20,000-29,999
□ 30,000-39,999  □ 40,000-49,999
□ 50,000-59,999  □ 60,000-69,999
□ 70,000-79,999  □ 80,000-89,999
□ 90,000-99,999  □ 100,000+

8. What are your current living arrangements?:  □ With parents  □ On-campus
□ Off-campus

9. Have you ever been in a social situation with Seattle University students where the people around you were drinking alcohol?  □ Yes  □ No

10. Have you ever been in a social situation with Seattle University students where the people around you were doing illegal drugs (prescription or otherwise)?  □ Yes  □ No

11. Please check all that you have witnessed other SU students doing in your lifetime:
□ Alcohol  □ Hallucinogens  □ PCP
□ Marijuana  □ Prescription drugs  □ Other (please specify): ______________________
□ Cocaine (other than specified use) ______________________
□ Heroin  □ Inhalants ______________________
□ Amphetamines  □ Morphine ______________________
□ Ecstasy  □ IV Drugs  □ None

12. Please check all that you have witnessed other SU students doing within the last month:
□ Alcohol  □ Hallucinogens  □ PCP
□ Marijuana  □ Prescription drugs  □ Other (please specify): ______________________
□ Cocaine (other than specified use) ______________________
13. Please check all that you have witnessed other SU students using more than once a week:

- Heroin
- Amphetamines
- Ecstasy
- IV Drugs
- None
- None
- None

14. By your estimate how often does an average SU student use drugs?

- Low quantity = 1-2 drinks, 1 joint or 1 drug use.
- High quantity = 3 or more drinks, multiple drug use (including binging)

- Abstinent more than 12 months
- Abstinent 1 to 12 months
- Current use less than monthly
- Current use less than weekly but more than monthly (low quantity)
- Current use less than weekly but more than monthly (high quantity)
- Current use more often than weekly (low quantity)
- Current use more often than weekly (high quantity)

15. How long has it been since you've witnessed drugs being used by SU students?

- Within the last day
- Within the last two days
- Within the last week
- Within the last two weeks
- Within the last month
- Within the last six months
- More than six months ago
- More than one year ago

16. Do you know of any SU students who have been arrested for their drug use?  

- Yes  
- No

17. Do you know of any SU students who have received treatment for their drug use?  

- Yes  
- No

18. Are you a transfer student? (If no, skip following questions)

- Yes  
- No

19. Did you transfer from a public university or college?

- Yes  
- No

20. Did you transfer from a private university or college?

- Yes  
- No

21. Did you witness drug use more frequently before you transferred to Seattle University?

- Yes  
- No

Please explain: _______________________________  
_____________________________________________________________________________  
_____________________________________________________________________________

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