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Correlates of Prescription Drug Market Involvement among Young Adults

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Abstract

Background—While a significant minority of prescription drug misusers report purchasing prescription drugs, little is known about prescription drug selling. We build upon past research on illicit drug markets, which increasingly recognizes networks and nightlife as influential, by examining prescription drug market involvement.

Methods—We use data from 404 young adult prescription drug misusers sampled from nightlife scenes. Using logistic regression, we examine recent selling of and being approached to sell prescription drugs, predicted using demographics, misuse, prescription access, and nightlife scene involvement.

Results—Those from the wealthiest parental class and heterosexuals had higher odds (OR=6.8) of selling. Higher sedative and stimulant misuse (ORs=1.03), having a stimulant prescription (OR=4.14), and having sold other illegal drugs (OR=6.73) increased the odds of selling. College bar scene involvement increased the odds of selling (OR=2.73) and being approached to sell (OR=2.09). Males (OR=1.93), stimulant users (OR=1.03), and sedative prescription holders (OR=2.11) had higher odds of being approached.

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Discussion—College bar scene involvement was the only site associated with selling and being approached; such participation may provide a network for prescription drug markets. There were also differences between actual selling and being approached. Males were more likely to be approached, but not more likely to sell than females, while the opposite held for those in the wealthiest parental class relative to lower socioeconomic statuses. Given that misuse and prescriptions of sedatives and stimulants were associated with prescription drug market involvement, painkiller misusers may be less likely to sell their drugs given the associated physiological dependence.

Keywords

drug markets; prescription drug misuse; young adults

1. Introduction

Prescription drug misuse is particularly prevalent among young adults (Kelly et al., 2013a; McCabe et al., 2006), and prescription drug markets driving this trend have both formal and informal dimensions. More than half of prescription drug misusers assessed during 2011 and 2012 reported receiving these drugs through their network ties, primarily a friend or relative (SAMHSA, 2013). Yet, a significant minority (15.2%) also reported purchasing prescription drugs from a friend, relative, stranger, or drug dealer, with very few reporting purchases from the internet (SAMHSA, 2013; Inciardi et al., 2009). Indeed, studies have indicated that young adults are more likely to use dealers to obtain prescription drugs than older adults (Cicero et al., 2011). Despite this, little is known about the prescription drug market in which young people acquire prescription substances for the purpose of misuse. In particular, while there is growing knowledge about sources where individuals acquire prescription drugs, little is known about young people who illicitly sell prescription drugs. In this paper, we examine the correlates of prescription drug market involvement among young adults by examining the influence of personal characteristics, prescription drug misuse, having valid prescriptions, and nightlife scenes involvement.

Even with the large percentage of young adults reporting misuse of prescription drugs during the 21st century, research on drug markets has focused primarily upon illicit drugs, with an overwhelming focus on inner-city “open-air” drug markets rather than private networks. Like any commodity, illicit drug markets function either through person-specific networking or place-specific markets (Harocopos and Hough, 2005; May and Hough, 2004). With few barriers to access, open-air drug markets represent the latter by operating in geographically-defined areas at certain times in order to facilitate transactions between buyers and sellers (Harocopos and Hough, 2005). Certain neighborhood characteristics, such as schools (Willits et al., 2013) and the presence of gangs (see, e.g., Fagan, 1989; Decker and Van Winkle, 1994; Valdez and Sifaneck, 2004), increase the odds that an open illicit drug market develops. People involved in illicit drug markets, however, are quite varied and sporadic in their involvement, with only a minority considering themselves as committed long-term participants in the drug economy (Hagedorn, 1994). Examining monthly within-person changes, Uggen and Thompson (2003) found that embeddedness in legitimate work and family roles was associated with decreased involvement in illicit drug markets, though

this was sensitive to drug use. During spells of cocaine and heroin use, individuals were more likely to accrue illegal earnings through drug market involvement. Others have found that drug selling is tied intimately to use, such that many users only sell to support their habit rather than for profit (Valdez and Sifaneck, 2004). Still, understanding involvement in drug markets remains important as it is associated with a host of other negative outcomes, such as committing crimes against property and persons (Altschuler and Brounstein, 1991), acquisition of sexually transmitted infections (Jennings et al., 2012), and difficulty transitioning to legitimate work opportunities (MacDonald and Marsh, 2002).

The open-air markets most often studied commonly include heroin, crack, cocaine, and marijuana (Harocopos and Hough, 2005), but a study of prescription drugs may require another approach to understanding markets. The limited research on other locations and personal networks is potentially important to understanding prescription drug markets, particularly as such closed markets are becoming increasingly a locus for drug transactions (May and Hough, 2004; Sandberg, 2012). In particular, scholars have identified closed dealing networks at universities to be key markets for prescription drug access for college students (Mohamed and Fritsvold, 2011). Additionally supporting this notion, in the rapidly developing Russian drug market, transactions take place frequently on university campuses and dormitories, as well as in bars and discos (Paoli, 2002a). In an ethnography of white middle-class dealers and users in London, such deals often took place informally in a residence or bar through network ties (Pearson, 2001). Although university settings are key locales for prescription drug markets, little is understood about other settings that have proven to be sites for drug distribution, such as nightlife settings. Further assessments of prescription drug market involvement may enable better understandings of the dynamics of these markets, which are often closed markets rather than open ones.

Studies of prescription drug markets remain limited, but we expect that the characteristics of participants may be distinct between prescription drugs and other illicit drug markets. Illicit drug sales typically require criminal networks consisting of diverse, albeit not particularly well organized, structures and hierarchies in order to distribute effectively from production to consumers (Deroches, 2007; May and Hough, 2004; Pearson and Hobbs, 2004; Johnson, 2003; Paoli, 2002b; Decker and Van Winkle, 1994). By contrast, prescription drugs are typically diverted from “legitimate” sources by dealers themselves through tactics such as visiting multiple clinics for prescriptions, working with pharmacy employees to steal medications, and purchasing medications from indigent patients (Rigg et al., 2012; Inciardi et al., 2009, 2007). In this respect, the characteristics associated with prescription drug market participation may be distinctive. For the purpose of intervention efforts, it remains important to identify characteristics that distinguish prescription drug misusers who report selling medications from those who are primarily users.

In this study, we build upon the existing literature on illicit drug markets and the few qualitative studies of prescription drug markets by examining prescription drug sales through a survey of young prescription drug misusers participating in nightlife scenes in New York, focusing on demographics, misuse, prescription access, and subcultural scene involvement. First, the research on illicit drugs demonstrates the importance of factors such as gender and race (Ludwick et al., 2013; Maher and Hudson, 2007; Beckett et al., 2006)

and the protective influence of socioeconomics (Uggen and Thompson, 2003). Second, the importance of personal use of illicit drugs for involvement in selling is well-documented (Uggen and Thompson, 2003; Valdez and Sifaneck, 2004). Beyond use, access to legitimate prescriptions is an important source of supply that should be accounted for (Rigg et al., 2012). Finally, there is a growing recognition of the importance of personal networks and locations other than open-air markets (May and Hough, 2004; Mohamed and Fritsvold, 2011; Sandberg, 2012; Paoli, 2002a; Pearson, 2001), which may be particularly salient for prescription drugs. For example, Pearson and Hobbs (2004) have described the nightlife stimulant drug market as “burgeoning.” Other studies have identified elevated prevalence of prescription drug misuse in a range of nightlife scenes frequented by young adults (Inciardi et al., 2007; Kelly et al., 2013b). Various subcultural scenes support norms and values that influence drug consumption (Pawson and Kelly, 2014; Vuolo et al., 2014). Thus, we also consider subcultural scene involvement as an important correlate of prescription drug market involvement. In order to understand actual involvement in selling and assumptions about who sells prescription drugs, we examine both actual selling in the last three months, as well as being approached to sell.

2. Methods

2.1 Sampling

As young adults active in nightlife scenes can be considered a venue-based population, we used venues as our basic unit of sampling to systematically generate a sample of nightlife-involved young adults. Time-space sampling (Stueve et al., 2001) was used in eight different nightlife scenes in New York City to recruit participants for this project. Time-space sampling is useful to recruit venue-based samples (Parsons et al., 2008) via the randomization of the venues attended and the days/times attended. Through extensive social mapping fieldwork conducted over the previous year, the research team generated a list of venues across a range of nightlife scenes in New York City: indie rock clubs, gay clubs, lesbian party scenes, electronic dance music scenes, jam band shows (aka “hippie” scenes), college bars, hip hop clubs, and alternative scenes such as warehouse parties. Day and hours of operation for these venues were documented and all listed venues were assigned an individual number. From this enumerated list of viable venues, venues and shift day/times were sampled using a random digit generator, which randomly produced a series of numbers with corresponding venues on days of the week throughout the month. This random digit generation process provided for a recruitment schedule for each month.

At the venues, recruiters approached patrons and asked them to complete a brief survey that assessed study eligibility. Those who verbally consented (75.0% of those approached) completed a screening survey that contained questions that determined eligibility for the study. To be eligible, participants were between the ages of 18-29, reported the misuse of prescription drugs on at least three occasions during the previous six months, and at least once within the past three months. If eligible in the field, potential participants were given the option to verify age and identity so that they could complete the study survey online. Near the end of the study, recruitment was supplemented with online recruitment (targeting groups that matched the social scenes) and a mobile sexual networking application for gay

and bisexual men. This supplemental recruitment comprised a very small proportion of the total sample (<5%). After screening at the initial point of contact, project staff contacted potentially eligible participants, screened them again, and, if remaining eligible, staff invited them to participate in the study and scheduled a baseline assessment. During the initial assessment, participants provided informed consent, completed a structured survey, and the first half of the sample engaged in a semi-structured qualitative interview.

2.2 Measures

2.2.1 Demographics—Participants self-reported their age, gender, sexual identity (gay, straight, bisexual, queer, or unsure), race/ethnicity (White, Latino, Black, Asian/Pacific Islander, mixed, or other), highest education completed (some high school, high school diploma, some college, currently enrolled in college, 4-year college degree, or graduate school), parents' socioeconomic class (rich, upper middle class, middle class, or working class/poor), and whether or not they currently had health insurance. Due to low cell counts when cross-tabulated with our outcomes, we collapsed several of the categories. As shown in Table 1, the sample had an average age of 24.6 years, was 54.7% male, and was 33.2% nonwhite. The majority (56.4%) of the sample had a Bachelor's degree or higher and 75.7% had health insurance. About 48.0% of respondents reported that their sexual orientation was LGBTQ. While high due to an intentional oversample, only 26.0% of the sample identified as lesbian or gay, with the remainder of this subset identifying more fluid sexual identities of bisexual, queer, or questioning that are greatest at this point in the life course.

2.2.2 Frequency of Prescription Drug Misuse—This study used the following operational definition of prescription drug misuse, which was provided to subjects in the survey: "...using prescription drugs obtained from a non-medical source, using more than the prescribed dose, or using prescription drugs for a non-medical or recreational purpose. Non-medical use may occur whether you do or do not have a prescription for that drug." Respondents reported their frequency of misuse during the previous three months. The average number of days of prescription drug misuse during the past 90 days were 11.9, 10.0, and 12.9 for sedatives, painkillers, and stimulants, respectively.

2.2.3 Prescription acquisition—Respondents were asked if they had a prescription within the last three months for sedatives, painkillers, or stimulants, with 21.4%, 16.5%, and 16.9% responding affirmatively, respectively.

2.2.4 Nightlife Scene—We also included the involvement in particular nightlife scenes associated with various youth cultures. Specifically, respondents self-reported involvement in the following eight nightlife scenes during the previous three months: Indie Rock, EDM, Hip Hop, Jam Band, Lesbian Nightlife, Gay Nightlife, College Bars, or Other scenes. These categories are not mutually exclusive. The percentage involved in each scene varied from 21.5% for the lesbian nightlife scene to 62.4% for the indie rock scene.

2.2.5 Involvement in Drug Markets—We assessed ties to prescription drug markets in two ways. First, we asked participants, "Have you sold prescription drugs within the past three months?" Participants replied in a dichotomy of yes/no, with 10.5% having sold

prescription drugs. Additionally, we asked participants, “Have you been approached to sell prescription drugs within the past three months?” Similarly, participants responded to a yes/no dichotomy, with 34.4% having been approached to sell. In the models for being approached, we include the actual selling measure as well. Respondents were also asked whether they have ever sold other illicit drugs, which is included in both models.

2.3 Data Analysis

Given that both of our outcomes are dichotomous, we used logistic regression to examine the predictive power of a) demographic factors, b) use patterns, prescription access, and other illicit market involvement, and c) nightlife scene participation on the probability of having sold prescription drugs and having been approached to sell prescription drugs. These groups of factors were entered in three blocks, resulting in three models for each outcome. Analyses were conducted using Stata 13.1.

3. Results

Table 2 shows the results of a logistic regression predicting the probability of having sold prescription medications in the last three months. In Model 1, there were negative effects of each of the parental class categories relative to the reference of the highest socioeconomic background (self-identified “rich”), though only the upper-middle class comparison was significant. Individuals identifying as having been raised by parents who were upper middle class were 77.1% less likely to sell prescription drugs than those raised by parents in the highest socioeconomic class ($p < .05$). This effect maintained its significance across the three models, increasing in magnitude when the additional variables are controlled. In Model 3 with the full complement of predictors, the other two comparisons also become significant. Those self-identifying as middle class or working class/poor were 85.6% and 87.5% less likely to sell prescription drugs relative to those who self-identified as from the wealthiest background, respectively ($p < .05$). Among the other demographics in Model 1, heterosexual young adults were 3.9 times more likely to sell prescription drugs than LGBTQ individuals ($p < .001$). This finding is also robust to the inclusion of prescription drug use and subcultural scene involvement. According to Model 3, this effect increased with the addition of the latter variables, such that heterosexuals were 6.8 times more likely to sell than LGBTQ individuals ($p < .01$).

Model 2 considered misuse of prescription drugs, receipt of a prescription, and other illicit drug market involvement as predictors. Instances of sedative misuse in the last 90 days was significant, such that a one instance increase raised the probability of selling prescription drugs by 2.5% ($p < .05$). Stimulant misuse was similarly significant, with a one instance increase raising the probability of selling by 2.2% ($p < .05$). Additionally, having a prescription for stimulants increases the odds of selling by 5.3 times ($p < .01$). Finally, having ever sold illegal drugs increases the odds of recent prescription drug selling by 5.7 times ($p < .001$). Each of these effects remained significant and of similar magnitude with the inclusion of subcultural scene involvement. Of the subcultural scenes in Model 3, only involvement in the college bar scene was significantly associated with the probability of selling prescription drugs. Those who participated in the college bar scene had 2.7 times higher odds of selling than those who did not participate in the scene ($p < .05$). Though not

included in the models for reasons of parsimony, we also tested previous 90 day misuse of eight specific illicit drugs (ecstasy, cocaine, methamphetamine, heroin, crack, ketamine, street methadone, and LSD) and a global indicator of any recent illicit drug use. These measures of illicit drug use were each non-significant with respect to prescription selling (and being approached to sell) and did not alter the results presented.

In Table 3, we considered the probability of having been approached to sell prescription medications in the last three months. Unlike selling, the only demographic characteristic that emerged as a significant predictor of having been approached to sell was gender. According to Model 3, males were 1.9 times more likely to have been approached to sell prescription drugs compared to females ($p < .05$). Among use in the past 90 days in Model 3, misuse of stimulants was significant, such that a one instance increase resulted in a 2.7% increase in the odds of being approached to sell ($p < .001$). Also, having had a prescription for sedatives increased the likelihood of being approached by 2.1 times ($p < .05$). Having sold either illegal drugs or prescription drugs are both significant in Model 2 ($p < .05$), but are reduced to marginal significance with the inclusion of subcultural scene involvement in Model 3 ($p < .10$). Both remain of similar magnitude from Model 2 to Model 3, such that having sold illegal drugs and recently having sold prescription drugs increases the odds of being recently approached to sell prescription drugs by 1.6 and 2.4 times, respectively. As opposed to the differing findings among the demographics and use and prescription measures, Model 3 demonstrates consistent findings between actual selling and being approached to sell for subcultural scene involvement. Involvement in the college bar scene increased the odds of being approached to sell by 2.1 times ($p < .05$).

4. Discussion

Epidemiological data indicates that a significant minority of prescription drug misusers (15.2%) purchase prescription drugs from a friend, relative, stranger, or drug dealer (Inciardi et al., 2009; SAMHSA, 2013). Yet, prescription drug markets in which young people sell prescription drugs for the purpose of misuse remain understudied. This paper provides important information on prescription drug market participation among young adults. We examined the correlates of prescription drug market involvement to provide a fuller picture of these markets. Additionally, our consideration of being approached to sell allowed us to elucidate the differences between actual selling and perceptions of selling among potential buyers, which may reflect attitudes among young adults about selling practices.

As noted above, the literature on illicit drugs highlights the importance of factors such as gender and race on patterns of drug use (Ludwick et al., 2013; Maher and Hudson, 2007; Beckett et al., 2006), as well as the protective influence of socioeconomic class (Uggen and Thompson, 2003). We found differing significant demographic measures associated with actual selling and being approached to sell. Heterosexuals had significantly higher odds of drug selling relative to their sexual minority peers, though no such difference occurred in the models for being approached. Thus, although there are few differences by sexual identity in patterns of misuse of sedatives, pain killers, and stimulants (Kelly et al., 2013a), prescription drug markets may be less active among sexual minority young adults. Males had higher odds of being approached to sell prescription drugs compared to females. The lack of

significant gender findings for actually selling, but significant findings for being approached, echoes the findings of Ludwick et al. (2013) that women are increasingly involved in prescription drug sales, but that their gender was a hindrance to success as a dealer. Finally, those from the wealthiest parental social class background were more likely to sell prescription drugs, but were not significantly more likely to be approached to sell relative to those from other classes. Class may be a harder social status for buyers to discern, such that those from the wealthiest backgrounds are able to sell in relatively close-knit networks with potentially lower risk of detection involved.

As commonly found with users of heroin and cocaine (Uggen and Thompson, 2003), we found that prescription drug misuse was associated with higher odds of selling. However, our data remain unable to distinguish if these individuals are selling to support their own drug use or if this is simply a product of them diverting legally obtained medications. The ability to divert one's own prescriptions for the purposes of selling (Rigg et al., 2012) emerged as significant. Frequency of misuse and having prescription access, specifically related to sedatives and stimulants, were associated with involvement in prescription drug markets. Given the significant physiological dependence that can be associated with painkillers, such misusers may be less likely to sell their own drugs. Stimulant and sedative medications may also be more easily accessible via prescriptions and thus young adults with such access may feel more able to sell some of their medication without risk of losing their own supply.

Scholars have identified university settings as important for prescription drug markets accessed by college students (Mohamed and Fritsvold, 2011). Our findings indicate that college bar scene involvement was the only nightlife site associated with both selling and being approached to sell, net of personal education level. Thus, regardless of education level, participation in the college bar scene may provide a network for prescription drug markets. Given that other nightlife scenes have been focal points for the distribution of other substances, it is somewhat surprising that college bar scenes are the only nightlife scenes associated with prescription drug selling. Nonetheless, college bars may be a site relevant for intervention efforts to reduce the distribution of prescription medications within young adult networks. Additionally, although college bars have not received the same level of attention from harm reduction experts as other nightlife scenes, these scenes may be ripe for harm reduction efforts targeting young prescription drug misusers. Such efforts may impact the extent to which the college bar scene serves as a focal point for prescription selling among young adults.

4.1 Limitations

Although our findings provide an important evaluation of prescription drug market involvement among young adults, some limitations should be considered. First, this project was designed to study youth involved in nightlife scenes. This population is an important one to study due to the salient role that substances often play in nightlife venues and the difficulty in sampling prescription drug users in surveys of the general population, yet these findings may not generalize to the entire young adult population. Second, as we used a time-

space sampling method, we may have oversampled people who are more frequent nightlife participants.

Additionally, while the boroughs with high concentrations of nightlife also have relatively high LGBTQ populations and young adults are considerably more likely to identify as LGBTQ, our sample contains an oversample of sexual minority young adults. Finally, as subjects were asked to self-report behaviors, there may be a social desirability bias in the reporting of drug market involvement, as is common in studies of illegal or stigmatized behaviors. However, studies have shown that the use of computer-assisted surveys improves self-report measures of sensitive topics (Gribble et al., 2000; Williams et al., 2000), which improves our confidence in these responses.

4.2 Conclusions

Differing demographics were influential when considering actual and perceived selling, such that buyer perceptions may not align accurately with seller characteristics. Notably, heterosexuals may be particularly important to reach in order to disrupt prescription drug markets. Personal prescription drug misuse and access to prescriptions were also associated with prescription drug markets. Recent research has come to view personal networks, closed markets, and subcultural scenes as important for illicit drug acquisition. We similarly show the central role that the college nightlife scene plays in the prescription drug market among young adults. Overall, these findings present a descriptive epidemiological profile of prescription drug market involvement among young adults in nightlife scenes.

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Highlights

- We examine correlates of selling and being approached to sell Rx drugs.
- Data are from 404 young adult Rx drug misusers sampled from NYC nightlife scenes.
- Heterosexuals and self-identified wealthiest background more likely to sell.
- Those in college bar scene more likely to sell and be approached to sell.
- Market involvement higher among stimulant and sedative users and Rx holders.

Table 1
Descriptive statistics of the sample

<i>Demographic characteristics</i>	Total (N = 404)
Age (mean, sd)	24.57 (2.69)
Sex	
Male	220 (54.73%)
Female	182 (45.27%)
Race	
White	270 (66.83%)
Nonwhite	134 (33.17%)
Educational achievement	
High school or less	28 (6.93%)
Some college or Associates degree	65 (16.09%)
Currently enrolled in college	83 (20.54%)
Bachelor's degree or higher	228 (56.44%)
Sexual orientation	
Heterosexual	210 (51.98%)
LGBTQ	194 (48.02%)
Parental class	
"Rich"	20 (4.99%)
Upper middle class	132 (32.92%)
Middle class	157 (39.15%)
Working class/poor	92 (22.94%)
Had health insurance	
Yes	306 (75.7%)
<i>Substance use characteristics</i>	
Past 90 days prescription drug use	
Sedatives (mean, sd)	11.94 (19.99)
Pain killers (mean, sd)	10.03 (18.24)
Stimulants (mean, sd)	12.93 (21.28)
Had prescription for prescription drugs	
Sedatives	83 (21.39%)
Pain killers	64 (16.49%)
Stimulants	66 (16.88%)
<i>Subcultural scene involvement</i>	
Indie scene	252 (62.38%)
EDM scene	212 (52.48%)
Hip hop scene	108 (26.73%)
Hippie scene	109 (26.98%)
Lesbian scene	87 (21.53%)
Gay scene	170 (42.08%)
College scene	161 (39.85%)

<i>Demographic characteristics</i>	Total (N = 404)
Other scene	145 (35.89%)

Table 2
Logistic regression predicting probability of having sold prescription medication in last 3 months.

	Model 1		Model 2		Model 3	
	Coef. (Std. err.)	OR.	Coef. (Std. err.)	OR.	Coef. (Std. err.)	OR.
Age	-0.032 (0.087)	0.969	-0.101 (0.110)	0.904	-0.102 (0.115)	0.903
Parents' class (vs. "Rich")						
Upper middle class	-1.481* (0.678)	0.227	-2.527** (0.903)	0.080	-3.156*** (0.981)	0.043
Middle class	-1.069 (0.654)	0.343	-1.561† (0.814)	0.210	-1.937* (0.855)	0.144
Working class/poor	-1.352† (0.710)	0.259	-1.742* (0.850)	0.175	-2.076* (0.909)	0.125
Educational achievement (vs. High school or less)						
Some college or Associates degree	0.077 (0.814)	1.081	-0.398 (0.938)	0.671	-0.703 (1.012)	0.495
Currently in college	0.363 (0.757)	1.438	0.370 (0.838)	1.447	0.253 (0.894)	1.289
Bachelor's degree or higher	-0.318 (0.775)	0.728	0.240 (0.884)	1.271	0.079 (0.933)	1.083
Nonwhite	-0.059 (0.403)	0.943	-0.341 (0.491)	0.711	-0.460 (0.525)	0.631
Male	0.284 (0.370)	1.328	0.403 (0.453)	1.497	0.545 (0.514)	1.762
Heterosexual	1.349*** (0.412)	3.852	1.754*** (0.533)	5.775	1.923** (0.626)	6.838
Had Health Insurance	0.335 (0.504)	1.398	-0.041 (0.572)	0.960	-0.416 (0.619)	0.660
Sedatives instances of use (past 90 days)			0.023* (0.012)	1.023	0.025* (0.012)	1.025
Pain killers instances of use (past 90 days)			0.000 (0.012)	1.000	-0.006 (0.013)	0.994
Stimulants instances of use (past 90 days)			0.022* (0.008)	1.023	0.027* (0.010)	1.027
Had prescription for sedatives			0.816 (0.597)	2.260	0.914 (0.629)	2.495
Had prescription for pain killers			-0.971 (0.807)	0.379	-0.938 (0.862)	0.391
Had prescription for stimulants			1.676** (0.554)	5.344	1.599** (0.589)	4.948
Ever sold illegal drugs			1.74*** (0.519)	5.730	1.907*** (0.555)	6.733
Indie scene					-0.271 (0.505)	0.763
EDM scene					0.113 (0.486)	1.119
Hip hop scene					-0.103 (0.497)	0.902
Hippie scene					0.037 (0.470)	1.038
Lesbian scene					0.507 (0.695)	1.660
Gay scene					-0.033 (0.595)	0.968

	Model 1		Model 2		Model 3	
	Coef. (Std. err.)	OR.	Coef. (Std. err.)	OR.	Coef. (Std. err.)	OR.
College scene					1.005* (0.463)	2.733
Other scene					-0.728 (0.473)	0.483
Constant	-1.393 (2.342)		-1.699 (2.931)		-1.361 (2.986)	
Log-likelihood	-113.285		-84.544		-80.108	
Model chi-square	21.77*		79.25***		88.12***	
*** $p < .001$;						
** $p < .01$;						
* $p < .05$;						
† $p < .10$						

Table 3
Logistic regression predicting probability of being approached to sell prescription medication in last 3 months.

	Model 1		Model 2		Model 3	
	Coef. (Std. err.)	OR.	Coef. (Std. err.)	OR.	Coef. (Std. err.)	OR.
Age	-0.024 (0.055)	0.976	-0.015 (0.058)	0.985	0.001 (0.061)	1.001
Parents' class (vs. "Rich")						
Upper middle class	0.331 (0.591)	1.393	0.763 (0.653)	2.145	0.523 (0.666)	1.721
Middle class	0.498 (0.585)	1.646	0.868 (0.639)	2.382	0.730 (0.648)	2.075
Working class/poor	0.618 (0.601)	1.856	1.054 (0.661)	2.870	0.960 (0.673)	2.612
Educational achievement (vs. High school or less)						
Some college or Associates degree	0.125 (0.523)	1.133	0.106 (0.564)	1.112	-0.052 (0.594)	0.949
Currently in college	0.144 (0.508)	1.115	0.141 (0.552)	1.151	0.008 (0.574)	1.010
Bachelor's degree or higher	-0.359 (0.504)	0.698	-0.336 (0.560)	0.715	-0.378 (0.582)	0.685
Nonwhite	0.324 (0.249)	1.382	0.316 (0.265)	1.371	0.245 (0.276)	1.278
Male	0.653** (0.234)	1.922	0.604* (0.254)	1.829	0.657* (0.296)	1.928
Heterosexual	0.083 (0.230)	1.087	-0.202 (0.256)	0.817	-0.408 (0.324)	0.665
Had Health Insurance	0.105 (0.295)	1.111	0.059 (0.312)	1.061	-0.037 (0.324)	0.964
Sedatives instances of use (past 90 days)			-0.013 (0.008)	0.987	-0.012 (0.009)	0.988
Pain killers instances of use (past 90 days)			0.007 (0.009)	1.010	0.005 (0.009)	1.005
Stimulants instances of use (past 90 days)			0.025*** (0.007)	1.026	0.027*** (0.007)	1.027
Had prescription for sedatives			0.711* (0.353)	2.037	0.746* (0.365)	2.109
Had prescription for pain killers			-0.425 (0.384)	0.654	0.3660 (0.388)	0.693
Had prescription for stimulants			-0.028 (0.378)	0.972	-0.044 (0.390)	0.957
Ever sold illegal drugs			0.577* (0.258)	1.781	0.485† (0.272)	1.624
Recently sold prescription drugs			0.893* (0.427)	2.443	0.857† (0.442)	2.357
Indie scene					0.217 (0.281)	1.242
EDM scene					0.284 (0.276)	1.329
Hip hop scene					0.366 (0.292)	1.443
Hippie scene					-0.341 (0.299)	0.711
Lesbian scene					0.100 (0.382)	1.106

	Model 1		Model 2		Model 3	
	Coef. (Std. err.)	OR.	Coef. (Std. err.)	OR.	Coef. (Std. err.)	OR.
Gay scene					-0.385 (0.320)	0.680
College scene					0.738** (0.269)	2.091
Other scene					0.396 (0.260)	1.486
Constant	-0.928 (1.525)		-2.064 (1.649)		-2.656 (1.720)	
Log-likelihood	-227.210		-208.098		-200.620	
Model chi-square	20.62*		58.84***		73.79***	

 $p < .001$;
**
 $p < .01$;
*
 $p < .05$;
†
 $p < .10$