

Social, Contextual and Psychological Correlates of Alcohol and Illegal Drug Use by College and Non College Attending Youth

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Abstract

Adolescent and young adult alcohol and illegal drug use and abuse in the U.S. are public health and social problems of epidemic proportions. This study attempts to identify social, contextual and psychological correlates of levels of alcohol and illegal drug use for a local sample of college and non-college youth. Results from regression analyses indicated a significant influence of friends on level of alcohol and marijuana use and on illegal use of prescription and other drugs. Frequency of marijuana use was significantly associated with being male and frequently feeling depressed. In addition, attending a four-year college was positive and significantly related to higher levels of alcohol consumption. Implications for college and university and social policymakers and for future research are discussed.

Introduction

A significant proportion of young adults in the U.S. continue to use and abuse alcohol and illegal drugs (White and Hingson, 2005; Johnston, et. al. 2013; Redonnet et. al., 2012; Goldberg, 2012; Meich, 2013; National Institute of Drug Abuse, 2014). National reports and surveys on student health indicate that compared to a decade ago, there has been a substantial increase in binge drinking and the abuse of over the counter and prescription drugs among college students and young adults ages 18-15 (National Survey on Drug Use, 2010; Student Health Infographic, 2014). Based on a report from a four year Columbia University study which indicated similar findings, former U.S. Secretary of the previous Office of Health, Education and Welfare, Joseph Califano commented that, "In this world of fierce global competition, we are losing thousands of our nation's best and brightest to alcohol and drugs, and in the process robbing them and our nation of their promising future (2007; p.1)."

Findings from the Columbia University study by its National Center on Addiction and Substance Abuse revealed that 49% (3.8 million) of full time college students were binge drinkers and/or abused prescription and illegal drugs; and that 23% met the medical criteria for substance abuse and dependence. The abuse of prescription drugs was even higher for young adults in this study. Between 1993 and 2005 among college students in the U.S., there was a 343% increase in the user of opioids, 93% increase in the abuse of stimulants, and a 450% increase in the abuse of tranquilizers (Columbia University, National Center on Addiction and Substance Abuse; 2007). In addition to the mental and physical health consequences and social costs of drug and alcohol abuse, data from the National Institute on Drug Abuse (2014) indicate a high economic cost of addiction and drug abuse to American families and tax payers, totaling approximately \$559 billion dollars annually in increased health costs, crime and human productivity. In 2012, 183,000 sexual assault and rape

cases (37%) in the U.S. involved alcohol use by offenders (National Council on Alcoholism and Drug Dependence, 2013).

While there have been previous studies on youth and young adult use and abuse of alcohol and other drug related substances, very few have made distinctions regarding the type of college students attend. In this study, students attending both two and four year colleges were surveyed along with a small sample of young adults who were not enrolled in college at the time of the survey. The main objective of this study is to examine the influence of gender, college type, and various social and social-psychological factors on alcohol and substance for young adults.

Individual and Socio-Demographic Factors

Findings from studies examining the influence of social class on substance use and abuse indicated a positive relationship between lower socioeconomic status and alcohol and illegal drug use. (von Sydow et. al., 2002; MacLeod et. al., 2004). In addition, gender was found to be positively and significantly related to levels of alcohol consumption and marijuana use, with males reporting higher levels on both variables than females (Wilsnack et. al., 2009; Redonnet, 2012; Grant et. al., 2004; Patrick et. al., 2011; Khan et. al., 2014). Males were also more frequent users than females of psychoactive drugs and to be poly-substance users (Grant et. al., 2004; Wilsnack et. al., 2009; Maslowsly et. al., 2013). Wastila-Simoni (2004) reported that females were more likely to take and abuse prescription drugs than males.

Sex roles and gender socialization, and gender stereotypes have been employed to explain these gender differences (Wastila-Simoni, 2004; Shimmin, 2009; Khan, 2014). Referring to the “Boy Code” coined by William Pollack, this code comes with, numerous expectations and reinforcers about how boys and men should feel, think and behave: “be tough,” “don’t cry,” “go it alone” and don’t show any emotion except for anger (Shimmin, 2009; p.2). Consequently some men and young men may view taking prescribed drugs, especially for depression and emotional problems in general as taboo for men and as behavior reserved for women. Traditional sex-typing cast women as being the weaker of the sexes and more in need of medical attention and social-psychological support. However, the use of alcohol and conventional ‘street drugs’ entail more risk taking behavior that is more align with male stereotypes and the “masculine image” and that may be more acceptable and tolerated in a male dominated world.

Peer and Family

Studies examining the effect of peers on adolescent and young adult alcohol and marijuana use have consistently reported a strong, positive and significant influence (Simon-Morton and Forhat, 2010; Hansen et. al., 1987; Manson and Windle, 2001; Buehler, 2006; Kuntsche and Jordan, 2006). Bransteller et. al., (2011) noted that friends and peers who drink and use drugs provide and facilitate access; and model substance use behavior for their friends and for newcomers and neophytes

Regarding the influence of parents and family, Von Sydow et. al., (2002) found that youth who reported feeling loved or cared about by family members or by someone, and youth who have strong bonds with their parents were less likely to abuse drugs and alcohol than those who did not feel loved or cared about and who were more detached from their parents. In addition, Manson and Windle (2004) found that family social support was indirectly associated with decrease in alcohol consumption.

Type of College Attended

National data from a U.S. study indicated that 1 in 4 (23%) college students met the medical criteria for substance abuse or dependence (Center for Addiction and Substance Abuse, 2011). Slutske, (2004) found that students living on college campuses drank more and were significantly more likely to be diagnosed with an alcohol use disorder than non-college attending youth. White and Hingson (2005) also reported that college drinking was lower at women's colleges than at coed colleges, and at colleges with strong drug and alcohol policies and educational programs accessible to students.

One of the few studies on the effects of college attendance (Velazques et.al., 2011) reported that students at four year colleges were more likely to drink and binge drink than students at two year colleges. One explanation is that four year college students are more likely to live on college campuses than two year college students (Velazques et. al., 2011). In addition, for many residential students, the college campus is their first residence away from home; one that provides an opportunity for freedom, independent living and experimentation away from parents and family (Borsari et. al., 2007).

Social Psychological Influences

The influence of a variety of psychological, social psychological factors and childhood experiences on youth substance abuse has been investigated in studies on adolescents but fewer on young adults. For adolescents, an earlier study by Scott et.al.,(1998) revealed that optimism, hope and high self-esteem were important and positive intra-personal factors in deterring substance use. In addition, frequent feelings of depression, stress, social anxiety, and lack of satisfaction with life and self were found to be positively related to alcohol, and marijuana abuse (Ross et. al., 1999; Lingford-Hughes, 2002; Tesson, 2002; Rao, 2006, Buckner et. al., 2007). Ross et al., (1999) reported that college students, especially freshmen, had higher stress levels and higher levels of binge drinking. The effects of social psychological variables are examined in this study.

Surveys of students on U.S. college campuses revealed a substantial use and increase in students taking Adderall and other ADHD drugs to focus, to reduce anxiety and to boost their studies and grades (Aaron Cooper, 2011; The National Survey on Drug Use and Health, 2009). Findings from the National Survey on Drug Use and Health (2009) indicated that full-time college students ages 18 to 22 were twice more likely to abuse Adderall than young people of similar age who were not enrolled in college. Results from the survey also showed that 90% of college students who used Adderall without a doctor's prescription were binge drinkers and 50% were categorized as more frequent heavy drinkers (National Survey on Drug Use and Health).

Theoretical Framework

It is argued that the use and experiences of young adults with alcohol and drugs must be viewed from the perspective of their relations with and expectations from significant others (i.e. parents, peers, mentors, role models) coupled with societal norms and expectations transmitted via socialization, social media and popular culture. Therefore, *socialization theory* with an emphasis on sex role socialization and Robert Merton's *reference group theory* form part of the theoretical perspective underlying this research. These theories articulate the process by which children and youth learn about expected gender behavior and their place and status within their families, schools and other social institutions (Merton, 1986; Risman, 2004). Sex roles and messages based on sex-typing convey that drinking and drugging, "challenging, rebelling and deviating from cultural norms and rules are more often tolerated and viewed as expected male than female behavior.

Urie Bronfenbrenner's *Ecological Systems Theory* (1994), offers an additional theoretical perspective

for understanding the impact of peer and youth culture on young adult behavior and social choices. Bronfenbrenner proposed that human development and behavior during various stages in the life cycle are influenced and shaped by different types of micro and macro environments. During early childhood and prior to adolescence, children are largely engulfed, directed and influenced by the micro and more immediate and controlling environments of family, schools and in some instances religious organizations. However upon transitioning to adolescence and young adulthood, friends, peer networks and peer pressure become important and powerful micro environmental spheres of influence for youth and young adults (Bronfenbrenner, 1994). At such time, family, authority and adult values and expectations are often challenged, questioned and sometimes rejected. In addition, during the transition to adulthood and beyond, the broader macro-environment through more formal institutions of government the world of work exert influence the behavior and outcomes of youth through a system of performance expectations, rewards and sanctions.

Wagner and Anthony (2002) formulated an *exposure opportunity* hypothesis noting that young adults who experiment with and use alcohol, illegal and non-prescribed drugs are: (1) more likely to be offered a chance to do so with their peers; and that (2) once the initial opportunity exists and is pursued, peer support and approval provides the gateway or subsequent exposure and use. While the current data does not permit a test of this hypothesis it is argued that youth and young adult exposure to alcohol and drugs is also facilitated and possibly enhanced by social media and increasingly advanced technology which often excludes adults, thereby reinforcing the ecological sphere of peer influence.

Main Hypotheses

Given the literature, four hypotheses are formulated and examined in this research:

- (1) *Male respondents will have higher levels of alcohol and marijuana consumption and use of psycho-pharmaceuticals than females.*
- (2) *Respondents' level of alcohol, marijuana and illegal drug use will be positively related to friends' use.*
- (3) *Given the greater chances of having more frequent peer-to-peer interactions in a residential college environment, respondents enrolled in four-year residential colleges will report higher levels of alcohol use than those attending commuter community colleges.*
- (4) *Respondents who report higher levels of depression and lower levels of feeling cared about will have higher levels of alcohol, marijuana and psycho-pharmaceutical drug use.*

Data and Methods

The data for this study are from a twenty-five item pre-tested survey formulated by the principal researcher. The survey was administered to 206 young adults in Orange County, California in the spring of 2012. An attached cover letter to the survey informed respondents regarding: (1) the purpose, of the survey; (2) that their participation was voluntary; (3) that participants would not be personally identified in the study; and (4) that the results would be summarized and presented primarily in group form.

Of the 206 surveys returned, eight were not usable, resulting in a final sample of 198. One hundred and two males (52%) and 96 females (48%) comprised the final sample. Ninety percent (90%) of the respondents were between the ages of 18-25. The remaining 10% were 26-32 year olds. Eighty-two (41%) of the respondents were enrolled in a mid-size four year private college in Orange County, California. Ninety-three (47%) were enrolled in two Orange County public community colleges. Twenty-three (12%) of the respondents were not enrolled in college at the time of the survey. With instructors' permission, the survey was administered in class in the four-year private college and in one of the two public community colleges. In the remaining public

community college, to invite participation, visits were made to campus coffee shops, dining halls and student social meeting places. Surveys included a small number of respondents who were not enrolled in college at the time. In some cases, these students were friends of college students and were on or off campus in student coffee shops, fast-food restaurants and coffee shop. Therefore a non-probability survey sampling technique was employed based on the accessibility and location of potential student participants.

Inter item correlations and linear and logistic regression analyses were employed to analyze the data. Linear regression was used to determine the influence of a set of predictor variables on two dependent variables: (1) *level of alcohol consumption*; and (2) *frequency of marijuana use*. *Level of alcohol consumption* was measured by a five-category item that asked respondents if and how much they drank. Categories were: (1) do not drink; (2) a little; (3) a modest amount; (4) a lot; and (5) an incredible amount). Thirty percent (30%) of the respondents indicated that they did not drink; 23% said *a little*; 35% said they were *moderate drinkers*; and 12% indicated that they drank a lot or incredible amount.

Frequency of marijuana use was measured by a question that asked respondents that indicated they used marijuana, the frequency with which they used. A *frequency of use* scale ranging from 1 to 8 (1=low frequency; 8=high frequency) was constructed to measure the frequency of use. Forty-three percent (43%) of the respondents indicated that they did not use marijuana. Of the remaining 57% who had used, 28% said they did so occasionally and 51% said they did so “often to very often”.

Logistic regression analysis was used to determine what factors might account for respondents’ illegal use of prescription drugs (i.e. Ritalin, adderall, vicodin, oxycontin) and popular street drugs (i.e. ecstasy, marijuana, LSD, heroin, cocaine meth, crack). Each drug that respondents had taken was coded 1 and each that they had not taken was coded (0). Therefore, a dichotomous composite dependent variable was constructed as a measure of *illegal drug use*. Thirty (30%) of the respondents indicated that they had at some point illegally used prescription and/or illegal “street” drugs.

Logistic rather than linear regression analysis is appropriate when a dependent variable is nominal or has only two categories (Fields, 2009). This statistical procedure allows the researcher to predict which of two dichotomous categories a respondent belongs. In this study the logistic model predicts the probability of *illegal drug use* and the degree of fit of the model containing the independent variables. To establish the maximum comparability to the *R Square* in linear regression, Cox and Snell’s *R Square* was used to assess the overall fit of the twelve variables logistic model subsequently presented.

Predictor Variables

Based largely on the literature regarding drug use and abuse among youth and young adults the following predictor or independent variables were included in this study:

1. *Gender (male=0; female=1);*
2. *College Type (four year college=1; two-year college=0);*
3. *Drink Alcohol (yes=1; no=0)*
4. *Age at first drink (an open ended question that asked respondents who indicated that they drank, the age at which they took their first drink);*
5. *Number of friends who drink frequently (an ordinal measure with a scale of 1-5 that asked respondents if they currently consume alcohol, how much they drink (5= an incredible amount; 1=I do not drink)?*
6. *Feel cared about (a five point likert scale item that asked respondents the extent to which they agreed that most times throughout their lives they felt cared about or loved by someone (5=strongly agree; 1=strongly disagree)*

7. *Often feeling sad or depressed* (a five point likert scale item that asked respondents the extent to which they agreed that they often felt sad or depressed (5=strongly agree; 1=strongly disagree);
8. *Satisfaction with: (a) my life; (b) my home life; (c) my ability to succeed; (d) the type of friends I have.* These items were measured by a seven point satisfaction scale ranging from 0 (not at all satisfied) to 7 (extremely satisfied).
9. *Number of Friends who frequently use illegal drugs including marijuana* (a five item ordinal scale that ranged from none=0 to 5=a lot).

Results

The results from linear regression regarding factors that might contribute to understanding *level of alcohol consumption* for the current sample are presented in Tables 1 and 2 (see all Tables in Appendix). Table 1 presents inter item correlations, means and standard deviations. It reveals moderate to small correlations between level of alcohol consumption and the following variables: (1) *number of friends who drink frequently* ($r=.43$); (2) age of first drink ($r=-.18$) which indicates that starting to drink at a later than an earlier age is negatively correlated with a high level of alcohol consumption; (3) often feeling sad or depressed which is positively related to high levels of drinking ($r=.16$); and (4) attending a four-year which is positively related to high levels of alcohol consumption ($r=.16$).

The results from linear regression analysis in Table 2 are consistent with the modest significant correlations noted in Table 1. Contrary to the hypothesis in this study and previous literature, the results indicate that being male or female was not significantly related to alcohol consumption. However, as originally predicted, respondents who drank a lot were more likely to have friends who drank frequently ($b=.38$; $p<.001$). The resulting betas also show that students enrolled in four-year colleges have a higher level of alcohol consumption than their two-year college peers ($b=.22$, $p<.05$). This is consistent with the initial hypothesis in this study.

While not hypothesized, Table 2 also reveals that respondents who began drinking at a later age were less frequent drinkers than those who started at an earlier age ($b=-.18$; $p<.05$). However, as initially hypothesized, respondents who felt cared about drank less frequently than respondents who did not ($b=-.21$, $p<.05$). Lastly, the *R Square* of .33 in Table 2 indicates that that collectively, the independent variables explained 33% of the variance in level of alcohol consumption for the present sample with friends' level of consumption, four-year college attendance and feeling cared about being the strongest predictors of this outcome variable.

Frequency of Marijuana Use

The correlations in Table 3, indicate that for the present sample, the strongest relationships between *frequency of marijuana use* and the independent variables are: gender ($r=-.27$), satisfaction with home life ($r=-.22$), feeling depressed ($r=.21$), and number of friends who use illegal drugs ($r=.19$). Being female and being satisfied with home life are negatively related to frequency of marijuana use while often feeling depressed and having friends who use are positively related to frequency of marijuana use.

Linear regression results in Table 4 (see Table in Appendix) show that *gender* ($b=-.29$, $p<.001$); *often feeling sad or depressed* ($b=.26$, $p<.05$); and *number of friends who drink frequently* ($b=.21$, $p<.05$) are significant predictors of frequency of marijuana use. The negative beta coefficient for gender indicates that the present sample of males were more likely to report higher levels of marijuana use than females. Often feeling sad or depressed and having friends who frequently drink are positively related to frequency of marijuana use.

Contrary to the initial hypothesis, the social-psychological predictors: feeling cared about, feeling good about oneself; being satisfied with home life; and perceived ability to succeed did not significantly influence frequency

of marijuana use. In addition, the model in Table 4 accounted for only 23 percent of the variance in explaining this outcome variable. Therefore, follow-up studies are needed to explore other possible factors. These might include more college contextual factors such as the presence of fraternities and sororities and other social clubs on campus; and the type of college and university policies regarding use of marijuana.

Illegal Use of Prescription and Other Drugs

SPSS logistic regression was employed to predict the final outcome variable in this study, *illegal use of drugs*. The findings in Table 5 (see Table in Appendix) show the beta coefficients and the log odds of respondent's use (coded 1) or non-use (coded 0) of these drugs when the predictor variables are considered. Contrary to the initial hypothesis, the beta coefficient for gender ($B = -.448$) is not significant. However, the negative coefficient indicates that males more often than females reported that they illegally used pharmaceutical prescription drugs and street drugs.

Table 5 also reveals that the initial hypothesis regarding the positive and significant influence of friends on respondents' illegal drug use is supported. The beta coefficient ($B = .995$; $p < .01$) indicates that respondents whose friends frequently illegally used drugs are more likely to illegally use them. The corresponding log odds indicate more specifically that respondents who have friends that illegally used drugs are 2.7 times more likely to illegally use than respondents whose friends did not.

Level of alcohol consumption ($B = .797$; $p < .01$) is also a significant predictor of illegal drug use. The log odds ratio of 2.2 indicate that respondents who reported higher levels of alcohol consumption were twice as likely to report use of illegal drugs than respondents who had lower levels of alcohol consumption. The unique contribution of each of these two independent variables to the model is indicated by the Wald statistics. The Wald coefficients for the variable, *friends using drugs frequently*, is 23.3 and for *level of alcohol consumptions* 10.2. The Wald both variables contribute substantially more to the overall predictability of the model than the remaining variables in Table 5.

While not significant, it is worth noting that Table 5 reveals that respondents who had friends that drank frequently ($B = .325$) were more likely to illegally use prescribed drugs and street drugs. In addition, while not significant, respondents who reported feeling cared about ($B = -.377$) were less likely to do so. Finally, the goodness of fit of the overall model in Table 5, shows a significant Chi Square value of 73.7 ($p < .000$) which suggests a relatively good fit. The resulting Cox and Snell R Square value of .336 is comparable to the R Square in linear regression and shows that the twelve variable model accounts for 34% of the variance in illegal drug use.

Reasons for Drug and Alcohol Use

To obtain some perspective regarding young people's motivations for using alcohol and drugs, respondents were asked why they believe young people used alcohol and drugs. The top three reasons given regarding alcohol were: (1) peer and family influences (35%); (2) fun and enjoyment (31%); and (3) to reduce stress and escape from problems and life challenges (18%). Similar reasons were given for illegal drug use: (1) experimentation (33%); (2) for fun and enjoyment (21%); and to relax and reduce stress (16%).

Summary and Conclusions

This inquiry was an effort to understand and extend current knowledge regarding alcohol consumption and illegal drug use among young adults. Despite the inability to generalize beyond the present sample, the findings

in this study were fairly consistent with past studies and have implications for future research and possible policy consideration. The significant influence of peers on respondents' use of alcohol and illegal drugs was the most important and consistent finding in both the present research and in past studies.

That young people socialize with their peers and are more likely to drink, experiment and use substances with trusted and influential friends are not surprising and is reflective of youth and young adult culture. Therefore, beyond efforts by parents and adults to counter the potential negative influences of peers, investing greater efforts and research in understanding the process of peer influence; and the dynamics of peer networks, peer modeling and friendships may be useful. This may be especially important in the present age of social media and advanced technology, both providing additional opportunities for young adults to expand their social contacts and networks.

Social-Psychological and Economic Well-being

The significant positive effects of (1) depression on marijuana use, and (2) feeling cared about on lower levels of alcohol consumption suggest that expanding knowledge about the social-psychological needs and well-being of young adults may be informative regarding substance, family and school intervention efforts. In addition, learning more about the objective needs of young people in terms of job access, quality of work, housing access and affordability, and economic resources also may be important. When asking survey respondents the major thing that would improve the quality of their lives, the top three responses given were: (1) good jobs; (2) education and (3) "more money." Therefore future research also may be needed to examine the possible relationship between these more objective factors and substance use and abuse among young people.

Perceived Risk of Excessive Use of Alcohol and Marijuana

Respondents were also asked about their perception of risk to their health associated with excessive use of alcohol and marijuana. Respondents perceived excessive use of both substances as potential impairment to their health. However excessive use of marijuana was perceived as a much lower risk factor than excessive use of alcohol (67% vs. 86%). Their perception is consistent with their reported excessive use of both substances. Only 12% of the respondents reported that they drank excessively. However, 51% of the respondents who reported having used marijuana said they did so very often. This may suggest the need for more dialogue, education and possibly debates about the short and long-term effects of these substances.

Extended Inquiry of College Life and Environment

Given the higher level of drinking on four-year college campuses found in this research and in previous studies, follow-up studies may be useful that collect survey and interview data regarding the views and perceptions of college student life by knowledgeable campus officials; and about school policies and practices regarding substance use and abuse. Information on the availability and use by students of health resources on college campuses aimed at addressing and mitigating stress, depression and anxiety, given their effects on academic performance (Winograd and Hais, 2011), might also prove useful. Lastly, learning about how young people perceive the quality of their lives, and what it means to be successful in an increasingly competitive global world may be important in further understanding the attitudes and perspectives of youth and young adults regarding substance use and abuse.

Study Limitations

The use of survey and largely quantitative data did not permit more in-depth analyses and details. Given more time and resources, interviews of respondents may have been useful in gaining additional information about their friendships and social networks; and providing an opportunity to engage in dialogue and learning from more open-ended sharing by respondents. In addition a larger survey sample of males and females based and interview data may have been useful in better unraveling and understanding the varying influence of gender on alcohol and illegal drug use.

Although surveys outside of class were distributed by females, males were more approachable and more eager to participate in this study than females. Therefore formulating alternative and perhaps more gender sensitive data collection methods may be needed to encourage greater participation of females and males. This may permit in the future, separate and comparative analyses by gender if warranted. However, preliminary disaggregation of the descriptive data by gender (i.e., crosstabs by gender) in this study did not reveal substantial differences for males and female. Therefore analyses were conducted for the total sample.

A final important limitation of this study was the small number of non-college attending youth included in the survey. Extending the number of non-college respondents was desirable but proved difficult, as they were not as contained and locatable as students on college campuses. However, the decision was made to include the small number of non-college attendees in the data analysis given their desire to participate and that a comparison of preliminary frequency distributions did not reveal any substantial difference in the responses of non-college and college attending participants. Non-college attending young adults constitute an important group for future studies and possible comparative analyses. Despite their underrepresentation and the limited and local nature of the current sample, the results of this study updated and confirmed major previous findings, and provided additional insights for future research and policy consideration.

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Appendix

Table 1 Descriptive Statistics and Inter Item Correlations for Key Variables (Level of Alcohol Consumption)

	1	2	3	4	5	6	7	8	9	
1. Level of Alcohol Consumption	–	-.07	.16*	-.18*	.43**	-.04	.16*	.01	-.11*	
2. Gender		–	.00	-.02	.06	.10	.06	.12	.04	
3. College Type (4yr/2 yr)			–	-.10	.33**	-.25**	--.07	.11	.22**	
4. Age First Drink				–	-.37**	.02	.00	-.06	.02	
5. Number of Friends Drink					–	.13	.08	.02	.14*	
6. Feel Cared About						–	.31**	.20**	.31**	
7. Feel Sad & Depressed							–	-.36	-.28**	
8. Satisfy With My Life								–	.27**	
9. Satisfy with Home Life									–	
	M	2.41	.51	.47	2.44	4.18	4.32	2.11	5.18	5.10
	SD	.95	.50	.50	.1.18	1.04	.96	.98	1.31	1.68

Note: *p<.05, **p<.01

Table 2 Regression Analyses Predicting Level of Alcohol Consumption

	B	Std. Error	Beta (Standardized Coefficient)
Gender	-.08	(.15)	-.04
College Type (4yr/2yr)	.41	(.16)	.22*
Age at First Drink	-.14	(.06)	-.18*
No. of Friends Drink Frequently	- .34	(.07)	.38**
Satisfied with ability to succeed	.18	(.24)	.09
Feel cared about	- .20	(.08)	-.21*
Often sad/depressed	.09	(.08)	.09

Satisfied with my life	.04	(.07)	.06
Satisfied with my home life	-.07	(.05)	-.13
<i>R Square</i> .335 (N=142)			
*p<.05, **p<.001			

Table 3 Descriptive Statistics and Inter Item Correlations for Key Variables (Marijuana Use)

	1	2	3	4	5	6	7	8	9
1. Frequency of MJ Use	–	-.27**	.12*	.19**	-.07	-.13*	.21*	-.15*	-.22**
2. Gender		–	-.06	.05	.00	-.06	.08	-.11	-.05
3. Alcohol Level Consume			–	-.03	-.12	-.09	.16*	-.11	-.17**
4. Number of Friends Use				–	.21**	.32**	-.31**	.42**	.45**
5. Feel Cared About					–	.22**	.00	.04	.01
6. Feel Good About Self						–	-.52**	.38**	.29**
7. Often Sad & Depressed							–	-.38**	-.41**
8. Satisfy With My Life								–	-.52**
9. Satisfy with Home Life									–
M	5.03	.50	2.63	5.48	4.23	3.78	2.25	4.99	5.03
SD	2.67	.50	.88	1.78	.97	.90	.96	1.35	1.68

Note: *p<.05; **p<.01

**Table 4
Regression Analyses Predicting Frequency of Marijuana Use**

	B	Std. Error	Beta (Standardized Coefficient)
Gender	-1.54	(.56)	-.29**
College type (4yr=1; 2yr=0)	-.24	(.60)	-.05
Number friends drink frequently	-.67	(.40)	.21*

Number of friends use	.27	(.25)	.13
Childhood drugs prescribed	.58	(.67)	.10
Alcohol consumption level	.44	(.33)	.15
Satisfied with type of friends	-.01	(.24)	-.01
Satisfied with ability to succeed	.26	(.26)	.12
Feel cared about	.21	(.31)	.07
Often sad/depressed	.72	(.36)	.26*
Feel good about self	-.06	(.38)	-.02
Satisfied with my life	-.97	(.96)	-.13
Satisfied with my home life	-.01	(.63)	-.00
<i>R Square</i> .231 (N=105)			
*p<.05,** p<.001			

Table 5				
Logistic Regression Results				
Dependent Variable: Use of Illegal Drugs (Yes)				
Variables	B	Std. Error	Wald	Odds Ratio
Gender	-.488	.425	1.322	.614
Friends Use Drugs Frequently	.995**	.206	23.394	2.705
You Drink Alcohol (yes=1/ no=0)	.079	.449	.031	1.083
Level of Alcohol Consumption	.797**	.249	10.262	2.218
No. of Friends Drink Frequently	.325	.140	5.366	.723
Satisfied With Ability to Succeed	-.107	.206	.270	.899
Feel Cared About	-.377	.230	2.695	.686
Feel Sad/Depressed	.016	.288	.003	1.016
Feel Good About Self	-.133	.301	.195	1.142
Feel Good About my Life	-.080	.199	.162	1.083
Feel Good About my Home Life	-.107	.145	.544	1.113
Overall Model Chi-Sq. (df)	73.762 (12)			
	Sig. p<. 000			
Cox & Snell R Sq.=336				
N=192				
Note: The Wald statistics are distributed chi-square with 1 degree of freedom and test the unique contribution of each predictor while holding others constant.				
*p<.05; **p<.01				