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THE ROLE OF SOCIAL FACTORS IN THE USE OF LICIT DRUGS AMONG UNIVERSITY STUDENTS FROM ONE UNIVERSITY IN KINGSTON, JAMAICA

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ABSTRACT: A quantitative, descriptive and exploratory study, with a cross-sectional design aimed at examining whether social factors are related to licit drug use among university students in one university in Kingston, Jamaica. The non-probabilistic sample was composed of 335 students from a specific university in Kingston, Jamaica. A questionnaire was developed with five validated scales that interrogated about the influence of the peer group, the family relationships, the entertainment, the spirituality, and drug consumption. The data indicated that respondents with one or more friend who engaged in drug use were 9.5 times more likely to smoke tobacco and twice as likely to consume alcohol. Notably, respondents who had low spirituality were twice as likely to smoke tobacco and 1.3 times more likely to consume alcohol. These results suggest that having friends who use drugs may be a risk factor for alcohol and tobacco use, whereas greater spirituality may serve as a protective factor.

DESCRIPTORS: Narcotics. University. Students.

EL PAPEL DE FACTORES SOCIALES EN EL USO DE DROGAS LICITAS EN ESTUDIANTES UNIVERSITARIOS DE UNA UNIVERSIDAD DE KINGSTON, JAMAICA

RESUMEN: Investigación cuantitativa de tipo descriptiva-exploratoria, con diseño transversal que examinó el efecto moderador de ciertos factores socio-culturales en el consumo de drogas licitas entre estudiantes universitarios de una universidad en Kingston, Jamaica. La muestra no probabilística fue conformada por 335 estudiantes de una universidad específica de Kingston, Jamaica. Fue elaborado un cuestionario con cinco escalas ya validadas, que interrogaba sobre la influencia del grupo de pares, las relaciones familiares, el entretenimiento, la espiritualidad y el consumo de drogas. Se utilizó el programa SPSS versión 18 para el análisis estadística. Los datos indicaron que los respondientes con uno o mas amigos que estaban involucrados con el uso de drogas eran 9.5 veces mas disponibles para fumar y dos veces mas para consumir alcole. Los respondientes que tenían baja espiritualidad eran dos veces mas proponentes para fumar y 1.3 veces mas proponentes de consumir alcole. Los datos indicaron haber asociación significativa entre los factores sociales y el consume de drogas licitas.

DESCRIPTORES: Narcóticos. Universidad. Estudiantes.

O PAPEL DE FACTORES SOCIAIS NO USO DE DROGAS LÍCITAS EM ESTUDANTES DE UMA UNIVERSIDADE EM KINGSTON, JAMAICA

RESUMO: Pesquisa quantitativa, descritiva e exploratória, com desenho transversal, que examinou o efeito moderador de certos fatores demográficos e socioculturais no consumo de drogas licitas entre estudantes universitários em uma universidade de Kingston, Jamaica. A amostra não probabilística foi composta por 335 estudantes de uma universidade na cidade de Kingston, Jamaica. Foi elaborado um questionário com cinco escalas validadas que questionavam sobre a influência dos pares, as relações familiares, o entretenimento, a espiritualidade e o consumo de drogas. Se utilizou o programa SPSS versão 18 para a análise estatística. Verificou-se que os estudantes da amostra que tinham pelo menos um amigo envolvido com drogas eram 9.5 vezes mais disponíveis para fumar e duas vezes mais para consumir álcool. Os estudantes que responderam que tinham baixa espiritualidade eram duas vezes mais proponentes a fumar e 1.3 vezes mais proponentes a consumir álcool. Os dados indicaram uma associação significativa entre os fatores sociais e o consumo de drogas licitas.

DESCRIPTORIOS: Entorpecentes. Universidades. Estudantes.

INTRODUCTION

Drug use is problematic for various populations, including youth, in certain parts of the world. Young people are critical to the development of a nation, and contemporary society provides both positive and negative avenues for them to express themselves. Whether they express themselves positively or negatively will have important effects on social order and the overall stability of a society. Jamaica, a developing country, has developed a plan called Vision 2030, which is intended to ensure its emergence as a developed country by the year 2030.¹ Youth are a vital component of this plan because increasing drug use and/or abuse among youth may not only threaten the health of the population but also the country's development.

In a global environment where commodities are easily and quickly accessible to individuals, alcohol and tobacco are both increasingly being used in various social spaces and among youths. This is due in part to the well organised nature of the legal drug industry which has highly sophisticated marketing strategies. In other words it is now typically seen as a consumer good that has to remain competitive.² As a major threat to health and overall individual and societal wellbeing, licit drugs, such as tobacco and alcohol, have the capacity to derail sustainable development.

The Caribbean is one region where young people initiate use and misuse of licit and illicit drugs at very vulnerable ages. According to the Inter-American Drug Abuse Commission (CICAD), the average age of first drugs use is approximately ten, and in some instances as low as age seven. It also reported that there is widespread social acceptance of drug use among young people in the Caribbean.³ It found that that drug abuse is significantly more common among males than females, that alcohol, ganja (cannabis), and crack cocaine are the most frequently abused drugs, and that tobacco is frequently consumed by the adolescent and youth population.⁴ Tobacco is one of the main addictive substances in the world and also one of the leading causes of death. Statistics from the World Health Organization (WHO) indicate that tobacco smoking causes nearly six million deaths per year.³

In 2010, the United Nations (UN) Office on Drug and Crime conducted a study on the link between drug use and HIV/AIDS among young people in Grenada. It found that alcohol is widely used among youth, mainly as a means of socialising at parties and other public events. Youth also

reported using alcohol for reasons such as stress relief, peer pressure, increased sexual pleasure, out of curiosity, and to improve academic performance. The study also found that alcohol was generally easily accessible in the home.⁵

In Jamaica, there is growing concern regarding excessive licit drug use among youth. Rapid social changes driven by larger local and global factors may predispose young people to use licit drugs such as alcohol and tobacco. While there is no single reason for smoking and alcohol use among teens in Jamaica, a survey from the National Drug Council revealed experimentation is one important factor.⁶ Some young people engage in drinking and smoking because they see others (friends, parents, other adults) doing the same. According to the 1997 National Adolescent Students' Drug Survey in Jamaica, 70.9% of students reported having ever consumed alcohol, and approximately one in four (28.8%) had used alcohol in the previous month.⁶ Together, these data suggest a worrisome and progressing trend in drug use among youth in the Caribbean. Appropriately addressing these concerns is imperative within developing countries like Jamaica, because the popularity and overuse of alcohol and tobacco, although licit drugs, pose a threat to the overall health and productivity of the next generation of leaders. A concerted effort among stakeholders will be required to address this problem. This study was conducted to provide empirical evidence to clarify the relationships between social factors and licit drug use among university students, with the objective of informing policy.

METHODOLOGY

A cross-sectional survey was used to collect data from 335 students at one university in Kingston, Jamaica. The survey targeted undergraduate students ages 18 to 24 within the faculties of social science, medical sciences, and pure and applied sciences. A purposive sampling method was used. The study was advertised using recruitment posters, campus intranet, bulletin and notice boards, campus newspapers, and hand outs.

The dependent variable of the study is past year (12 month) use of the licit drugs tobacco and alcohol. The independent variable of the study is the level of peer influence. The moderating variables are: quality of family relations, engagement in interactive and non-interactive screen-based entertainment, party-based entertainment, and level of spirituality.

A self-report questionnaire was used to collect the data. The questionnaire consisted of six sections, with a total of 86 questions pertaining to socio-demographic information (10 questions), peer influence (six questions), family relations (25 questions) entertainment (nine questions) spirituality (26 questions) and drug consumption (10 questions). It took approximately 20 to 30 minutes to complete. Pre-existing scales and instruments within the questionnaire included The Peer Influence Scale,⁷ The Index of Family Relations,⁸ The Spirituality Involvement and Beliefs Scale,⁹ Screen-based entertainment,¹⁰ The Alcohol, Smoking and Substance Involvement Screen Test.¹¹ The data were analyzed using The Statistical Package for Social Sciences (SPSS), version 18. Bivariate analyses and crosstabulations were done, and then multivariate and logistic regression were used.

The research study received ethics approval from the Centre for Addiction and Mental Health (CAMH) in Canada as well as the participating university in Jamaica in 2012.

RESULTS

Gender and Peer Influence were both significant factors for the licit drugs; alcohol and tobacco but entertainment variables were significant for only three of the six relationships, two for tobacco and only one for alcohol.

Table 1 examines the bivariate relationships between the selected independent variables and tobacco and alcohol use in the past year (12 months). Only the significant results will be discussed in this section.

Males were twice as likely to have smoked tobacco during the last 12 months, at a rate of 18.3 percent, compared to females at a rate of 8.9 percent ($\chi^2(1)=6.0$, $p<.05$). Furthermore, males were 1.2 times as likely to have consumed alcohol during the last 12 months, at a rate of 81.7 percent, compared to females at a rate of 70.4 percent ($\chi^2(1)=4.8$, $p<.05$).

Participants with one or more friend who engaged in drug use were 9.5 times more likely to smoke tobacco within the past year, compared to those whose friends did not use drugs (14.5 percent versus 1.5 percent; $\chi^2(1)=8.2$, $p<.01$). Furthermore, those with one or more friend who used drugs were nearly twice as likely to have consumed alcohol during the past year, compared

to those whose friends did not engage in drug use (81.6 percent versus 43.1 percent; $\chi^2(1)=8.2$, $p<.01$).

Participants with peers who engaged in risky behaviour were more than twice as likely to have smoke tobacco during the past year, compared to those with peers who engaged in few risky behaviours (17.9 percent versus 7.4 percent; $\chi^2(1)=8.5$, $p<.01$). Additionally, participants with peers who engaged in many risky behaviors were more likely to have consumed alcohol within the past year, compared to those with peers who engaged in few risky behaviors (82.3 percent versus 67.9 percent; $\chi^2(1)=8.7$, $p<.01$).

Participants with reportedly low spirituality were nearly twice as likely to have consumed tobacco during the past year, compared to those who were high in spirituality (15.8 percent versus 8.1 percent; $\chi^2(1)=4.7$, $p<.05$). Further, students who were low in spirituality were 1.3 times as likely to have consumed alcohol within the past year, compared to those who were reportedly high in spirituality (84.3 percent versus 64.5 percent; $\chi^2(1)=16.7$, $p<.01$).

Participants who often engaged in interactive screen-based entertainment were 2.3 times more likely to have used tobacco during the past year, compared to those who reported rare use (17.4 percent versus 7.5 percent; $\chi^2(1)=7.5$, $p<.01$).

Students who reported frequent use of non-interactive screen-based entertainment were 3.3 times more likely to have used tobacco within the past year, compared to those who reported rare use (18.1 percent versus 5.5 percent; $\chi^2(1)=6.8$, $p<.01$). Further, participants who often used non-interactive based entertainment were 1.2 times more likely to have used alcohol within the past year, compared to those who reported rare use (80.2 percent versus 67.7 percent; $\chi^2(1)=12.5$, $p<.01$).

Participants who reportedly engaged in party-based entertainment, at which licit or illicit substances were present, were 1.5 times more likely to have consumed alcohol within the past year, compared to those who did not participate in party-based entertainment (90.4 percent versus 57.3 percent; $\chi^2=47.1$, $p<.01$).

Gender, peer drug use, risky behaviour, spirituality, interactive screen based entertainment, non-interactive screen based entertainment and party-based entertainment were significant predictors in the bivariate relationships.

Table 1 - Bivariate relationships between selected Independent variables Alcohol and Tobacco use in the past 12 months. Kingston, Jamaica, 2012

Independent variables	Tobacco	c ²	Alcohol	c ²
Gender				
Male	18.3%	6.0	81.7%	4.8
Female	8.9%		70.4%	
Peer drug use				
None	1.5%		43.1%	
1 or more	14.5%	8.2	81.6%	8.2
Risky behaviour				
Few	7.4%		62.9%	
Many	17.9%	8.5	82.3%	8.7
Spirituality				
Low	15.8%	4.7	84.3%	16.7
High	8.1%		64.5%	
Interactive screen-based entertainment				
Rarely	7.5%	7.5		Not significant
Often	17.4%			
Non-interactive screen based entertainment				
Rarely	5.5%		67.7%	
Often	18.1%	6.8	80.2%	12.5
Party-based entertainment				
Low	7.9%		57.3%	
High	15.7%	Not significant	90.4%	47.1

Table 2 denotes the results of a series of hierarchical multiple logistic regression analyses that were conducted to determine the extent to which past year (12 month) drug use was influenced by peers, marital status, family relations, entertainment use, and spirituality. Notably, tobacco and alcohol were combined into one variable, as both constitute licit drug use. At the first stage of analysis, age and gender were entered as control variables. At the second stage, the main variables of interest—friends who use drugs, peer influence, spirituality, interactive screen-based entertainment, non-interactive screen-based entertainment, party-based entertainment and family relations—were entered into the regression equation. At the final stage of analysis, the interactions of peer influence with spirituality, interactive screen-based entertainment, non-interactive screen-based entertainment, party-based entertainment, and family relations were entered into the regression equation to explore if these factors moderated licit drug use. Statistical significance was determined using an alpha level of .05.

Table 2-Logistic regression examining factors associated with licit drug use (12 Months). Kingston, Jamaica, 2012

Variables	Past year Licit drug use		
	O.R.	Confidence Limit	
Marital status	1.148	0.560	2.353
Friends who use drugs	5.441	2.659	11.132
Peer influence	1.107	0.897	1.153
Family relationship	1.002	0.984	1.021
Spirituality	0.958	0.932	0.984
Drug present parties	2.078	1.477	2.925
Interactive screen-based entertainment	1.115	0.945	1.315
Non-interactive screen-based entertainment	1.108	0.948	1.295

Results of the regression analyses, controlling for the associations of gender and age, indicated that peer drug use, spirituality, and attending parties where drugs were significantly associated with past year drug use among participants. Stu-

dents who attended a party at which drugs were used were 2.07 times more likely to use licit drugs within the past year, compared to those who did not attend such parties. However, each one-point increase in spirituality scores reduced the probability of licit drug use within the past year.

In the final step of the analysis, the interactions between peer influence and family relations, spirituality, and types of entertainments were entered after controlling for the other variables in the model (Table 2). None of the interactions were found to be statistically significant. As such, it appears that these factors did not moderate the association between peer influence and the use of licit drugs during the past year.

DISCUSSION

Overall, three factors were found to influence past year (12 month) drug use among participants: spirituality, attending parties at which drugs were present, and peer drug use. Thus, religious and social factors had significant effects on student drug use.

Because associating with peers who engaged in drug use and attending parties at which drugs were present increased the likelihood of using tobacco and alcohol, peer pressure appears to be an important influence on licit drug use. In other words, it can be viewed as a risk factor, as it relates to the increasing use of licit drugs among Jamaican university students. Notably, peer influence can also act as a protective factor if students associate with peers who abstain from drug use.

Despite the arguably diminishing role of organised religion in society (due in part to increased secularisation), the results of the current study demonstrate that spirituality stills plays an important protective role in a young adult's decision to use licit drugs.

The results points to the need for stakeholders to pursue a more aggressive and sustained agenda to implement effective and efficient mechanisms within Jamaica's development mandate. Specifically, these should facilitate positive peer influences and other protective factors to counter the negative effects of the increasing licit drug use among university students.

Interventions by the National Council on Drug Abuse (NCDA), such as training workshops held within communities, may encourage some behavioural changes. These training workshops currently take place in a number of communities. They involve various stakeholders who identify

substance misuse challenges, primarily among youth, and assess which community assets and resources may promote change.¹² For example, a UNICEF-funded two-year project operated through the NCDA in Jamaica encourages community action projects aimed at protecting youths from the harmful effects of substance misuse.¹² It is important that more communities, and schools including universities, can benefit from this kind of project. However, the lack of resources presents some challenges in terms of the sustainability of these intervention programmes. For example, the UNICEF-funded project is currently available in only 20 communities (primarily rural), and is only funded for two years. Securing funding for longer periods would help ensure continuity and build on the gains made. The NCDA also collaborates with the National Health Fund (NHF) on a project called Resistance Education Against Drugs (READ), which has been launched in 25 schools in Jamaica. This in-school programme is intended to empower children from a young age to recognise the negative consequences that drug misuse can have.¹³ Implementing this programme in many more schools island-wide would increase its reach and could be very effective.

The misuse of licit and illicit drugs involves tremendous costs to Jamaican society, especially financial resources that could be better spent on human resources and other areas that could help Jamaica become a developed country. According to the Economic and Social Survey of Jamaica, the guidelines of the Vision 2030 National Development Plan require the Ministry of Health to assess the needs of human resources and to provide the necessary training for their development. The Ministry of Health currently has 14,606 employees, and has projected that 16,100 will be needed to effectively manage the needs of the healthcare system by 2013/14.¹⁴ The need for more healthcare staff, as well as funding to address HIV/AIDS and the massive chikungunya outbreak,¹⁵ may affect the viability of the READ programme. However, it may be more effective to fund this kind of preventative programme and more research to identify appropriate preventative approaches to the significant threat of licit drug use among Jamaican youth.¹⁶

CONCLUSIONS

Social factors appear to have less of an influence on alcohol and tobacco use than peer influence, quality of family relationships, and use

of various forms of entertainment. Encouraging spirituality and spiritual practices among youth may be a one way to moderate the increasing use of tobacco and alcohol (and arguably other behaviours) that may place youths at risk for negative social outcomes.

To date, limited research has explored how social factors affect licit drug use among university students in Jamaica. The current study addressed this research gap by focusing on university students, who appear to be using licit drugs in increasing numbers. This, and other studies, can help inform policy and programme interventions to aid at-risk populations.

The results of this study point to a disturbing trend that seems to be developing among most young people in the global society. Although alcohol and tobacco are licit drugs, their popularity and overuse among young people is troubling, because they will be responsible for future governance. This trend is particularly problematic in developing countries such as Jamaica, which are attempting to move into a state of development. Strategies must be put in place to mitigate this trend.

Limitations

This study was not a random sample, so the results may not be generalizable to all university students or young people in Jamaica.

Recommendations

Reduce the use of licit drugs by appealing to students' beliefs in a higher power in order to encourage more socially conscious decisions. While not necessarily advocating for organised religion, spirituality may be an effective protective factor for at-risk youth. Participants who scored high for spirituality were less likely to engage in licit drug use.

More funding should be sought to bolster the NCDA's intervention programmes in rural and urban communities. Additionally, intervention programmes should have a more sustainable timeline to ensure maximum effect on behavioural change.

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