TEXTO & CONTEXTO ENFERMAGEM

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PEER ASSOCIATION AND PERCEPTION OF HARMS AND BENEFITS ASSOCIATED MARIJUANA USE AMONG JAMAICAN ADOLESCENTS

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ABSTRACT

Objective: to examine the relationship between peer association and perception of harms and benefits associated marijuana use among Jamaican adolescents.

Method: the purpose of the study is to examine the relationship between peer association and perception of harms and benefits associated with marijuana use among 300 Jamaican adolescents in grades 10 and 11.

Results: lifetime prevalence for marijuana use was higher for total males 34% compared to total females 26%. Overall lifetime prevalence roused by 4% in the move from grade 10 or form 4 to grade 11 or fifth form. Data reveal the mean age for first use at age 12 years. Data also revealed that males were more likely to have friends who use marijuana than their female counterpart.

Conclusion: there was a significant difference in opinion relating to perception of harms of marijuana use and peer association, which was evidenced with a weak correlation of .29. Also, there was a significant difference in benefits of marijuana use by peer association, with a moderate correlation of .31.

DESCRIPTORS: Marijuana use. Adolescents. Risk. Marijuana smoking. Drugs. University. Students, adolescents.

ASSOCIAÇÃO DE PARES E PERCEPÇÃO DE DANOS E BENEFÍCIOS ASSOCIADOS AO USO DE MACONHA ENTRE ADOLESCENTES JAMAICANOS

RESUMO

Objetivo: examinar a relação entre associação de pares e percepção de danos e benefícios associados ao consumo de maconha entre adolescentes jamaicanos.

Método: o objetivo do estudo é examinar a relação entre a associação de pares e a percepção de danos e benefícios associados ao uso de maconha entre 300 adolescentes jamaicanos nas 10° e 11° séries.

Resultados: a prevalência ao longo da vida para o uso de maconha foi maior para o total de homens 34% em relação ao total de mulheres de 26%. A prevalência global ao longo da vida aumentou 4% na mudança da 10° série ou do formulário 4 para a 11° série ou quinto formulário. Os dados revelam a idade média para o primeiro uso foi aos 12 anos de idade. Os dados também mostraram que os homens eram mais propensos a ter amigos que usam maconha do que suas contrapartes femininas.

Conclusão: houve significativa diferença na opinião quanto à percepção de danos do uso de maconha e associação de pares, evidenciada com uma fraca correlação de 0,29. Além disso, houve uma diferença significativa nos benefícios do uso de maconha por associação de pares, com uma correlação moderada de 0,31.

DESCRITORES: Uso de maconha. Adolescentes. Risco. Fumar maconha. Drogas. Universidade. Estudante, adolescentes.

ASOCIACIÓN ENTRE PARES Y PERCEPCIÓN DE DAÑOS Y BENEFICIOS ASOCIADOS AL USO DE LA MARIHUANA ENTRE ADOLESCENTES DE JAMAICA

RESUMEN

Objetivo: examinar la relación entre la asociación entre pares y el daño percibido y los beneficios asociados al uso de la marihuana entre adolescentes jamaicanos.

Método: el objetivo de este estudio es examinar la relación entre la asociación entre pares y el daño y los beneficios percibidos relacionados a la marihuana entre 300 adolescentes jamaicanos en los grados escolares 10 y 11.

Resultados: la prevalencia de vida para el uso de la marihuana fue mayor en el total de hombres (34%) en comparación con el total de mujeres (26%). La prevalencia general a lo largo de la vida aumentó en un 4% en el cambio del 10° grado 10 o del formulario 4 o 5 al 11° grado. Los datos revelan que la edad promedio para el primer uso fue a los 12 años de edad. Los datos también demostraron que los hombres tenían más probabilidades de tener amigos que consumían marihuana que sus contrapartes femeninas.

Conclusión: hubo una diferencia significativa en la opinión con respecto a la percepción del uso de marihuana y la asociación de pares, que se evidencia a través de una débil correlación de 0,29. Además, hubo una diferencia significativa en los beneficios del consumo de marihuana por asociación de pares, con una correlación moderada de 0,31.

DESCRIPTORES: Uso de marihuana. Adolescentes. Riesgos. Fumar marihuana. Drogas. Universidad. Estudiante, adolescentes.

INTRODUCTION

Substance abuse cases in schools are prevalent.[1] This issue affects students of various races, ethnicities, cultures and socio-economic backgrounds. Substance use and abuse among students is purported to include peer pressure and low self-esteem, in order to be accepted within a group, to experience "getting high", to look "cool", and to express autonomy.[2] The National Institute on Drug Abuse (NIDA) posited that as adolescents become more socialized in peer networks, especially during high school years, they are likely to become exposed to greater availability of drugs, drug abusers, and social activities involving psychoactive substances. One such substance is that of marijuana. Marijuana is the second most abused drug next to alcohol among the Jamaican adolescent population.[3–4] Adolescence is found to be a time of first use and experimentation[5] and given this notion, drug use among adolescents has become so rampant.[6] There is a dearth of information on peer association and perception of harms and benefits associated marijuana use among Jamaican adolescent. To date, no studies in the Jamaica have explored the interactions of perceived risk and benefits and marijuana use with that of peer association. Thus, the purpose of the study is to examine the relationship between peer association and perception of harms and benefits associated marijuana use among Jamaican adolescents.

Adolescent substance use exists through a continuum, from those who have tried illicit drugs a limited number of times for recreational use and experimentation, to those who are regular/habitual users and have developed a physiological and psychological addiction to the drug.[7] There remains much that is not known about the marijuana plant. Shifting views of risk of marijuana use among adolescents is likely encouraged by changes in regulatory controls on marijuana use around the globe.[8]

With regard to drug use among Jamaican adolescents, a comparative analysis of drug use in Caribbean Countries revealed that for marijuana, the prevalence rate among adolescent was: 21.56% lifetime; 12.04% past year and 7.06% past month respectively.[9] Marijuana use was higher among adolescents aged 17+ (15.20% past year) compared to adolescents aged 15-16 years (14.67% past year). One in five students who were current marijuana users were at high risk for marijuana misuse.[4] Jamaica, there is a trending down of lifetime, past year and past month use of marijuana since the 2010 National Secondary School within the country. Statistics shows that 10% smoked marijuana in the past year and 6 % had smoked marijuana in the past month. What is noteworthy is the large percentage (43%) of students who find it easy to access marijuana in the 2013 national school survey. Not only do they themselves are accessing marijuana easily, but their peers are too.[4]

Peer substance use is one of the most consistently found strongest correlate of adolescent substance use. In general, peer use of a substance predicted adolescent use of the same substance, although in some instances peer use was associated with adolescent use across substances. Consistent with these findings found peer substance use to be the most consistent predictor of adolescent substance, predicting adolescent alcohol, cigarette, and marijuana use.[10] One study found significant cross-sectional relationships between best friend alcohol use and adolescent alcohol use in two waves of measurement for both older and younger siblings; however, in the longitudinal analysis, best friend alcohol use only predicted future substance use for the younger siblings.[11] Furthermore, peer influence on adolescent substance use has generally been found to stronger than parental influence.[10] Reported association with deviant peers increased the odds of marijuana use over time.[11] During adolescence, peer influence becomes more powerful as less time is spent with the family and more time is spent associating with peers. Consequently, this gives rise to explore the perception of harms and benefits surrounding marijuana,[6] especial with marijuana due to mixed reactions the use among users. Use of marijuana for some is like a stimulant, depressant, and or hallucinogen.[12]

With regards to perception of risk, 40% felt that "smoking marijuana sometimes" was very harmful to health, and that 65% felt that "smoking marijuana frequently" was very harmful to health.[4] The softening of risk perception of a drug that much is not known generates deep concerns and

potential public health dilemma.[13] In most Latin American and Caribbean countries, the prevalence of marijuana use among secondary school students is increasing.[9] Some evidence suggests that decreased risk perception and increased availability may increase the consumption of marijuana among adolescents.[14] Marijuana is perceived by this population as the illicit drug causing the least harm. Despite the perception of marijuana use as involving low risk, treatment admissions for marijuana users in Latin American and Caribbean countries have increased from 24 to 40% in recent years.[14]

The objective of this study was to examine the relationship between peer association and perception of harms and benefits associated marijuana use among Jamaican adolescents.

METHOD

This study utilized a non-experimental quantitative cross-sectional survey research design. Cross-sectional studies are conducted in order to examine current attitudes, beliefs, opinions, or practices of individuals.[15] Convenience sampling was used to select the three public secondary schools that were used in the study. Each school was in close proximity to the researcher, so it could be easily accessed. Schools were located in a sub rural area. Participants were selected by age range and attached grade. Therefore, for inclusion participants must have been between ages 15 and 17 and be in upper high school. The participants for this study comprised 299 English speaking public secondary school students, 35% (n=107) males, and 63% (n=192) females between the ages of 15-17 years, in one parish in central Jamaica.

The instrument that was used to collect data is an amalgamation of scales from three instruments, namely: a) Inter-American Drug Use Data System (SIDUC) Secondary Students School Survey; b) Monitoring The Future (MTF); and, c) the Benthin Risk Perception Measure.[16] All instruments were self-measured using Likert rating scale. Parental informed consent along with participants assent was obtained. Descriptive statistics was primarily used to describe demographic data and address research questions on prevalence, such as measures of central tendencies and variability and Pearson correlation. The main descriptive statistical procedures used were frequencies and percentages to highlight prevalence rate and gender difference is marijuana use for the sample. The main inferential statistics was chi square, via Statistical Package for the Social Science (SPPS), version 20 to addressed to address the following research questions: 1) What is the perception of harm and behavioral problems associated with marijuana use among older adolescents? And 2) What is the perception of harm and behavioral problems associated with marijuana use among older adolescent users and non users regarding potential regulatory changes to marijuana laws?

RESULTS

Lifetime prevalence of marijuana use among total sample, when asked if ever smoked marijuana, 71% (n=210) said no. Lifetime prevalence for marijuana use was higher for total males 34% compared to total females 26%. Overall lifetime prevalence roused by 4% in the move from grade 10 or form 4 to grade 11 or fifth form. Data reveal the mean age for first use at age 12 years. For past 30 days prevalence, there was 11% (n=32) prevalence among participants. Of the 11% prevalence, 5.5% (n=16) indicating using the substance once. For past 12 month prevalence, there was a 20% prevalence rate among participants. Nine percent (n=28) indicated use of just once, 4% (n=13) indicated using marijuana several times over the past 12 months at point of being surveyed.

Data revealed that males were more likely to have friends who use marijuana than their female counterpart. However, females (24%, n=45) reported greater uncertainty when it comes to knowing whether or not their friends are using marijuana compared to males (15%, n=16). Data also revealed that within gender analysis, males (10%) were twice likely to have half the number of friends who use marijuana when compared to females (5%). Overall analysis of the sample indicates that there is an

approximate of equal distribution of 'some' and 'none' of closest friends who uses marijuana, 34%, n=102, 33%, n=97 respectively (Table 1).

Table 1 – Distribution of marijuana use by closest friends. Jamaica, 2015

Closet friends use of marijuana by gender			
How many of your closest friends use marijuana?	Gender		Total
	Male	Female	
None of my friends	35	64	99
Some of my friends	35	67	102
About half of my friends	11	11	22
All of my friends	10	3	13
Don't know	16	47	69
Total	**107**	**192**	**299**

Participants were asked to rate their general perception of harm relating to marijuana use, as well as specific harm surrounding personal use of marijuana. When asked "How much do you think people risk harming themselves (physically or in other ways) if they use marijuana once or twice?", 54% (n=161) of the participants indicated some level of risk perception. Eleven percent (n=32) indicated not knowing whether or not a person was at risk for trying marijuana once or twice. There was equal distribution of participants perceiving great and moderate risk involved in marijuana use. Thirty-five percent (n=105) said there was no risk in trying marijuana once or twice. Females were twice as likely as males to perceive no risk in marijuana use once or twice. More females reported not knowing if there exists any risk in marijuana use either once or twice. With reference to occasional smoking of marijuana 19% of the sample reported that there exist no risk, 20% indicated slight risk, against 23% that said that there exist 'great risk'. Noteworthy is the 13% (n=39) that said they do not know of whether or not there are risk in smoking marijuana occasionally. Perception of great risk in the regular use of marijuana was 54%. The perception of great risk of regular use was only increase perception across three types of use, compared to a general decline in the perception of risk over the types of use. Overall, females reported great general and specific risk on smoking marijuana when compared to males within the sample. However, females reported greater "no risk" on smoking marijuana on all three usage type when compared to males. Females were more likely not to know of the risk in smoking marijuana on the three types (Table 2).

Table 2 – Perception of risk for marijuana use: Once or twice, occasionally, and regularly by gender, Jamaica, 2015

Perception of Risk	Once or twice		Occasionally		Regularly	
	Male n(%)	Female n(%)	Male n(%)	Female n(%)	Male n(%)	Female n(%)
No risk	32 (30)	72(38)	21 (20)	37(19)	17(16)	36(19)
Slight risk	37 (35)	68(35)	17(16)	42(22)	4(3)	10(5)
Moderate risk	16(15)	11(30)	29(28)	44(23)	14(13)	19(10)
Great risk	11(11)	18(9)	29(28)	40(30)	62(59)	102(54)
I don´t know	9(9)	23(12)	9(9)	29(15)	8 (8)	23(12)
Missing	1(.05)	1 (.05)	-	2 (1)	1 (.05)	1(.05)
Total	106	193	105	194	106	193

An overall total risk score from the Benthin[15] risk scale indicates low perception of risk of marijuana use among participants (M=17.99, SD=6.14). The Cronbach's alpha as a measure of reliability estimates for the perception of risk for the Benthin was a tenable, 0.56. Also, Benthin risk scale indicates low perception of benefits of marijuana use among participants (M=17.62, SD=6.22). The Cronbach's alpha tenable, 0.68.

Participants when asked how likely they were to be influenced by friends to use marijuana, 80% reported no influence, 6% was unsure of the presence of influence, whereas another 6% (n=20) being greatly influenced. 13% (n=40) of participants' friends had influenced them to use marijuana, majority of the sample, 72% reported that smoking marijuana could be avoided. With regards to general knowledge about the risks involved in smoking marijuana, 55% of the sample reported that the risk of smoking marijuana is known to some degree.

With respect to the participants when asked what extent are teenagers who are smoking marijuana admired by their friends, 13% (n=41) affirmed they were not at all admired, 43% reported some levels of admiration. Majority, 35% of the participants were uncertain as to whether the benefits provided by smoking marijuana were greater than the potential risks associated with it. Twenty five percent (25%) noted that the risk was much greater than the benefits compared to 6% that said that the benefits were much greater than the risks.

When asked, how likely they were to be influenced by friend to use marijuana, 80% reported no influence, 6% were unsure of the presence of influence, whereas another 6% (n=20) being greatly influenced. Those whose friend influenced them to degree to use marijuana were 13% (n=40). Majority of the sample, 72% reported that smoking marijuana could be avoided. With regards to general knowledge about the risks involved in smoking marijuana, 55% of the sample reported that the risk of smoking marijuana is known to some degree. The sample was evenly split in opinion on whether marijuana aided coping with emotional difficulties. However, most participants, 55 %, (n=165) said it did not improve academic performance.

A chisquare analysis was done to evaluate harm of marijuana use by peer association. There was a significant difference in opinion relating to perception of harms of marijuana use and peer association, (c^2(4)=25.537, p<0.000). There was a weak correlation of .29 (Cramer's V) between of perceived harms/benefits of use marijuana and peer association? A chi-square analysis was done to evaluate benefits of marijuana use by peer association. There was a significant difference in benefits of marijuana use by peer association, (c^2(4)=26.69, p<0.000), There was a moderate correlation of .31 (Cramer's V) between marijuana use and peer association.

DISCUSSION

This study supports findings of CICAD[9] survey and the National Council on Drug Abuse in Jamaica[4] survey on adolescents' substance use in Jamaica, which mirrors other Caribbean countries in that there is a high prevalence of marijuana use for past 12 months. For the current study, past 30 days prevalence was 11% among participants. An interesting highlight of the study was that lifetime prevalence for marijuana use was higher in females 17% compared to males 12%. While this could be linked to the uneven gender distribution it is still noteworthy. There was consistence with previous research[4] with reference to the age of onset for marijuana use, data revealed the means age for first use at age 12 years.

Special attention must be given to our male students. From this study one can see that males were likely to have friends who use marijuana than their female counterpart. Such findings seek to augment the work of substance use practitioners[17] in noting males are vulnerable to substance use. Such findings create alarm for the young males. It behoves policy makers and clinicians to begin crafting interventive and preventative programs on substance use within the communities, schools, and

churches. These proactive measures will stem the likely marginalization of society's males to substance use. This is a finding that must be watched carefully given the potential and actual changes in legal regulatory measures relating to marijuana use throughout the Caribbean. Therefore life skill training programs in schools must teach students effective friends selection and drug refusal skills. Not to leave out the females, it was interesting to note that the females in the study reported greater uncertainty when it comes to knowing whether or not their friends are using marijuana compared to males. This creates a great cap within females' decisional making system. They might choose to experiment with psychoactive substances given the 'right' persuasion. Once more this creates an opportunity to facilitate life skills training sessions in schools to improve decision making skills among adolescents.

In the current study over 50% of participants reported some level of risk perception surrounding marijuana use. Such statistics present the case to embark on public education campaigns. Given that no softening of risk perception of a drug, still much is not known about, generates deep concerns and potential public health dilemma.[8] Work is therefore needed in the researching of marijuana use. Data showed that females reported greater "no risk" on smoking marijuana than males. Given the speculations by surrounding marijuana as the drug causing the least harm,[14] this study highlights that there are more adolescents who are of the opinion that they will continue to use marijuana although their perception of harm resulting from the drug is higher than those who will continue to use the drug even though they have a low perception of harm. Given that this study has not explored reasons for deferring perceptions of harms and benefits, this study has sort to lay a foundation for exploring one of the two factors purported by leading organization in the fight against substance abuse[9] as possible factors to the increasing trend of marijuana consumptions among adolescents being linked to decreasing perception.

This warrants the need to do further research to understand why such is the case. Though females were more likely not to know of the risk in smoking marijuana this lends to them being vulnerable to peer pressure to use drugs. With an overall low perception of benefits of marijuana use among participants this needs to be further assessed. The teaching of life skills through the health and family life education medium may be one key to success in teaching adolescents about the dangers of drug use. It is predicated on the basic assumption that adolescents are able to make informed decisions if provided with the correct information, the right skill sets, and are taught appropriate attitudes.

Its postulated benefits are tremendous, chief among them is empowering young adolescents to make healthy lifestyle choices regarding drug use. It is noted to promote healthy behaviours that will serve as the spring board for a productive society. The current study adds to the views of prior research in peer association and substance noting that there was a significant difference in opinion relating to perception of harms of marijuana use and peer association.[10] Also, there was a significant difference in benefits of marijuana use by peer association which resulted in a moderate correlation of .31 (Cramer's V) between marijuana use and peer association. This indicates averaging of results in adolescents opinion on the perception of benefits and harms against their peer use.

CONCLUSION

In concluding, the uses of any psychoactive substances during adolescence or in younger age group is primarily life altering and often create irreversible physical damage. Substance use variably may lead to problematic use and may be viewed as a public health issue that must be confronted. Therefore, continued research is needed to examine emerging attitudes towards substance use among vulnerable and non-vulnerable adolescent groups in understanding their interactions with other mental health concerns. A limitation of the study is that participants may or may not be representative of students in private schools. One contribution of this study to the advancement of science is that it provides current empirical data to inform policy makers on current attitude and perception on marijuana harms and benefits.

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NOTES

CONTRIBUTION OF AUTHORITY
Study design: Wynter J, Hynes M.
Data collect: Wynter J.
Data analysis and interpretation: Wynter J, Hynes M.
Discussion of the results: Wynter J, Hynes M.
Writing and / or critical review of content: Wynter J, Hynes M.
Review and final approval of the final version: Wynter J.

ETHICS COMMITTEE IN RESEARCH
Permission was granted to conduct the study from the research ethics review boards at Center for Addition and Mental Health, Canada, Northern Caribbean University, Jamaica IRB board, and the Ministry of Education, Jamaica.

CONFLICT OF INTEREST
There is no conflict of interest.

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