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MARIJUANA USE AMONG STUDENTS AT NORTHERN MICHIGAN UNIVERSITY

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MARIJUANA USE AMONG STUDENTS AT NORTHERN MICHIGAN UNIVERSITY

By

Guy R. LaPlante

THESIS

Submitted to
Northern Michigan University
in Partial Fulfillment of the Requirements
for the Degree of

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SIGNATURE APPROVAL FORM

Thesis Title: MARIJUANA USE AMONG STUDENTS AT NORTHERN MICHIGAN UNIVERSITY

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ABSTRACT
MARIJUANA USE AMONG STUDENTS AT NORTHERN MICHIGAN UNIVERSITY

By

Guy R. LaPlante

Medical Marijuana in Michigan has had big impacts on communities in the state. The implementation of so called Medical Marijuana *dispensaries* have been gaining much notoriety in these communities which has raised more questions and debates on regulations and zoning issues. Michigan universities are having their policies challenged and are being pressured to comply with the Michigan Medical Marijuana Act (MMMA). However, with federal regulations in the drug free schools act banning the use of marijuana on campuses the dispute remains a challenge and university's policies stand firm to comply with zero tolerance.

Northern Michigan University has had a significant increase in possession of marijuana and use of marijuana with intent to sell complaints since the (MMMA) law came into effect in 2009. The data reflects a dramatic change in behaviors amongst the student body who seek out marijuana. This research presents data from marijuana arrests at Northern Michigan University during a four year period before and after (MMMA) to illustrate this dramatic increase. The author also uses data from a self- reported student survey that explores the potential reasons behind such an increase. It is the intent of this research to provide university policy makers with information to assist in reducing the use of controlled substances to ensure the maintaining of an environment conducive to learning.

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The author would like to thank Dr. Kapla for his continuous support and assistance in making not only this project a reality but also the author's pursuit of higher education.

DEDICATION

The author would like to dedicate this project to his parents, Guy R LaPlante Sr. and Lynn M Forrest, for instilling life values rich in education beyond the classroom. And to my wife Tracy, who has unselfishly supported me from the beginning throughout my career in law enforcement and the pursuit of my Master's degree.

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LIST OF SYMBOLS AND ABBREVIATIONS

Northern Michigan University.....NMU

Michigan Medical Marijuana Act.....MMMA

Uniform Crime Act.....UCR

Federal Bureau of Investigation.....FBI

United States Department of Education.....USDE

Monitoring the Future.....MTF

Minor In Possession.....MIP

Food and Drug Administration.....FDA

INTRODUCTION

This thesis follows the format prescribed by the APA style manual and the Department of Criminal Justice.

Marijuana can be found on every college campus in the United States and is second only behind alcohol as the drug of choice for students (Wechsler, 2000). According to a Harvard School of public health study conducted over an eleven year period found that marijuana use in college has gone up from 26.4% in 1989-1991 to an alarming 33.6% in 2000 (Wechsler, 2000). In a similar study the majority of students on college campuses that used marijuana participated in other high risk activities such as cigarette smoking, binge drinking and sex while intoxicated. Marijuana is very easy to obtain and is very tempting to experiment with especially in a social gathering where judgment is impaired after a few drinks (Wechsler, 2000).

Given this dramatic rise in marijuana use, it becomes imperative to better understand the reasons behind it, as pervasive drug problems degrade the educational experience, and may label the institution negatively. To better understand this phenomenon, substance abuse on college campuses is a major health and behavioral concern for college students. Marijuana and alcohol being the most commonly used substances have a large impact on poor academic performance and failure to successfully complete a college education (Rimsza, 2005).

Marijuana arrests and contacts have risen on NMU's campus at an alarming rate since the 2009 enactment of the Michigan Medical Marijuana Act. These data parallel a unique timeliness of the vague law and teen drug use on NMU as a suspected reason in need of research to answer these questions. Michigan universities across the state are only in the earliest stages of this

phenomenon on how to address increased drug use and abide the prescribed marijuana users.

The research asks us to what extent is the statistical rise in marihuana arrests at Northern Michigan University been affected by the implementation of the Michigan Medical Marijuana Act?

I believe through research of criminal complaint data on marijuana statistics over a three year period before and after MMMA accompanied by student surveys a thesis question on the effects of the MMMA in the campus community would answer the question as to why these particular statistics are on the increase. In addition to analyzing the quantitative data from the resources and understanding the results a clear objective is to determine what will the future behold at Northern Michigan University and or the city of Marquette as the issue of medical marijuana and drug use will ultimately have to be addressed.

CHAPTER 1

LITERATURE REVIEW

Medical Marijuana in Michigan has had big impacts on communities in the state. The implementation of so called Medical Marijuana dispensaries have been gaining much notoriety in these communities which has raised more questions and debates on regulations and zoning issues. Michigan universities are having their policies challenged and are being pressured to comply with the Michigan Medical Marijuana Act (MMMA) however with federal regulations in the drug free schools act banning the use of marijuana on campuses the dispute remains a challenge and the university's policies stand firm to comply with zero tolerance. Northern Michigan University has had a significant increase in possession of marijuana and use of marijuana with intent to sell complaints since the (MMMA) law came into effect in 2009.

Marijuana use is up amongst teens in colleges in large numbers. A study conducted by the Department of Health and Social Behavior, Harvard School of Public Health, conducted a self-administered survey to sample 17,000 students at 140 American colleges found one in four students reported using marijuana within the past year (Bell,1997). Rates of use amongst the colleges were zero percent at the lowest to 54% at the highest use schools. College characteristics showed use was higher amongst non-commuter type colleges. Student characteristics in the survey were associated with being single, white, spending more time at parties and socializing with friends with less time studying. Marijuana use was higher amongst students who participate in other high risk behaviors such as binge drinking, cigarette smoking and having multiple sexual partners. The study points to the social nature of drug use in colleges and demonstrates that this behavior is of continuing concern from public health (Bell, 1997).

A health concern related to marijuana use found by the Federal Drug Administration concluded smoking drugs are found to be a poor way to provide medicine and that it is found to be a health danger not a cure. The American Medical Association has rejected pleas to endorse marijuana as a medicine claiming smoking is harmful (Tandy, 2010).

Another study conducted at Central Michigan University included data on both the internal and external factors on college students' use and cessation of use of marijuana (Globetti, 1995). Examined was the frequency of use and cessation of use of marijuana. External factors included social-environment forces which discourage marijuana use, the number of an individual's friends who use marijuana and peer attitudes towards marijuana.

Marijuana is a schedule one narcotic and is considered an illegal substance regulated by the Federal Government and subsequently enforced by state laws. Colleges throughout the nation are financially assisted by the Federal Government through student aid programs and regulatory funding for operating programs through the Drug Free Schools and Campuses Act of 1989. Consequently colleges are held to zero tolerance standards which prohibit the use of illegal substances on campus by students and staff by imposing penalties for non-compliance. Such penalties include monetary fines and retraction of aid funding. This prompts college campuses to constantly remind students and staff of the ordinance requirements and place the information in the universities code of conduct. Pursuant to the policy (as defined by the Act), the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance or abuse of alcohol by an employee or student on college property or as any college activity is prohibited. (20 USC 1145g).

Michigan as well as several other states has recently adopted medical marijuana laws for qualifying patients who need the “medicine” for certain relief of known medical issues. Michigan’s initial law was proposed in December of 2008, and passed in November of 2009. Titled the “Michigan Medical Marijuana Act” (MMMA), this legislation allows the medical use of marihuana, and provides protections for such use and a system of registry identification cards for qualifying patients and primary care givers (MCL 333.26421). With the advent of the MMMA, the law states that a person(s) who have been medically approved under the care of a physician is issued an identification card regulated through the Michigan Department of Health which makes it legal to consume marijuana within the confines of their residence outside of public view. In addition to the act are guidelines for a person(s) to be eligible to become a care giver to person(s) who consume medical marijuana. As defined in the act the caregiver can grow up to 12 marijuana plants while caregivers are also regulated through the Michigan Department of Health and must be in possession of the caregiver identification card. The law is vague in its description on the implications for dispensaries who choose to become the main store and distributor of medical marihuana. Communities across the state rely on local government zoning committees and ordinance boards to regulate the dispensaries wishing to provide medicinal marihuana. Communities argue that the language in the law, along with ordinance regulations, are misleading and fear that dispensaries in their neighborhoods will create an unwanted increase in crime and increase in drug usage among non-card holders and youth. Unclear in the MMMA law is the language that defines a specific residency for the consumer nor does the law identify certainty of the card holder’s guarantee while on college campuses in Michigan to use medical marijuana freely without recourse. The same argument is applied to caregivers wanting to grow

marijuana on campus well within the boundaries outlined in the act maintaining 12 or less plants. While the MMMA law states that it is legal to be possession of small amounts of medicinal marihuana for card holders, Michigan college policies like Northern Michigan University under the drug free schools act have not accepted the language to supersede their commitment to the drug free act.

According to a study by the *Galegroup* in 2011 which studied addictive behaviors comparing marijuana use among college students concluded various negative outcomes and acceptability's (LaBrie, 2011). The study evaluated individual marijuana approval levels of 3553 college students and their perceptions of others marijuana approval levels in various reference groups. Individual's approval yielded mean scores paralleling that of perceived close friends' approval and all groups perceptions of typical student's approval. LaBrie discovered that higher levels of marijuana use among the college students tended to produce higher endorsements of individual friends approval and perceived parental approval. Among occasional and regular users there were no differences in perceptions between the close friend approvals (LaBrie, 2011).

Clinical research conducted in 2009 by Joan Bottorff discovered marijuana is increasingly being used by teens to alleviate symptoms and for the treatment of a variety of medical conditions both physical and psychological. The study looked at both the risks and benefits of the therapeutic use of marijuana. Analyzing interviews of 20 youth who self-identified as using marijuana to relieve or manage health problems hypothesized that these teens differentiated themselves from recreational users and positioned their use of marijuana for relief by emphasizing their inability to find other ways to deal with their health problems, the way they titrated their intake and the benefits they experienced (Bottorff, 2009). Of the youth interviewed

several admitted the use of marijuana as harmful noting physical symptoms such as decreased stamina and shortness of breath with physical activities. Others worried about weakened immune systems and how it affected their addiction to marijuana (Bottorff, 2009).

The (Globetti, 1995) Central Michigan University study expanded data selected on both the internal and external factors on college students' use and cessation of use of marijuana paralleling Bottorff's findings. The internal control factors comprised of variables that perceived risk of marijuana use and the attitudes towards the prohibition of marijuana use and referred to a built in personal tendency toward conventionality. The external control factors refer to the social-environmental forces which discourage marijuana use. These factors include the number of extracurricular activities in which an individual is involved such as place of availability of marijuana, peer attitudes toward marijuana use, the number of friends who use marijuana and the number of occasions an individual has observed others using marijuana. The study's results show that both internal and external control factors are significant predictors of the frequency of marijuana use (Globetti, 1995). The external control factor, however, plays a more important role in explaining lifetime marijuana use and cessation of marijuana use.

After years of decline teen drug use is up according to a research article on teen drug use (Katal, 2011). Trends in teen drug use were abundantly increasing according to the data reported in "Monitoring the Future" conducted by the University of Michigan which has conducted such surveys since 1975 to present. Experts agree that the recent wave of state medical marijuana laws as well as statutes that eliminate criminal penalties for the personal use of pot have persuaded teens that drugs such as marijuana are innocuous (Katal, 2011). The latest "Monitoring the Future" (MTF) survey of drug, alcohol and cigarette use by 8th through 10th and

12th graders sparked and renewed debate whereas the data released from the (MTF) in late December of 2010 showed that marijuana use was on the rise in all three grades over the past three years (Johnston, 2010). After a gradual decline in the past decade the 8th 10th and 12th graders daily marijuana use is on the rise noting that 1 in 16 high school students used marijuana daily and that 70% of 10th graders reported that marijuana is “fairly easy” or ‘very easy” to obtain (Johnston, 2010).

By the time teens graduate from high school approximately 48% will have tried marijuana according to the study by (MTF). The World Health Organization ranks the United States first among 17 European and North American countries for prevalence of marijuana use (Volkow, 2010). In 2008 an estimated 2.2 million Americans used marijuana for the first time in which greater than half were under the age of 18 according to the National Institute on Drug abuse. The use of marijuana can produce physical, mental, emotional and behavioral effects as well as impairment of short term memory and judgment perception (Volkow, 2010). Marijuana is also found to affect brain systems that are still maturing through young adulthood which in teens can have a negative effect on their development and contrary to popular belief can be addictive (Volkow, 2010).

The research supports the fact that marijuana use in colleges is on the rise however, (Bell,1997) implies that this trend makes the connection to health concerns but it does not address the medical application as is seen in more current reviews. Risk behaviors for teen users was another point that could have been examined more in depth possibly through additional survey questioning as these risks appear much more broader as concluded from additional literature reviews.

What is missing from the research, and specifically in relationship to the present research, is what if anything did medical marijuana do to expand upon an already out of control problem? Marijuana use is on the rise and trending. The data reflect this trend is increasing at an alarming rate. Socially, marijuana appears to be accepted simply because it is for medical use and therefore why is it not legal? Medical marijuana appears to be a political vehicle to accelerate possible legalization of the substance legalization. The legalization supporters also desire the data collected for the purposes of supporting medical marijuana, which is misleading and requires further research from other sources. A better approach would be to hypothesize the separation between medical marijuana and the availability to teens via regulated marijuana getting into the wrong hands. The medical spin on this issue has more questions than answers however the data is misconstrued.

This chapter serves to introduce the study and its concern for the increase of drug use among teens at Northern Michigan University and any effect that MMMA laws have on the campus community. It is apparent from crime statistics that an increase in the violation of substance abuse complaints needs to be addressed and if a correlation exists with the advent of the MMMA laws.

Also missing are the numbers that reflect distribution among non-medical card holders who in fact buy and use others prescribed medical marijuana.

CHAPTER II

METHODS

Teen drug use is up and trends in teen drug use are abundantly increasing according to the data reported in “Monitoring the Future” a study conducted by the University of Michigan which has conducted such surveys since 1975 to present. Experts agree that the recent wave of state medical marijuana laws as well as statutes that eliminate criminal penalties for the personal use of pot have persuaded teens that drugs such as marijuana are innocuous (Katal, 2011). The latest “Monitoring the Future” (MTF) survey of drug, alcohol and cigarette use by 8th through 10th and 12th graders sparked and renewed debate, whereas the data released from the (MTF) in late December of 2010 showed that marijuana use was on the rise in all three grades over the past three years (Johnston, 2010).

Given this rise in marijuana use among pre-college students, it follows that such trends may continue once a youth enters college. Consequently, Marijuana arrest and calls for service at Northern Michigan University have increased dramatically between the years of 2008 and 2010. (www.nmu.edu). These data comport with the university’s Clery Act report, which reports drug contacts on campus and on areas adjacent to university property (www.nmu.edu/clery).

Such increases are interesting on their face, however, what is of particular interest is that the increases correlate during the time in which the 2009 Michigan law [MCL333.26421], known as the Michigan Marijuana Medical Act regulating marijuana as a prescribed drug was passed. The passage of this act resulted in over 60,000 applicants applying for permission to possess marijuana for medical purposes, with an estimated 29,548 receiving permission as of June, 2010 according to the Michigan Municipal League. (www.mml.org). Furthermore, applications and

approval for caregiver cards have paralleled this increase over the two years following the passage of the law. (www.mml.org). Therefore, this study seeks to discover whether the correlation between increases in drug contacts at NMU and the passage of the MMMA is in response to students' perceptions of marijuana being 'safe' or medicinal.

To the author's knowledge, there is no research addressing medical marijuana use that explains students' attitudes towards its use. The current MMMA laws have vague guidelines for applicants to adhere to and the control, distribution, prescription and safety of the drug is not clearly defined. Is cannabis use up among this age group because of the social attitude that it is a prescribed drug? Are teens entering college more susceptible to cannabis use because it is more readily available and socially acceptable? Are students at NMU getting cannabis from MMMA suppliers or patients due to availability? What are the variables that affect these increases in marijuana use on campus? In answering these questions, it is the author's belief that they will substantiate the theory that increased cannabis use among NMU students is largely accepted as a prescribed drug and therefore, legalization is the accepted norm.

In order to address this hypothesis and to assist with further research and policy decision making, the author will be administering a survey to a population of NMU's student body. The student body is used as an element in the sampling frame because it represents the population the author wishes to study in order to recognize the rising drug use percentages on the university and what is causing the dramatic increase. Of further interest is educating the community on the issues of drug abuse and addiction and to formulate policy change better to adjust to the law.

Methods

As of fall 2011, enrollment at Northern Michigan University consists of 9,400 students

(www.nmu.edu). According to Maxfield and Babbie (2005), using a sample of this population will increase the sampling error in one sense having increased the dilemma in attempting to find the parameter in the population. However, by using probability sampling or equal sampling of selection methods (EPSEM), the sampling is a representation of the population. Additionally, Maxfield and Babbie (2005) state utilizing random sampling will protect against bias on the authors part. Using systematical sampling and selecting the first sample by random selection will also help protect against bias (Maxfield & Babbie, 2005). The application for permission to administer the survey was submitted to Northern Michigan University's Institutional Review Board (IRB) and was approved. (HS12-441).

Survey Construction

By using 36 closed ended questions in the survey, it allowed the author to use ordinal measures with systematical sampling. The closed ended questions were short statements in which the respondents were asked to respond based on a yes/no format. Questions asked such as, do you smoke marijuana or do you possess a medical marijuana card better described the samples habits and allowed the author to identify elements supportive of the theory (See Appendix A).

Survey Administration

The survey was administered during the winter 2012 academic semester. The survey was open for three weeks with 2 mid-week reminders to assure the best results on the returns. Confidentiality and anonymity terms were addressed and provided with the survey as outlined by the IRB with respect to human research ethical principles.

Limitations

Several limitations may affect the results of the survey. First, a respondent's prior contact with law enforcement – whether positive or negative - may make one unwilling to answer the questions. Second, misperceptions of current marijuana laws and penalties may impact the results, as some may believe it is legal. And finally, fear of being identified as a participant is always a concern.

Reducing potential limitation is paramount to a successful response rate. Therefore, consistent with IRB protocol, the survey was accompanied by an email to all potential participants explaining the reasons and benefit of the research and voluntariness of completing the survey. Additionally, potential participants were assured of their anonymity and that no identifying information was contained in the survey, which made linking answers or respondent's information to individual surveys nonexistent. Finally, the initial email contained the author's contact information, the Thesis Director's contact information and that of the Dean of Graduate Studies and Research.

Response rates were 40% following three weeks of administration. Approximately 9,400 students attend Northern Michigan University (NMU Common data set 2011/2012), and the survey was administered to 600 full time students. To be full time a student a student must be registered with at least 12 credits as an undergraduate and 8 credits as a post graduate student. The sample was chosen at random from an email list of active full time students supplied by the Office of Institutional Research at NMU.

The survey was administered using Qualtrics, which is a web based program that distributed surveys via email.

CHAPTER III

RESULTS

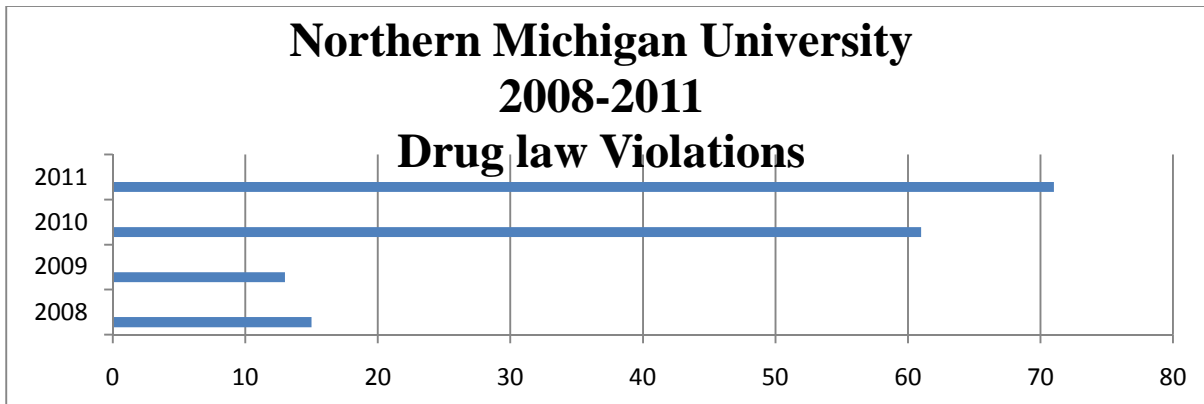
If the results of this research indicate that drug use at Northern Michigan University is on the rise, such information would be consistent with the author's hypothesis. Furthermore, increased marijuana use among students also confirms available statistics reflecting such increases throughout the country. These data also parallel the university's crime reports, from 2008 to 2011, illustrating dramatic increases in drug use and contacts with law enforcement. This research, in addition to investigating marijuana use among students, sought to provide a clearer picture of student attitudes toward drug use and whether their perceptions are related to Michigan's Medical Marijuana Law.

Limits of Present Study

Two considerations must be taken into account in the interpretation of the results. First, that according to Federal Law the crime data posted annually at Northern Michigan University is mandatory according to the guidelines set forth in the Clery Act and by the Department of Education. Mandatory crime reporting at colleges and universities publishes crime data as a transparent view of the environment in which the student will be residing and a guide for incoming students to follow when comparing realistic crime statistics within the community. The annual crime statistics at Northern Michigan reflect a rise in illegal drug use therefore it is known to exist. The case data from the university crime reports also have no reporting methods depicting Medical Marijuana from illegal marijuana. Second, and most importantly, is that according to state and federal law, marijuana is classified as a Schedule I narcotic, and is illegal

to possess, ingest or sell. Medical Marijuana is not recognized on NMU's campus and is considered an illegal substance however it is not punishable under state law. Contrary to the MMLL statutes, colleges and universities are bound by the Drug Free Schools Act and adhere to those guidelines. Statistically marijuana data collected by NMU is carried as reported crimes to both the Uniform Crime Report (UCR), post arrest and conviction and the Clery Act which is published according to strict policy guidelines. These data parallel the author's hypotheses that drug arrests and contacts at the university are on the rise however the statistics published do not separate cases which may involve Medical Marijuana incidents that may have occurred otherwise (See Figure 1).

Table 1.



Annual crime statistics and mandatory crime reporting figures, Clery Act, released by NMU reflect an upward trend in drug related contacts (www.nmu.edu/clery). Although the data only records crime statistics the type of drug is not listed on the published version. Medical Marijuana is also not separated from these statistics, mainly because it is listed for reporting purposes as an illegal substance. Medical Marijuana is not accepted or recognized on NMU's campus regardless of Michigan's statute, whereas the Drug Free Schools Act appears to be the determining factor

that substantiates that policy.

Concerns of misreporting or underreporting are not the issue in these cases for marijuana contacts or arrests. The research in this case seeks to divulge a much more in depth look into the correlation between the student's attitudes towards marijuana as they enter college under the premise of the legalization of Medical Marijuana.

Of the 600 selected samples consisting of NMU students 240 responses were recorded which is a 40% response rate. Thus, the response rate is fairly representative of the university (www.nmu.edu).

Demographics

Of the respondents participating, 60% were female and 40% were male which is consistent with the gender demographics published by NMU for the 2011-2012 semesters. Of these respondents 37% were freshman while 31% reported they were sophomores, 15% juniors, 12% seniors and 4% graduate students. (See Figure 2).

Table 2.

Class standing.

Answer	Response	%
Freshman	85	37%
Sophomore	71	31%
Junior	36	16%
Senior	28	12%
Graduate Student	9	4%
Total	229	100%

Furthermore, demographics for the student- based sample were from campus housing. Of those, 79% of respondents resided in the residence halls while responses were much more

limited to on campus single apartments and family housing. Racial and ethnic demographics are also consistent with racial populations on NMU’s campus, as respondents reported a 91% white-Caucasian non-Hispanic back ground.

Marijuana Use.

Table 3.

Do you or have smoked marijuana on NMU’s campus?

Yes	54	69%
No	24	31%
Total	78	100%

According to survey results, 69% of the respondents acknowledged smoking marijuana on NMU’s campus whereas 31% did not. (See Figure 3). This is consistent with NMU Public Safety data that reflect increases in law enforcement contacts over a four year period from 2008 to 2011, (www.nmu.edu/clery).

Table 4.

		I currently use marijuana:				Total
		Once a month	Several times a month	Daily	Occasionally	
	Yes	5	16	19	24	64
Have you smoked marijuana in high school prior to attending NMU?	No	3	3	2	7	15

Survey respondents responded to the question in reference to marijuana use in high school prior to attending NMU. Of the 64 who smoked marijuana in high school, the majority of them smoked marijuana in college only occasionally. However, 19 out of the 64 smoked daily. Furthermore, of the 15 who reported not smoking in high school, only 2 now smoke daily.

These data correlate with the University of Michigan “Monitoring the Future” study that suggests that students at a fairly younger age reported the same drug use (Johnson, 2010). Not alarming then are the numbers represented for marijuana use in high school compared to the results of the author’s survey question regarding current use (Figure 4).

Percentages on frequency of use also reflect variations of use. Thirty-percent reported using marijuana once a month, 37% responded using marijuana several times a month and 33% reported using marijuana daily prior to attending NMU.

NMU student respondents reported that their marijuana use varies, however they parallel the behaviors of use recorded prior to attending NMU. Of the 15 users that reported not using prior to attending NMU also show that 7 now use occasionally. (See Figure 4).

Table 5.

		I currently smoke marijuana with:			Total
		Self	Friends	Strangers	
	My friends do	6	15	2	15
I currently use marijuana for/because:	Recreation	24	48	7	49
	To Relax	31	64	8	66
	Other	19	21	5	23

Of the 66% that smoke marijuana to relax 31 of those respondents smoke alone whereas 64 smoke with friends. However, out of the 49% of respondents that smoke marijuana for recreation purposes of those 48 responded to smoking the substance with friends. Also reported was that 15% of the respondent’s reported smoking marijuana because their friends do. (See Figure 5).

Table 6.

I currently use marijuana for/because:

Answer	Response	%
My friends do	15	19%
Recreation	49	62%
To Relax	67	85%
Other	24	30%

Of the 155 respondents to the question regarding why they use marijuana, 85% report they currently use marijuana to relax. Thirty percent of the respondents listed ‘other’ as a reason for currently smoking marijuana (See Figure 6). Interestingly, 32% of survey respondents also reported smoking other people’s Medical Marijuana on NMU’s campus whereas 68% reported they did not. A question pertaining to obtaining Medical Marijuana in the Marquette area discovered 57% reported Medical Marijuana is relatively easy to obtain in the Marquette.

Survey respondents to the question on law enforcement contact and marijuana report that only 11% have been in trouble with police or campus officials for smoking marijuana and 89% have not been in trouble.

Table 7.

Do you currently smoke marijuana for non-medical reasons?

Answer	Response	%
Yes	80	36%
No	143	64%
Total	223	100%

Of the 223 responses 80 reported that they smoke marijuana for non-medical reasons. Of those respondents 143 or (64%) reported that they do not smoke marijuana for non-medical reasons. (See Figure 7).

Table 8.

Marijuana is easier to obtain than alcohol at NMU?

Answer	Response	%
Yes	27	16%
No	64	38%
Same	78	46%
Total	169	100%

Alcohol, according to the state of Michigan, is illegal to possess or consume according to Michigan Criminal law (MCL) 436.14017(3) (a); [Minor in Possession] or persons under the age of 21 years. A majority of students classified as freshman at NMU can fall into this category however no data was requested in this survey to separate that population as Medical Marijuana can be prescribed to youth ages or what would be considered minors under Michigan’s “M.I.P.” law in comparison. Out of 169 survey respondents 46% reported that obtaining marijuana and alcohol are of the same ease at NMU (See Figure 8). Sixteen percent reported that marijuana was easier to obtain at NMU while 38% reported marijuana was not easier to obtain than alcohol. NMU campus crime statistics show the trending up rise in marijuana complaints from the data collected from 2008 and post MMMA 2009 to 2011 however, it also is noted that responses from the survey show that 1/3 of the respondents admitted to smoking other people’s Medical Marijuana on NMU’s campus. Students surveyed responded that 67% had not smoked marijuana before class whereas 29% infrequently did and 5% frequently did. The survey also asked respondents about after class smoking of marijuana which showed that while 29% still had

not smoked marijuana, 40% infrequently did while 31% frequently smoked marijuana after classes. The number of respondents to the question of missing class after smoking marijuana were consistent with the above data as 92% of the respondents did not miss class where only 8% surveyed had missed classes after smoking marijuana. The exact location where the marijuana was consumed is not clarified as a demographic for those specific questions.

Marijuana and Health

Respondents appear unanimous when asked if they use Medical Marijuana with 97% of the sample stating they do not use prescribed Medical Marijuana, (See Figure 9) which correlates with the question on current Medical Marijuana card holders where it was reported that only one of the respondents, 0%, having a Medical Marijuana card themselves. This data also reflects close friends at 35% and relatives at 9% who do have a medical marijuana card as reported but does not specify the residency of those persons. Notably, 32% or approximately 1/3 of the survey respondents stated they have smoked other people’s Medical Marijuana on NMU’s campus whereas the origin is undetermined if only 7 respondents reported having a Medical Marijuana card; however the access to the drug appears to be present. Data reflect that 57% of the sample found that Medical Marijuana is relatively easy to obtain in the Marquette area and 71% agreed that Medical Marijuana is accessible from authorized users.

Table 9.

I currently use prescribed Medical Marijuana.

Answer	Response	%
Yes	7	3%
No	222	97%
Total	229	100%

Opinions recorded in regards to marijuana as an alternative for medicine varied in different degrees however a majority of respondents, 68%, agree that it is a safe alternative within age groups as a demographic. Interesting was the majority of support for adults versus younger adults, teens and youth. Respondents reported that subjects ranging from 15 years of age to 21 years of age were a close split at 47% in favor and 46% not in favor of the medicinal alternative for that age demographic, (See Figure 10).

Table 10.

Do you agree that Medical Marijuana is safe to prescribe to young adults (15 yrs. of age to 21 yrs. of age)?

Answer	Response	%
Agree	104	47%
Disagree	102	46%
No opinion	16	7%
Total	222	100%

Respondents reported opposite opinions when the age range was lowered to children aged 5 years of age to 14 years of age. Respondent's returns were at 91% not in favor of prescribing to the younger age demographic. Interestingly 45% of the respondents agree that smoking Medical Marijuana is not harmful to a person's health whereas 38% agreed it was and 17% were unsure.

Table 11.

		Since marijuana is a prescribed medicine, do you believe smoking marijuana is harmful to a person's health?			Total
		Yes	No	Unsure	
	Once a month	1	6	1	8
I currently use marijuana:	Several times a month	1	16	1	18
	Daily	3	17	1	21
	Occasionally	8	18	5	31
	Total	13	57	8	78

As seen in (Figure 11) the survey respondents noted that of the 3 persons who smoke marijuana daily also believe it is harmful to your health. Seventeen of those same respondents that smoke the substance daily do not believe it is harmful to one's health. However, out of 31 marijuana users that use occasionally 18 believe that the substance is not harmful to one's health whereas 5 are unsure.

Cigarette Smoking and Health

Tobacco use on campus, particularly smoking cigarettes, reflects a much broader perspective in relationship to health as 82% of the sample stated they do not smoke cigarettes with only 18% replying they do. Conducive to this response is that 72% of these respondents have close friends who smoke cigarettes and 60% responded that their parents choose to smoke tobacco. Of the 221 responses to cigarettes being harmful to your health 217 agreed it was. (See figure 12). Respondents reported that 36% smoke marijuana for non-medical reasons whereas 64% percent of the respondents however reported they do not smoke marijuana for non-medical reasons.

Table 12.

Cigarettes are harmful to your health

Answer	Response	%
Agree	217	98%
Disagree	1	0%
No opinion	3	1%
Total	221	100%

Alcohol Use

Other health concerns from the study concentrated on alcohol versus marijuana other than prescribed. Survey respondents reported that 68% believe alcohol is more of a health risk than marijuana. Eighteen percent believed the risks were the same while 5% were unsure.

Table 13.

		I currently use marijuana:				Total
		Once a month	Several times a month	Daily	Occasionally	
	Do not drink	0	1	2	3	6
I drink alcohol at NMU.	Monthly	4	3	7	14	28
	Weekly	4	13	11	14	42
	Daily	0	1	1	0	2
	Total	8	18	21	31	78

Alcohol, according to the state of Michigan, is illegal to possess or consume according to Michigan Criminal law (MCL) 436.14017(3) (a); [Minor in Possession] for persons under the age of 21 years. Alcohol statistics are recorded much the same according to university policy for both the UCR and Cleary act reporting. Of 14 the occasional marijuana users 4 reported consuming alcohol monthly as well was reported with the same figures for monthly users. From

the group of current marijuana users 6 responded that they do not use alcohol. (See Figure 13).

Table 14.

Use of alcohol is more of a health risk than marijuana?

Answer	Response	%
Yes	151	68%
No	20	9%
Same risk	39	18%
Not sure	11	5%
Total	221	100%

Notably out of 169 survey respondents 46% reported that obtaining marijuana and alcohol are of the same ease at NMU. Comparatively 16% reported that marijuana was easier to obtain at NMU while 38% reported marijuana was not easier to obtain than alcohol as seen in (Figure 8). Of the 221 respondents asked if use of alcohol is more of a health risk than marijuana 151 reported it was. Of the same group 18% believed alcohol and marijuana bore the same risk.

Marijuana Perception

Table 15.

Do you agree that marijuana should be legalized in Michigan?

Answer	Response	%
Agree	124	56%
Disagree	69	31%
No opinion	28	13%
Total	221	100%

From the 221 responses to the question if marijuana should be legalized in Michigan, 56% of the respondents agree that marijuana should be legal or decriminalized whereas 31% disagreed with legalization and 13% had no opinion (See Figure 15). This parallels the responses with the larger percentage, (56%) agreeing that marijuana should be legalized.

CHAPTER IV

CONCLUSIONS

Northern Michigan University is a relatively small, rural campus within the city limits of Marquette. When compared to larger universities and their 'host' cities, NMU and Marquette boast very low crime rates. Unquestionably crime statistics are subjective in any setting or demographic, as unreported crimes oftentimes fog the real behavior of any criminal activity. The safety and well-being of the student body, faculty and staff, are of utmost concern, and in fact, Northern Michigan University's mission statement pledges to ensure that the quality of the academic environment is high and that students are safe. This seems to foster confidence in the surrounding community, and most certainly reflects a positive image. The intent of studying the increases in illegal drug use at Northern Michigan University by the author only parallels the same goal of ensuring safety and quality as an attraction for future students and staff.

Background

Unfortunately, illegal drugs are a part of our landscape much like any Mid-Western community. College is considered a young students "rite of passage" and along with the college environment experimentation is inevitable as most social gatherings introduce opportunities that require decisions that have both positive and negative impacts. While studying student behavior is not a new phenomenon this study adds to our knowledge of this class of people by investigating the interesting and alarming rise in drug complaints at NMU.

To the author's knowledge, there is no research addressing Medical Marijuana use that explains students' attitudes towards its use. The current MMMA laws have vague guidelines for applicants to adhere to and the control, distribution, prescription and safety of the drug is not

clearly defined. Is cannabis use up among this age group because of the social attitude that it is a prescribed drug? Are teens entering college more susceptible to cannabis use because it is more readily available and socially acceptable? Are students at NMU getting cannabis from MMMA suppliers or patients due to availability? What are the variables that affect these increases in marijuana use on campus? In answering these questions, it is the author's belief that they will substantiate the theory that increased cannabis use among NMU students is largely accepted as a prescribed drug and therefore, legalization is the accepted norm.

Research Method

In order to address the hypothesis and to assist with the research the author administered a survey from a population of NMU's student body. The sample represented the population the author wished to study in order to recognize the rising drug use percentages on the university and what is causing the dramatic increase.

As of fall 2011, enrollment at Northern Michigan University consists of 9,400 students (www.nmu.edu). According to Maxfield and Babbie (2005), using a sample of this population will increase the sampling error in one sense having increased the dilemma in attempting to find the parameter in the population. However, by using probability sampling or equal sampling of selection methods (EPSEM), the sampling is a representation of the population. Additionally, Maxfield and Babbie (2005) state utilizing random sampling will protect against bias on the authors part. Using systematical sampling and selecting the first sample by random selection will also help protect against bias (Maxfield & Babbie, 2005). The application for permission to administer the survey was submitted to Northern Michigan University's Institutional Review Board (IRB) and was approved. (HS12-441).

By using 36 closed ended questions in the survey, it allowed the author to use ordinal measures with systematical sampling. The closed ended questions were short statements in which the respondents were asked to respond based on a yes/no format. Questions asked such as, do you smoke marijuana or do you possess a medical marijuana card better described the samples habits and allowed the author to identify elements supportive of the theory (See Appendix A).

The survey was administered during the winter 2012 academic semester. The survey was open for three weeks with mid-week reminders to assure the best results on the returns. Confidentiality and anonymity terms were addressed and provided with the survey as outlined by the IRB with respect to human research ethical principles.

Limitations

Several limitations may affect the results of the survey. First, a respondent's prior contact with law enforcement – whether positive or negative - may make one unwilling to answer the questions. Second, misperceptions of current marijuana laws and penalties may impact the results, as some may believe it is legal. And finally, fear of being identified as a participant is always a concern.

Perceptions

According to the Monitoring the Future (MTF) study data reflect that youth are exposed to marijuana at a much younger age and the use of the substance in earlier grades from 8th grade through 12th grade is increasing at an alarming rate. (Johnston, 2010). Perceptions then of young teens entering college after high school could then be mixed on awareness of Medical Marijuana and that the substance appears safe for medicinal purposes therefore experimentation

is much more attractive.

Alcohol still remains the number one drug of choice among college students whereas marijuana ranks as number two with 32 percent reporting in 2008 according to the MTF survey (Johnston, 2010). With the liberalization of marijuana laws being sought after currently in Michigan, four years after the passing of (MMMA), will likely lead to increased marijuana availability, higher levels of use and more problems for students.

The results of the author's survey found that several descriptors were provided from the sample that answers if marijuana was a factor for increases in law enforcement illegal drugs contacts and incidents on NMU over the four year period from 2008 to 2011 whereas Medical Marijuana was not noted as a particular attribute. It was reported that 69% of survey respondents admit they smoked marijuana on campus whereas 32% responded they have smoked other peoples Medical Marijuana on campus. A question remains then as to where the introduction of the Medical Marijuana is coming from and how it is being introduced to students at NMU. The survey did conclude that any legalization of marijuana showed a majority (56%) believe it should be considered legal which supports the author's hypothesis on perception of drug use among students at NMU.

Medicinal Perceptions

Future studies should be directed to other states that have Medical Marijuana laws and compare data from states that do not have similar Medical Marijuana laws to see if perception and use of marijuana has depicted an increase or decrease of marijuana use, criminal arrests for possession and or policy challenges. A much broader study in Michigan could consider comparing data for future studies on all college campuses in the state to see the impact of

marijuana use among college students across a larger spectrum of students and if crime data figures parallel those findings.

Health concerns were of consideration when it came to Medical Marijuana questions in the author's survey. Respondents believe that children ages 5-14 years of age should not be prescribed Medical Marijuana however after the age of 14 most felt it was a safe alternative. Similarly, smoking tobacco was of great concern as most were opposed to smoking cigarettes. The ingesting of Medical Marijuana is typically done through inhaling the substance much like tobacco is ingested and perceptions on the two questions are on separate ends of the spectrum. A future study on the impact of ingesting marijuana is warranted in this case as a safe alternative to prescription medication such as marijuana is perceived currently. Future testing on ingesting Medical Marijuana should seek approval from the Food and Drug Administration (FDA) before legalization to educate the public.

Marijuana

The survey results on marijuana as a safe alternative to prescribe to adults revealed that 68% are in favor of that method. Interesting is that from the majority of the sample 37% were of freshman status. This comparison on class standing compared to opinions held on alternatives specifically to marijuana parallel the University of Michigan 'Monitoring the Future' study that show youth more exposed to marijuana at a younger age. In addition then it is no surprise that the younger incoming freshman are already at a much higher risk of using marijuana which show the trending rise in use and perceptions of the substances potential as a medicine. The issue with Medical Marijuana however is that there is no accurate study that a majority can agree on that supports the true medicinal attributes in modern drug applications for its intended use. Are

students then more willing to accept the drug because the State of Michigan has a legal Medical Marijuana Law or are perceptions of marijuana as a safe alternative a motivating factor for illegal use.

If self-medication is a predetermining factor in using marijuana it is worth further study as to what symptoms are causing the need for the drug. According to the study results 85% use marijuana to relax. Of those respondents who reported the use for relaxation 62% resort to marijuana for recreational purposes. These data could be construed as similar in nature as recreation has a relaxing correlation. Long term effects of using marijuana in an illegal form or medicinal capacities are not reported in this survey.

In comparison to availability the author concluded that perceptions were split between alcohol being much easier to obtain on NMU's campus compared to if marijuana was easier. The author discovered from the survey respondents that 68% believe that alcohol is more of a health risk than marijuana. Both substances appear to be readily available however interesting was the survey respondents that found Medical Marijuana was as easy to obtain in the Marquette area and was also readily available from others who possessed the medicinal substance on campus.

The campus dilemma however still exists where the State of Michigan as well as other states has made Medical Marijuana legal with a doctor's prescription however they are not allowed to smoke it on campus. Medical Marijuana on NMU's campus is treated no different than alcohol or illicit drugs.

Legalization

Legalization of marijuana would impact the medicinal option as null and void if the substance were distributed over the counter or off the shelf as a consumable product regulated and taxed.

The push to have marijuana legalized in the state is no new phenomenon. Past attempts at decriminalizing the substance however have not had as much media attention. Also in previous campaigns Medical Marijuana was not a factor whereas now the passing of the MMMA statute appears to be a vehicle supporters are relying on to change the law. Also worth noting is that should marijuana be legalized those seeking the substance will not benefit from a prescription or a doctor's referral and will not need the actual Medical Marijuana card currently regulated through the State of Michigan. Proposed taxing of the substance and future regulation has yet to be determined should the laws become a reality post-election?

Policy Considerations

Future considerations as they pertain to policy on Medical Marijuana at Northern Michigan University should consider several points of concern. Medical Marijuana is being used as is illegal marijuana on campus. Marijuana (illegal) much like alcohol is readily available and is as easy to obtain each substance. Medical Marijuana has health concerns as it pertains to ingesting the substance, Medical Marijuana is not FDA approved. Current guidelines set by the Drug Free Schools Act do not recognize the Medical Marijuana laws in the state therefore it is currently not allowed to be used on campus.

APPENDEIX A
SURVEY INSTRUMENT

Section I Background Information

- (1) Sex:
 - A. Male
 - B. Female

- (2) Class Standing.
 - A. Freshman
 - B. Sophomore
 - C. Junior
 - D. Senior
 - E. Graduate student

- (3) School Residence.
 - A. Residence Hall
 - B. Family Housing
 - C. Single Student Apt.
 - D. Off- Campus- non-parent residence
 - E. Off campus- with parents

- (4) Race.
 - A. African American
 - B. Asian
 - C. Hispanic
 - D. Native American
 - E. White- Caucasian

- (5) Which of the following best describes your political affiliation?
 - A. Democrat
 - B. Republican
 - C. Independent
 - D. None

Section II Marijuana use

- (6) Are you a registered Medical Marijuana card holder?
 - A. Yes
 - B. No

(7) Have you ever smoked marijuana in any amount?

A. Yes

B. No

If no please go to question #13.

(8) Have you smoked Marijuana prior to attending NMU?

A. Yes

B. No

If yes please go to question #10.

(9) Did you start smoking marijuana while attending NMU?

A. Yes

B. No

(10) I have smoked other people's medical marijuana.

A. Yes

B. No

Section III Frequency/Use

(11) I currently smoke marijuana:

A. Don't use.

B. Once a month

C. Several time a month

D. Daily

(12) I used marijuana prior to attending NMU.

A. Don't use.

B. Once a month

C. Several times a month

D. Daily

Section IV Attitude/Perception

(13) In your opinion, NON – medical marijuana is easy to obtain at NMU.

A. Agree

B. Disagree

C. No opinion

- (14) In your opinion, Medical Marijuana is easy to obtain at NMU.
- A. Agree
 - B. Disagree
 - C. No opinion

- (15) Do you believe that medical marijuana should be allowed on NMU?
- A. Agree
 - B. Disagree
 - C. No opinion

- (16) Do you believe that NON- medical marijuana should be legalized in Michigan?
- A. Agree
 - B. Disagree
 - C. No opinion

Section V Drug use

- (17) I have been in trouble with police or campus officials for smoking marijuana.
- A. No
 - B. Yes

- (18) I have been pressured into smoking marijuana at NMU (peer pressure).
- A. No
 - B. Yes

- (19) I smoke marijuana before class.
- A. No
 - B. Yes

- (20) I smoke marijuana after class.
- A. No
 - B. Yes

- (21) I have missed class after smoking marijuana.
- A. No
 - B. Yes

Section VI Motivation/ Use.

(22) I currently use marijuana for:

- A. Medical purposes (Health related)
- B. Because my friends do
- C. Recreation (get high)
- D. To relax
- E. Other

(23) I currently smoke marijuana with:

- A. Self
- B. Friends
- C. Strangers

(24) It is easier to get high with marijuana than drunk with alcohol at NMU?

- A. Yes
- B. No

(25) I can obtain marijuana on campus easier than alcohol.

- A. Yes
- B. No

(26) People I know who have a Medical marijuana card.

- A. Parents
- B. Relatives
- C. Close friends

(27) People I know who smoke cigarettes.

- A. Parents
- B. Relatives
- C. Close friends

(28) I smoke cigarettes.

- A. Yes
- B. No

(29) I drink alcohol at NMU.

- A. Don't
- B. Monthly
- C. Weekly
- D. Daily

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APPENDIX B

Application for Review of Research
Involving Human Subjects
NMU Institutional Review Board (IRB)



Submission of this application signifies that you have read the NMU IRB Policy Manual and agree to adhere to the procedures and policies explained therein, and that you have completed the [requisite CITI Human Subjects Research Training Modules](#). You must include your CITI Completion Report as an attachment to this IRB application.

Submission of applications to the IRB review will be conducted electronically according to the following procedure:

1. After completing this application, the principal investigator will forward the application to the Department Head for approval.
2. If the Department Head approves the project, s/he will forward the application electronically to the administrative assistant to the IRB (kmaki@nmu.edu) and the IRB chair (dereande@nmu.edu). Please copy the principal investigator on the e-mail.

-
- I. **Name of Investigator** [Guy Richard LaPlante Jr.](#)
Department NMU Public Safety
Mailing Address 1401 Presque Isle Ave., Marquette, MI 49855
Phone 906-227-2151
Email glaplant@nmu.edu
- II. **Faculty Advisor** (for student research) [Dr. Dale Kapla](#)
Advisor's Phone 227-2660
Advisor's E-mail dkapla@nmu.edu
- III. **List the CITI Modules you have taken within the past three years:** [Students in Research.](#)
- IV. **Project Title:** [Is marijuana medicine? Student perceptions of marijuana use at Northern Michigan University.](#)

V. **Funding:** Pending funding decision Currently funded Not funded **xx**
List source of funding (if applicable):

VI. **Proposed project dates:** from [January, 2012](#) to [May, 2012](#)

Note: Do not begin your research (including potential research subjects) until you receive notification that your application has been approved by the IRB. This process will take approximately 2 weeks (excluding breaks).

VII. **Type of Review** (check one)

Administrative review	Yes ¹	No
Expedited review	Yes ² xx	No
Full review	Yes	No

¹ If yes, explain why you feel your project should receive an administrative review (please relate your argument to one of the categories listed under Section I Part D in the IRB Manual).

[This proposed research proposed is centered on individual and group characteristics of student's behavior through the use of an online survey, and is therefore requested to be expedited.](#)

IIIX. Project Description (Abstract)

Please limit your response to 200 words

Medical Marijuana in Michigan has had enormous impacts on communities. One such impact is the implementation of Medical Marijuana Act that is raising more questions than answers regarding community regulations and zoning. Although not highly publicized, such confusion is affecting Michigan universities, as their long-standing policies are being challenged to comply with the Michigan Medical Marihuana Act (MMMA). Federal regulation contained in the Drug Free Schools Act bans the use of marijuana on campuses, yet the dispute remains a salient challenge to universities throughout the state. To date however, universities are standing firm with their policies and continue to take a zero tolerance approach to any marijuana use on campus. Alarmingly, however, Northern Michigan University has had a significant increase in possession and use of marijuana with intent to sell complaints since the (MMMA) law came into effect in 2009, illustrating a dramatic change in behavior among the student body. This research seeks to discover the reasons behind such increases by first utilizing marijuana arrest and call for service data at NMU from the law's (MMMA) inception through December 2011. Additionally, data collected from a student survey exploring attitudes and perceptions of the MMMA and marijuana use in general, may assist in gaining a more thorough understanding of these dramatic increases.

Such understanding may provide university policy makers with more complete information to assist in reducing the use of controlled substances that is essential in maintaining a campus environment conducive to learning.

IX. Subjects in Study (check all that apply)

- | | | |
|---|--------------------------------------|----------------------|
| <input checked="" type="checkbox"/> NMU students' | Pregnant women, fetuses, or neonates | NMU faculty or staff |
| Cognitively impaired | Prisoners | Adult, non-student |
| Minor | Non-native speakers | |

Number of subjects + or - 600

Age range of subjects 18+

X. Procedures

- A.** Describe how the subject pool will be identified and recruited. If the subjects receive payment or compensation for participation, state the amount and form of payment.

Survey respondents will be a random sample of students from Northern Michigan University's student body. The Office of Institutional Research is providing the random sample in the form of email addresses. Generally, 6-7% of the university student population is randomly chosen for student-centered surveys (about 600 students). Prior to survey administration, and following IRB approval, the author will advertise the survey to students with assistance from Housing and Residence Life, hall government committees, approved posted fliers and the Health Promotion Services office. Such advertising may increase response rates, in addition to informing students that the survey's purpose is purely academic. There is no payment or compensation for participating in the survey.

- B.** Discuss where the study will take place and any equipment that will be involved.

The survey will be administered through the university's online survey program, Qualtrics, during the winter 2012 academic semester. Respondents can take the survey on their university laptops (or any computer) by using their access to the Internet.

- C.** Describe what the participants will be doing in the research project and how long will they be asked to participate. Attach any interview scripts, questionnaires, surveys, or other instruments that the participants will be asked to complete or respond to.

Participants will be asked to read the questions and respond with the best answer that supports their behavior and beliefs. Participants will be advised that the survey will take approximately 15 minutes. See Appendix B for the complete survey.

- D. If there are any costs—laboratory tests, drugs, supplies, etc.—to the subjects for participating, they should be explained. **No costs are associated with this study.**
- E. If deception is involved or information withheld from the subjects, please justify the withholding and describe the debriefing plan. **No deception is involved.**

XI. Risks

Describe the nature and likelihood of possible risks (physical, psychological, social, etc.) to the subjects and precautions that will be taken to minimize them. **Simply stating “none” is unacceptable; most research presents some risk to subjects.**

Respondents may not want to answer questions regarding their illegal drug use for fear their identity may be disclosed. Additionally, some respondents may have relatives or friends that were arrested, harmed or even killed by illegal drug use, and taking the survey may elicit strong emotional responses. The cover letter (Appendix C) ensures anonymity and confidentiality, and clearly informs the respondent that the survey is optional. The letter also gives the potential respondent examples of the types of questions in the survey. This mitigates the unknown, and allows the respondent to choose not to take the survey.

XII. Benefits

Describe the benefits to the subject and/or society. The IRB must have sufficient information to make a determination that the benefits outweigh risks.

This research has direct and indirect benefits to individual respondents, as the results may assist in creating or revising drug education programs on campus that may benefit current and future university students. The results may also serve to better educate the campus community on the specifics of the MMMA, which currently suffers from incomplete information or misinformation. Additionally, the increased incidents of marijuana incidents handled by Public Safety utilizes already scarce resources of many university, city and county offices, and any educational effort resulting from this research may lessen the burden on these agencies. Furthermore, this research provides the foundation for future research into illegal and legal drug use, and the impact of the MMMA.

II. Voluntary Participation

Describe how you will ensure subject participation is voluntary. A copy of the consent form to be signed by the subject should be attached to this proposal, (See Section IV in the IRB Manual for information about informed consent forms.) If your research is exempted from obtaining a signed informed consent release, please include a written protocol that indicates how informed consent will be obtained.

[See Appendix AA](#)

XIV. Confidentiality of Data

Describe how you plan to protect the confidentiality of the data collected. Include a description of where the data will be stored and who will have access to it. If the data will be coded to protect subject identity, this should be explained. NOTE: ALL DATA MUST BE RETAINED FOR 7 YEARS

The data collected is recorded and maintained from the Qualtrics system and is only viewable by the author and the Thesis coordinator, Dr. Dale Kapla – Department of Criminal Justice. Any hard copies of data will be stored by the author, secured and protected in his residence, available only to the author and the Thesis coordinator via email. The results of the survey will be aggregated and presented in such a manner that no respondent can be identified. The author will be presenting graphs, numbers and no identifiers that can be traced back to a respondent.

Upon approval from the IRB, you will be issued a project number. Please list this project number on all materials distributed to your participants. If your project is approved, you will have one year from the date you receive your project number to conduct your research.

Within one year of your project approval, you must submit either an End of Project Report or request a one-year extension by submitting a Project Renewal Form.

At any point, should you wish to make changes to your protocol, you must submit a Project Change Form before initiating the changes.

If any unanticipated problems arise involving human subjects, you must immediately notify the IRB chair (dereande@nmu.edu) and NMU's IRB administrator (bcherry@nmu.edu) and must submit an Unanticipated Problem/Adverse Event form.

Appendix C

COVER LETTER

Dear NMU Student:

I am writing to invite you to participate in a research study. The purpose of the study is to learn more about student perceptions of marijuana and the relationship between marijuana use and the Michigan Medical Marijuana Act. I am inviting you because you are a student at Northern Michigan University, and part of approximately 600 other randomly chosen students being asked to participate.

If you agree to participate, I would like you to read the questions and make the appropriate choice that best represents your attitudes and beliefs. The data collected from the survey will be used to understand characteristics associated with marijuana use on campus and correlations with medical marijuana. Examples of questions on the survey are similar to the following: Do you smoke marijuana? Are you a medical marijuana card holder?

If you choose not to participate in the survey, please do not reply to the attachment. A follow up e-mail will be sent two weeks later, asking for your participation, and again, if you feel you do not want to participate, discard the e-mail.

Your part in this survey is anonymous and confidential. That means that your answers to all questions are private. No one else can know if you participated in this study and no one else can find out what your answers were. Study reports will be based on group data and will not identify you or any individual as being in this project.

There are no known risks from being in this study, and you will not benefit personally. However, we hope that others may benefit in the future from what we learn as a result of this study.

Taking part in this research study is completely voluntary. If you decide not to be in this study, or if you stop participating at any time, you will not be penalized or lose any benefits for which you otherwise qualify.

If you have any further questions regarding your rights as a participant in a research project you may contact Dr. Brian Cherry, Assistant Provost of Graduate Education and Research, at Northern Michigan University (906) 227-2300 bcherry@nmu.edu . Any questions you have regarding the nature of this research project will be answered by the Thesis Director, Dr. Dale Kapla, Northern Michigan University Department of Criminal Justice, (906) 227-2660 dkapla@nmu.edu or the principal researcher, Guy R. LaPlante, at glaplant@nmu.edu .

