Hippies, Pothead and Yuppies:

Marijuana Usage and Effects,
With Attention to its Impact at
Hamilton College

Setting: Hamilton College 2003-2004

The 2003-2004 academic year at Hamilton College will be remembered as a year of change and self examination for all those who live and work on the hill. Not only did we start the school year with a new president but we also started the year asking questions about the kind of community that exists here and if that is the community we really want. In the fall semester the reconstituted Coalition on Alcohol and Other Drugs began to consider how best to address the high levels of alcohol abuse and alcohol related negative activities that have been on the rise in the past few years. Their report was released in the spring semester and everyone anxiously awaits possible policy changes for the next year. In a blink of an eye, just as the Coalition wound down, a new Taskforce began charged with thinking of ways to better coordinate the academic offices and the student life offices.

It was these tumultuous times that led me to apply for a Kirkland Research Associate grant with the idea of studying marijuana usage on campus and attempting to examine how this substance affects our community. Much of the focus this year, largely due to the Alcohol Coalition, has been on alcohol and its affect on students. Marijuana had always seemed to me to be a common feature on our campus so I began to wonder how it related in the grand scheme of substance abuse on campus. I set out to do this and with the support of Nancy Rabinowitz, Robin Vanderwall, and the Kirkland Project, I was able to accomplish my objective.

Project Objectives

My project overall had three main goals, each one building on the previous. To begin with I wanted to have a clear understanding of marijuana as a substance and its

affects on individuals and communities. It is easy to turn on a television screen or open a newspaper and see articles and commercials which are talking about marijuana abuse. But, part of me questioned whether all of what I was seeing was accurate information and how much of it might be based on a societal stigma. Depending on where you are geographically it possible to encounter widely differing opinions and beliefs about marijuana, so before I proceeded I needed to gain an understanding of what was fact and what was fiction. I accomplished this through research as well as interviews with people who have first hand interaction with marijuana users.

After increasing my own knowledge I wanted to apply what I had learned to the Hamilton College community. I started out by examining the data collected by Bob Kazin, Head of the Counseling Center and Greg Pierce, Associate Professor Psychology. It was their survey collected during the 2002-2003 academic year that in many ways turned campus focus toward alcohol usage on campus. I also began holding discussion groups in student residence halls, to hear firsthand what people had to say. The questions I was hoping to answer were: How prevalent is marijuana at Hamilton? What negative activities can be related back to the presence of marijuana? All the students and administrators I spoke too had their own opinions and perceptions about these two questions. I endeavored to find my own answers that could be verified with the existing data as well as with some of the perception of our community members.

My final goal was to consider what a community that was concerned with marijuana might begin to do in order to address it. The reconstituted Coalition on Alcohol and Other Drugs was beginning to do this and I wished to examine their findings and come up with some of my own suggestions as well.

Marijuana: Telling Fact from Myth

The cannabis plant has been cultivated as far back as 28 BCE, though archaeologists are now finding that it may have been grown over one thousand years before that. As trade between the Europe, Asia and the Middle East increased cannabis became known to the Western world. It was brought to the New World in order to be grown for its fiber that can be made into extremely resilient rope. During the Napoleonic era in Europe it began to be used as a popular intoxicant. The drug truly became widespread in a way we might recognize during the mid 1950s. Marijuana culture began to develop in the United States during the 60s and has been affecting our society as well our government since then. Though some countries such as the well known Netherlands but also the UK and Canada have classified marijuana as a "soft drug" on par with alcohol, the US continues its more stringent stance.

Nearly all medical and scientific studies conducted with marijuana involve examining the way the body reacts to THC, the most well known compound that is released into the body when someone uses the drug. It is important to note however that THC is but one of hundreds of compounds that are released into the body with each inhale of smoke. While there is a body of literature about the physical and mental affects of marijuana, there is still a lot of work to be done.

Every time a person smokes, THC is absorbed through a rich blood supply that surrounds the lungs. This THC laden blood is then pumped through the body by the heart and into the brain. When the THC reaches the brain is when a person feels what is commonly referred to as the "high". This only lasts for a few hours, after the initial

ingestion the THC is flushed from the brain by new blood. However, a percentage of it accumulates in the liver, kidneys, spleen and testes. Around 30% of the THC is also absorbed into the fatty tissues of the body.

Besides these physical circumstances there are the subjective effects that each individual feels when they use marijuana. The book <u>Buzzed</u> is a straightforward telling of drug facts, the authors of this book write:

"As a drug, marijuana defies characterization. It does not fit neatly into any of the general categories into which most psychoactive drugs can be placed."

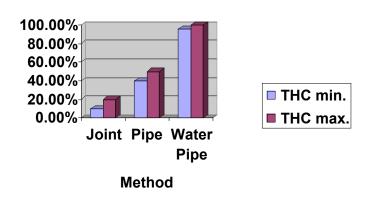
In general marijuana relaxes a person while also elevating their mood. Users have described feeling stimulated both intellectually and emotionally. They say that time can seem to pass very slowly or very quickly dependent on the specifics of each situation. But again, nothing has been found to hold true completely across the board of documented experiences.

There are three factors which are thought to have the strongest influence on a person's reaction to marijuana. The first is the potency of the particular plant. Most marijuana grown in the United States is raised in very controlled conditions and using hydroponic techniques rather then traditional soil methods. Potency can vary slightly based on the strain of the plant, how old the marijuana is, and how the plant was processed after harvesting. The second factor is how the drug is ingested. The most common methods for smoking marijuana are either in the form of a cigarette known as a joint, using a dry pipe, or using a water pipe such as a bong or hookah. When a person

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¹ Kuhn, Cynthia. Swartzwelder, Scott. Wilson, Wilkie. <u>Buzzed</u>. W.W. Norton & Company. New York, NY. 1998

THC Absorption



smokes a joint they are only getting about 10-20% of the THC within the marijuana. An average pipe will also only give you about 50% of the THC. However, any sort of pipe which uses water as a filter can allow a user to take in up to 100% of the THC, which means they are only losing the THC that they exhale in the form of smoke.

The final factor is the experience level of the person using the drug. It is common myth among marijuana users that a person will be unable to get high their first time using because they need to build up THC in their systems. This is entirely untrue; in fact new users are physically the most susceptible. The reason however that many users do not get high their first time around is because they are inexperienced with smoking in general as well as using the various forms of smoking paraphernalia. This leads to very little smoke actually getting into the lungs and being absorbed by the bloodstream.

Effects: Short Term vs. Long Term

There are some short term negative affects that come with smoking marijuana, though they are not as serious as the short term negative affects associated with the usage of a drug such as cocaine or heroin. Lethal overdose of marijuana is considered virtually impossible; there have never been any documented cases of anyone using marijuana until

it killed them. There are some new studies that have documented small children or infants who have reacted severely to ingesting marijuana and fallen into a catatonic state. While under the influence of marijuana a person's ability to focus and their hand eye coordination are impaired which means there is a threat of lethal activity if a person chooses to attempt to operate a vehicle. Also marijuana increases a person's heartbeat by about 20-30 beats a minute. Though the work in this area is just beginning it is believed that this can cause harm in people who have heart disease or irregular heart beats. When marijuana is combined with other drugs that also elevate heart beat the affect can become significantly more dangerous for even a healthy heart.

While under the influence of marijuana it has been shown that a person's ability to store new information in their memory is impaired. In studies where students were under the influence of marijuana while studying or while taking a test, their grades were significantly lower than normal. In general they also showed less mental flexibility and impaired problem solving skills. None of these effects have been shown to last beyond 24-48 hours after the use of the drug, and marijuana has never been shown to affect long term memory in any way.

Long term affects of marijuana use are minimal, once you do not take into account the affects of smoking. Smoking is only one method of using marijuana, and does cause long term health risks similar to smoking tobacco. Scientists and doctors conduct their studies by giving the subject marijuana in an oral pill form, which is similar to users who make marijuana into food and ingest the THC through their stomach. There has been no evidence found for a physical addiction to marijuana, though people do develop psychological addictions. Physical addiction occurs in a drug such a heroin, in

which the body now requires the chemical in order to function. In contrast psychological addiction is entirely created by the user, in which the user believes for whatever reason that he or she needs the drug in order to survive. In studies patients have been given dosages of THC well beyond the size of a normal user and have still shown only mild symptoms of withdrawal when the drug was taken away. These symptoms include mainly irritability and restlessness, as well some insomnia, sweating, and mild nausea.

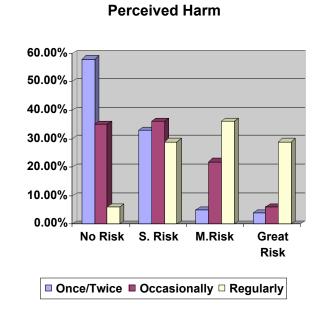
The Hamilton Pothead

The first question I needed to answer once I had bettered my understanding of marijuana as a substance was how much marijuana is getting used here at Hamilton? The annual study conducted by Bob Kazin and Greg Pierce attempts to answer this question and others about substance abuse in the form a nationally recognized survey. This survey is given to one hundred people in each class year, with a total maximum sample size of four hundred. The students receive the survey by way of their Resident Advisor and both the student and the RA receive incentives for returning the completed survey. Each year the survey provides a good return rate sufficient for being used for interpreting substance abuse at Hamilton.

In 2002-2003 59% of Hamilton students used marijuana within the last year, while 36% of them used marijuana within the last month. In my discussion groups students often described marijuana as being as prevalent as or more prevalent than alcohol. Not surprisingly the perceptions of the student about how many people are using are exaggerated, much in the same way it has been shown our student's perception of the

amount alcohol being drank is exaggerated. However students are informed when it comes to their knowledge about how dangerous marijuana can be. One of the questions

(depicted here in a graph) asks student to describe how much risk (none, some, moderate, great) there is in using marijuana once or twice, occasionally, and regularly. What this graph demonstrates is that as we move from using marijuana once or twice to using it regularly students believe that their risk of



some form of harm increases; 58% of them believe there is no risk in using marijuana once or twice while a total of 64% believe there is moderate or great risk regularly. The facts surrounding marijuana use would largely agree with this perception.

Responses and Conclusions

This past March 2004 the Coalition on Alcohol and Other Drugs released a report which contained suggestions for changes to be made at Hamilton that they believe may help stop some of the negative impacts of alcohol and drug abuse. The opening statement read:

"In September 2003, President Stewart reconstituted the Coalition of Alcohol and Other and charged it with finding ways to reduce the negative consequences – vandalism, sexual assault, drunk driving arrests, injuries

and compromised academic performance – associated with eh abuse of alcohol at Hamilton."

In this opening statement there is an immediate contradiction. Though the Coalition is on Alcohol and *Other Drugs*, the primary concern appears to negative consequences associated only with alcohol. The consequences listed here and others considered important to the Coalition have never been found to have any sort of connection to marijuana. In fact marijuana users have been found less likely to commit certain act such as vandalism and violence because the mood elevation and lethargy caused by marijuana lessens the aggressiveness of the user. Though national advertisements have been depicting marijuana as a drug which can increase the likelihood of sexual assault, no data has ever been found to back this fact up.

All of my research has shown that marijuana is a complex substance that does not match up completely with the national stigmatized image we have of it. Not only is it complex in itself but the way it enters our community is vastly different in scope than how alcohol is brought in. Marijuana also only represents one of as many as a dozen other substances that have been shown to exist on our campus. Though alcohol has grabbed much of the attention, these substances require addressing as well. Though the Coalition attempted to address them in their report by integrating them into the new point system, I do not feel this is enough. If we are serious about working to combat substance abuse, as it appears that we are, than we must devote equal energy to it as we do to alcohol.

It is my belief and recommendation that a separate Coalition on Illegal Drug Use would be a logical next step for the current administration. This Coalition could be given

the knowledge about how these individual drugs work, and about how they enter our community. With this information to guide them I believe it would be possible to formulate policies to combat the drugs which could be integrated into the existing policy structure. While marijuana may not be as serious as the average American might believe, it is an illegal substance and we must endeavor to address it here just as we must address such actions as underage drinking.

Hamilton today stands at an interesting crossroad as many of the suggestions made by the alcohol coalition will be adapted into active use. In the following years we will see if they are effective and if any of the negative consequences targeted by them go down. I would like to thank the Kirkland Project again, and everyone who assisted me in capturing what might be a brief snap shot of Hamilton life just before it changed. Community is an active thing and it can only be changed through proactive work. I hope that this paper serves as an example of how students, faculty, and administrators can work together to further academic interests and can also work together to further communal ones.

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