

Effects of Marijuana

New Mexico Adventures in SuperComputing Challenge

Final Report

April 06, 2005

Team 067

Shiprock High School

Team Members:

1. Lache Yazzie
2. Dakota Dee

Teachers:

1. Vernetta Noble
2. Brenda Hine
3. Kyla Johnson

Mentor:

1. Mary Herrmann

Table of Contents

- Table of Contents..... 2
- Executive Summary..... 3
- Introduction 4
 - Hypothesis 4
 - Model..... 4
- Project Description 5
 - Hypothesis 5
 - Model..... 5
- Results 6
- Conclusion 7
- Recommendations 8
- Acknowledgements..... 9
- References 10
- Appendices
 - Appendix A: {Description of Appendix} 11
 - Appendix B: {Description of Appendix} 12

Executive Summary

We want to find out what the side effects of smoking marijuana are and how we can help to keep teenagers from starting the habit. The purpose of doing this project is to find out what these side effects can do to our body, so we can tell other people about it.

In 2002, over fourteen million Americans ages twelve and older used marijuana at least once in a month prior to being surveyed and 12.2 percent in the past twelve months. The percentage of youth ages 12-17 who had ever experimented with marijuana declined slightly from 2001-2002.

When someone smokes marijuana, Tetrahydrocannabinol (THC) rapidly passes from the lungs into the bloodstream, which carries the chemical to organs throughout the body, including the brain. In the brain, THC connects to specific parts called cannabinoid receptors on nerve cells. One study has shown that a user's risk of heart attack quadruples in the first hour after smoking marijuana. This can cause burning and stinging of the mouth and throat. It is also followed by chest illness, a high risk of lung infections, and a greater risk to obstructed airways. It contains more cancer-causing agents than tobacco.

Our mission is to use this information to contribute our time to finding out what the effects of marijuana do to the students of Shiprock High School and to help the students to think twice before smoking marijuana.

Introduction

Hypothesis:

Smoking marijuana as we know can be very harmful to one's health. We think the effects of smoking marijuana are a very important issue in the United States and should be taken seriously. Many people don't think marijuana is an important issue but really it is a disease to human society. We as a team are striving to get facts about smoking marijuana out to the public by providing methods on how to deal with their addiction.

Model

As a group we found that high school students are most likely to smoke than any other age level. We have thought about giving a survey to people in our high school in Shiprock. The survey would have included questions about whether they have thought of smoking marijuana or if they know anyone who has smoked marijuana or is addicted to marijuana.

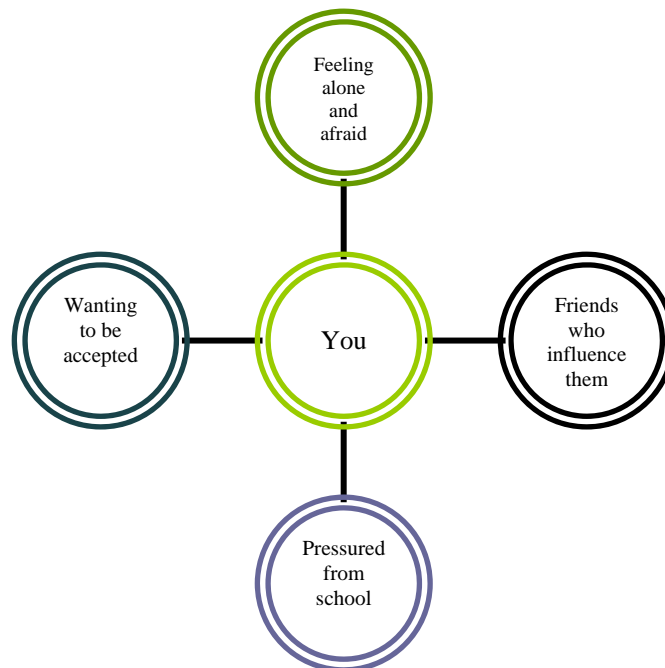
Project Description

Hypothesis

There has been a lot of discussion about marijuana in today's society. The Federal government lists marijuana as an illegal drug. Through our research, we have found some information about why many people smoke marijuana. Some of the most common causes are feeling rejected, abandoned, alone, ashamed, hopeless, depressed (sadness that does not go away and has no clear cause), afraid of something/someone, or feeling like a failure. Other causes include pressure at school, home, or with friends and breaking up with a boyfriend/girlfriend. Other reasons include doing poorly in school, being gay and feeling guilty or fear of not being accepted.

Model

How People are influenced to smoke



Results

We found that smoking marijuana is a growing problem among many people. The most common influence of smoking has to be pressured by friends who smoke. The second most common reason for smoking is the need for acceptance. There are many effects of marijuana use on teenagers. First of all, marijuana can cause high school drop-outs. Secondly, marijuana is a dangerous drug and using it can seriously ruin a teenager's life. Also, the use of marijuana can disrupt coordination and concentration. A lack of these can also destroy a teenager's life. Furthermore, marijuana is illegal and teenagers who use it could be facing serious consequences. For example, having it on a teenager's record can be harmful to job or college chances and they may end up in a detention center. In addition, marijuana use can be affected by other drugs. Finally, the use of marijuana can lead to other, more dangerous drugs. The effects of marijuana use on teenagers vary, but they are all equally negative.

Conclusion

From our research we discovered that marijuana can be prevented if people get help before they start smoking. We as a team will do what we can to prevent teenagers from using marijuana by informing them of the consequences that may vary. We really did not get a chance to do a survey on the students of our school, but we hope to find solutions or methods to help an individual cope with the pressure of smoking marijuana.

Recommendations

We recommend that people should look out for other people who might try to influence them to smoke marijuana. In doing so, here are some ways to say no to marijuana.

- * No, I already eat too much junk food.
- * No, what do I look like, a hippie?
- * Sorry, I am on a drug-free diet.
- * No, my imagination is good enough already.
- * My parents did and look at them now.
- * No, I like my brain the way it is.
- * No, I might forget my locker combination.
- * I'll say it slow for you
"nnnnnoooo."
- * No, I am allergic
- * No thanks, I am into reality.
- * No, grass is for mowing.
- * I prefer my brown eyes to your red ones.
- * Gee, thanks but I am high on life.
- * No, and that's my final answer.
- * I don't do the pot thing.

Acknowledgements

We would like to thank the teachers Mrs. Noble and Mrs. Hines for helping us out with our project. We want to thank Mrs. Herrman for generously helping us out during our research and for revising our project. Also, thanks to the judges for all of their advice on our project.

References

- * <http://www.Infofacts.nih.gov>
- * <http://www.druglibray.org>
- * <http://www.personalhealthzone.com>

Smith, Sandra. Marijuana. New York: The Rosen Publishing Group, INC., 1999.

David, Blender. Tobacco and Smoking. San Diego: Greenhaven Press, INC., 1998.

Hasday, Judy, and Angelis Therese. Junior Drug Awareness Marijuana. Philadelphia: Chelsea House Publishers, 1998.

Levine, Herbert. The Drug Problem. Austin, Texas: Raintree Stek-Vaughn, 1998.

Herscovitch, Arthur. Everything You Need to Know About Drug Abuse. New York, New York: The Rosen Publishing Group, Inc., 1998.

Appendix A: (code for turtle program)

- Turtle Command Center
- Turtle Procedures

Turtle-own [Health]

to go

```
rt random 90
rt random 90
fd random numsteps
if color= green [set health health -2]
if health < 0 [ set color pink]
```

End

Observe command center

To setup

```
ca
create-and-do numturtles [ if else( random 100) < percent users
[set color green] ; green turtles user
[set color blue]
set health
```

End

We have been using the Star Logo program to help us with our project. We have programmed the turtles to relate to what would happen in real life. The pink turtles represent the people who are sick and die. The blue turtles represent the people who are not affected. The green turtles represent the people who are smoking marijuana.

Appendix B: (Pictures of people who smoked marijuana)



Here is a picture of a smoker's lung



Marijuana can lead also can lead to abuse.



Here is a picture of a patch of Marijuana leaves.



Here is a picture of marijuana, seeds and "Joint".