



The Association Between Marijuana Use and Education Level

Dutra A. & Gleaton C.

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Introduction

- Marijuana use and education use has been a topic of discussion for many years. Marijuana is one of the most frequently used drugs in adolescents and many high school students use marijuana during the school day. The relationship between marijuana use and achievement in academics have mixed results, Finn, K (2012) reported that students who use marijuana in general exhibit poorer behavior than those who did not.
- Drug use is a severe epidemic throughout the world and the fact that the problem has permeated into the academic world is not one to be taken lightly. Studies have generated some specific numbers on the percentages of students that are involved in the drug world. Palmer et. al (2012) states that 69% of a 262-student survey reported that they have experienced some negative consequences as a result of their drug use, and 28% of the students reported some moderate concern about their drug or medication misuse.

Research Question

- Is there an association between marijuana usage and the ability to be academically successful?

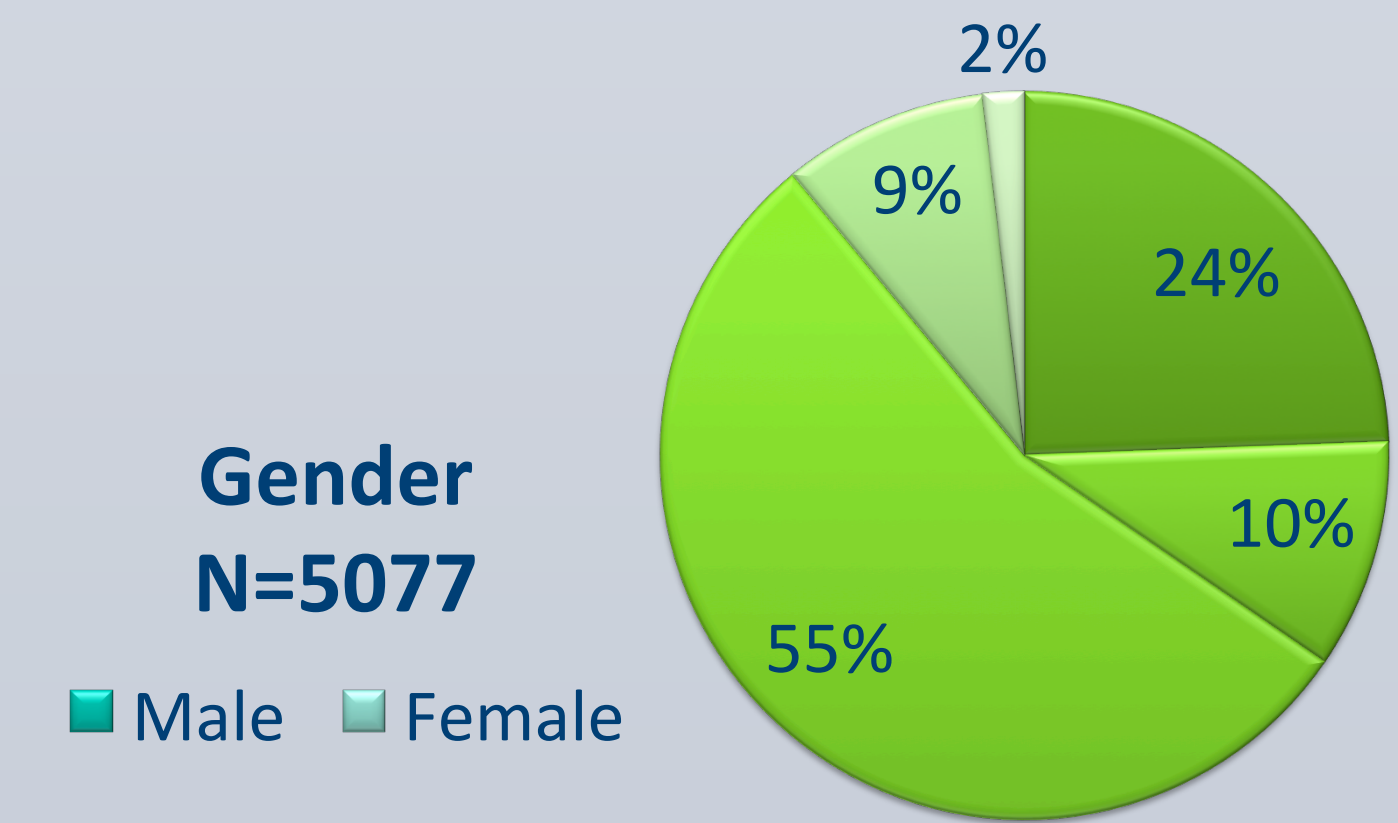
Variables

- 6,504 individuals in The National Longitudinal Study of Adolescent to Adult Health Wave IV survey, ages of participants range from 24-34

Highest Education	Gender	Marijuana User
The highest level of education that the participants reported, ranging from High School to Doctorate Degree.	Simple breakdown of the male and female distribution in the National Longitudinal Study of Adolescent to Adult Health	Whether or not the participant reported ever smoking marijuana in their lifetime.

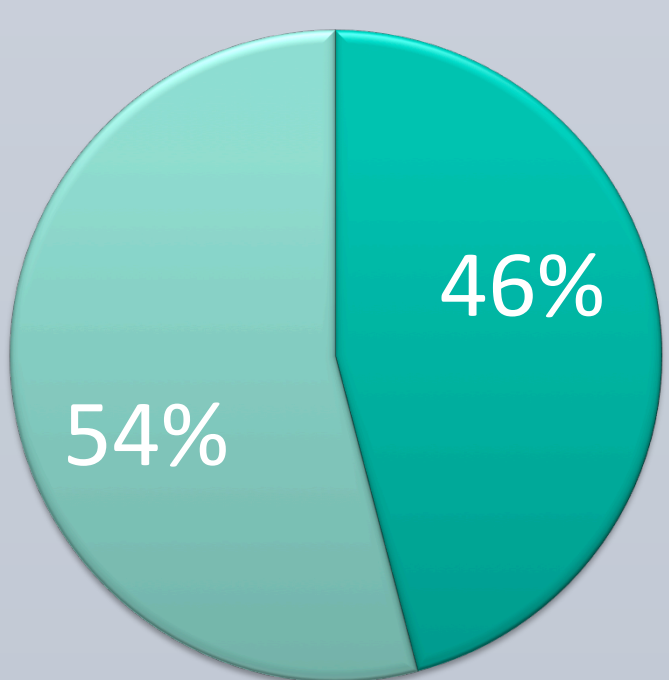
Highest Education
N=4970

■ High School ■ Tech Training ■ Bachelors ■ Grad School/Masters ■ Doctorate



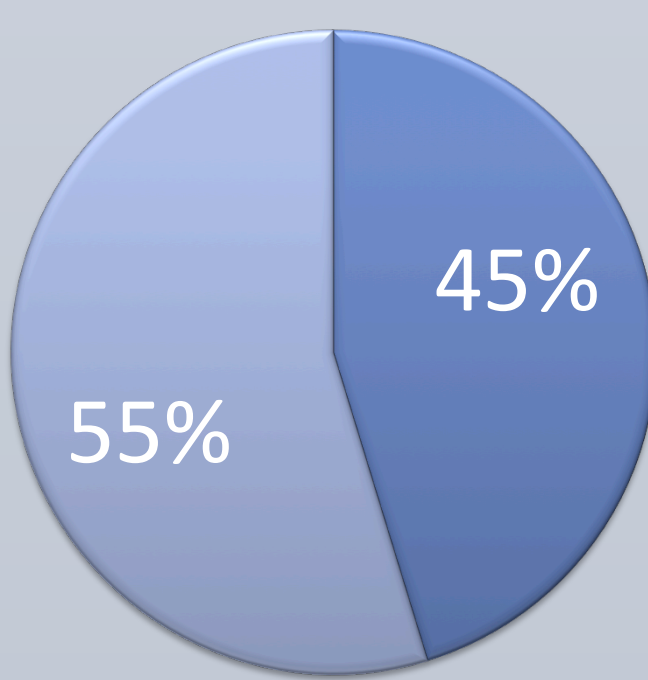
Gender
N=5077

■ Male ■ Female



Marijuana Use
N=5077

■ Yes ■ No



Results

Education Level vs. Marijuana Use

Table 1. The number of responders that have used marijuana across education levels.

Marijuana Use	Up to HS Grad	Voc./Tech Training	Up to Bachelors Degree	Grad School/ Masters Degree	Doctoral School Degree
Yes	554	233	1173	243	46
No	659	272	1535	212	43

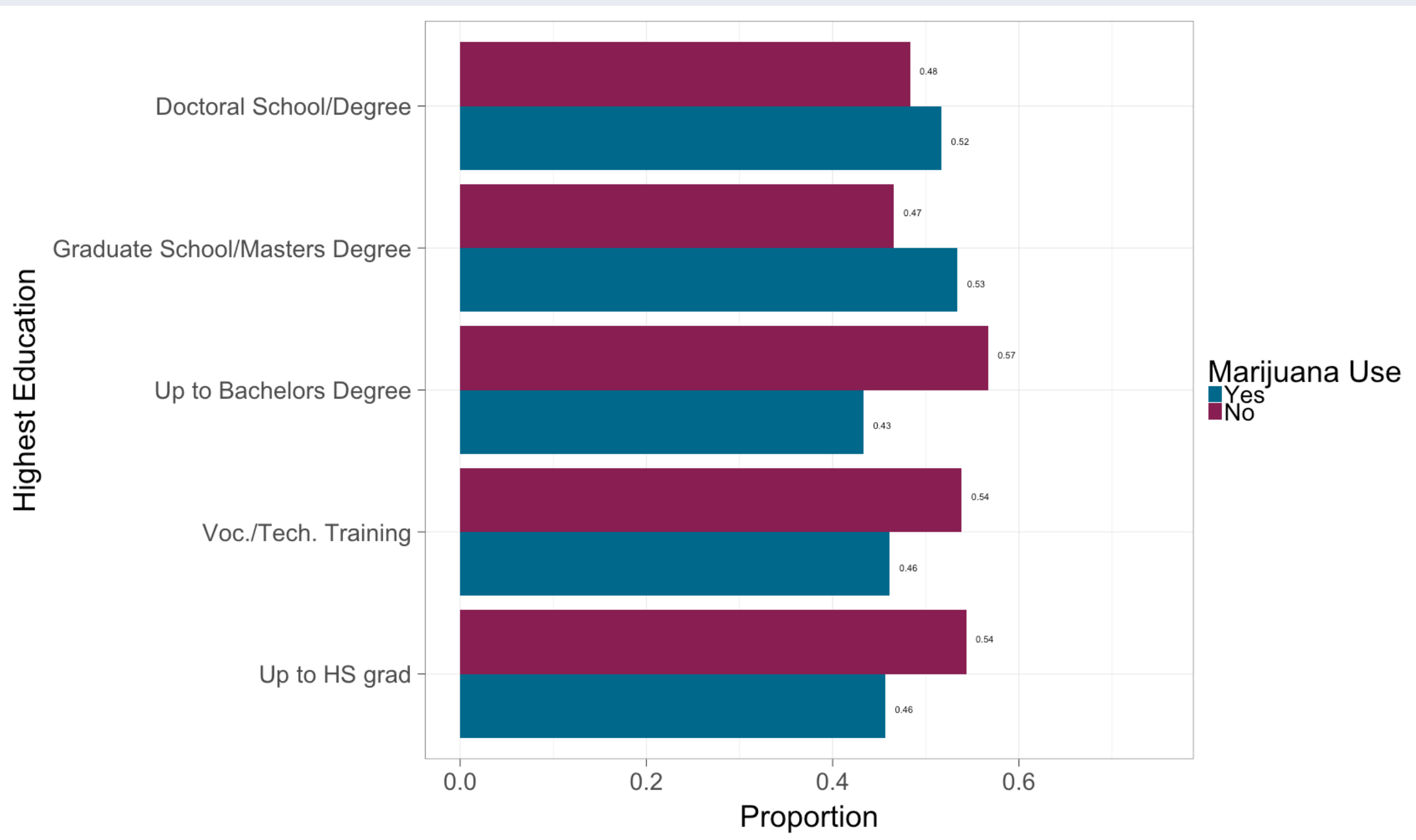


Figure 1. The proportion of marijuana use across education levels.

Gender vs. Marijuana Use

Table 2. The number of respondents that use marijuana between males and females

Marijuana Use	Male	Female
Yes	929	1370
No	1403	1375

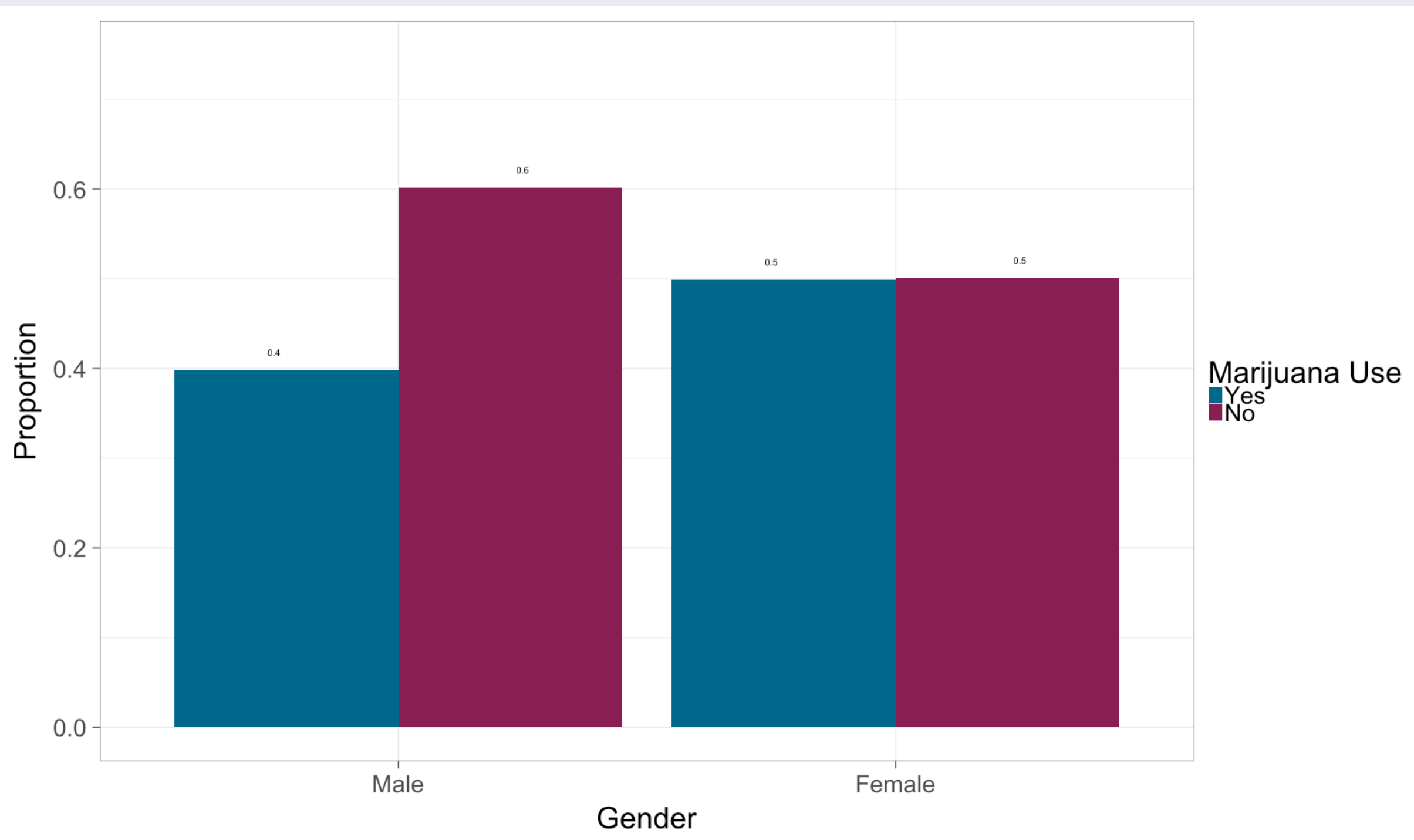


Figure 2. The proportion of marijuana use across males and females.

Multiple Linear Regression

- Table 3 is the odds ratio, 95% confidence intervals for all of the variables, and p-value for the multiple linear regression model.

Measures	OR	95% Confidence Interval	P-value
Gender(Female)	0.66	(0.59,0.74)	<0.0001
Education			
Up to High School	1.09	(0.95,1.24)	0.21
Voc/Tech Training	1.02	(0.83,1.26)	0.86
Bachelor's Degree	1.17	(1.02,1.34)	0.03
Grad School/Masters	0.81	(0.65,1.00)	0.05
Doctorate Degree	0.88	(0.57,1.35)	0.55

Analysis

- A multivariable logistic regression was run to assess the relationship between marijuana use and academic successfulness after controlling for gender.
- Figure 1 is displaying the relationship between a person's education level and whether or not they have used marijuana; marijuana does not seem to have a significant effect on a person's ability to be successful in academics.
- After adjusting for the potential confounding factor of High school graduation, Gender (0.66, CI0.59-0.74 p <.0001) was significantly and positively associated with the likelihood of using marijuana.
- In this analysis, the odds ratio tells us that Females are 0.65 times more likely use marijuana.
- These analyses show that Marijuana use is not a confounding factor because the association between gender and marijuana use is still significant after accounting for High School graduation.

Results

- Based on our research on the relationship between marijuana use and education level, there is no clear indication that the two have any significant correlation.
- Marijuana does not seem to affect a person's ability to succeed in academics.
- 52% of the add health responders that have a doctoral degree have used marijuana.

Conclusion/Implications

- These data support that there is no correlation between marijuana use and a person's ability to be successful in school.
- Marijuana does not see to have a significant effect on a person's ability to be successful academically
- According to the National Institute on Drug Abuses' website, "Considerable evidence suggests that students who smoke marijuana have a poorer educational outcome than their nonsmoking peers" (NIDA, 2017).
- Based on our research, marijuana usage does not seem to effect a student's academic outcome.

References

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