# The relationship between Religious Affiliation and Marijuana and Alcohol Use

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## Introduction

- **Prevalence of Religion:** Religion has been around since the dawn of time, and different countries and people have adopted different belief systems. In the United States, about 73.8% of adults are religious. (Public Religion Research Institute, 2023)

- **Marijuana and Alcohol Abuse:** Substances are used by a large amount of the United States population. When talking about alcohol abuse, it is important to note that around 11.2% of adults have an alcohol use disorder meaning they drink everyday. When talking about marijuana use around 18% of adults in America smoke marijuana, but about 11% of adults have a habit of abusing marijuana by using it every day. (U.S. Department of Health and Human Services.. Centers for Disease Control and Prevention. 2021)

- **Current Findings:** Strictly speaking being affiliated with a religion alone does not deter the abuse of drugs and alcohol. There are other factors like personality traits, level of importance of the religion to the person, and rules of religions themselves. Some belief systems have stricter rules about drugs and alcohol than others and these religions have a strong negative correlation between religion and substance use.
  - Ismail et al., 2021
  - Ellison et al., 2008
  - Moscati & Mezuk, 2014

- **Gap in Literature:** Level of importance of religion is hard to measure, but current literature does not include when participants became religious. Few studies, if any have specifically looked into how religion affects people if they have been religious their whole lives versus only becoming religious later on when they are adults. Moscati, A., & Mezuk, B. (2014).

## Methods

### Sample

- **Men and Women** in their late 30s and 40s who participated in the U.S. National Longitudinal Survey of Adolescent Health (ADDHEALTH) as adolescents in grades 7-12. Data comes from the fifth wave of the ADDHEALTH survey (n=4,196).

### Measures

- Participants were asked what religion they affiliated with, if they were religious at all. The religions to choose from were, Protestant, Catholic, Christian, Jewish, Buddhist, Other, or none.

- Alcohol use was assed through a survey question asking participants how many times they drank in the last 30 days. The answers were given as categorical variables where responses ranged from 0 (none) to 6 (every day). This variable is recoded into a binary response variable with only two levels, none or every day.

- Marijuana use was assed through a survey question asking participants their usage in the last 30 days. The answers were given as categorical variables where responses ranged from 0 (none) to 6 (every day). This variable is recoded into a binary response variable with only two levels, none or every day.

- Attendance was measured through frequency of attendance at religious services in the past 12 months. The answers were given as categorical responses ranging from 1 (never) to 6 (more than once a week).

## Research Questions

1. What is the association between religion and marijuana and alcohol use?
2. Given the association found this poster will look at how religion affects alcohol compared to how religion affects marijuana.

## Results

### Univariate

- A total of 20.66% of the sample is not religious and Protestants take up a majority of the sample with 29.89%

- 11.99% of the sample never drinks alcohol whereas 4.96% of the sample drinks everyday

- 42.99% of the sample never uses marijuana whereas 6.84% uses marijuana everyday
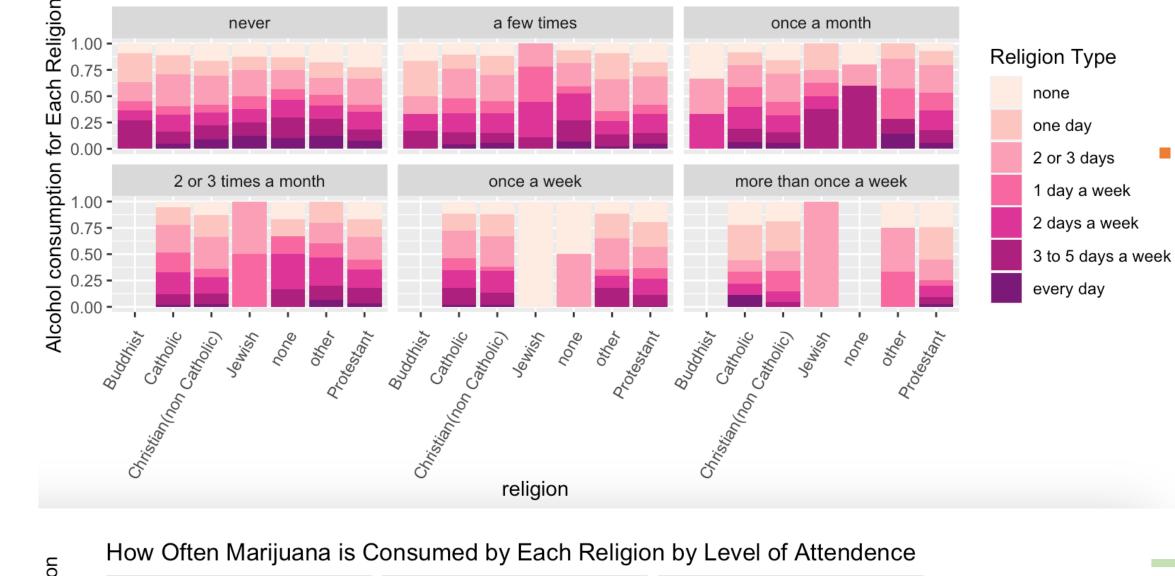
### Bivariate

- Logistic regression of alcohol and religion indicated **statistically significant relationships** between drinking alcohol everyday and not drinking at all for those that are **Protestant**, Catholic, and Christian compared to the reference group, not being religious at all. No significant difference between being religious and being Jewish, Buddhist, or other were found

- Being Protestant compared to not being religious indicates that you are **less likely** to drink alcohol everyday by a factor of 1.23

- Logistic regression of marijuana and religion indicated **statistically significant relationships** between using marijuana everyday and not using at all for those that are **Protestant**, Catholic, and **Christian** compared to the reference group. No significant difference between being religious and being Jewish, Buddhist, or other was found

- Being Protestant compared to not being religious indicates that you are **less likely** to use marijuana everyday by a factor of .77 and being Christian compared to not being religious indicates that you are less likely to use marijuana everyday by a factor of .63

### Multivariate

- Adding in the third variable of **attendance** was found to be significant for **marijuana more** so than it was for **alcohol**

- The multivariate logistic regression shows that **attending religious services a few times a month or once a week** is significant and **decreases** the likelihood that a person uses marijuana everyday by a factor of .66 and 1.33 respectively more than just being religious



**Figure 1.** Alcohol/Marijuana Consumption by Religion



**Figure 2.** Multivariate Graph of Alcohol and Marijuana Consumption for each Religion by level of Attendance

## Discussion

- When comparing alcohol to marijuana abuse, the significant differences shown in the logistic regression demonstrates that prevalence of religion does deter abuse in certain religions, specifically Protestantism.

- Being Protestant deters the use of alcohol more than it does the use of marijuana

- When adding a third variable, the data shows attendance of religious services to the highest degree significantly impacts marijuana abuse, but not alcohol abuse
  - This shows that simply being religious is enough to deter alcohol abuse, but in order to deter marijuana abuse, a person must also attend religious services as well.

- The significant decrease in alcohol and marijuana abuse due to religious affiliation is consistent with previous literature

- The additional significance of the third variable, attend, is also consistent with previous literature showing that it is more than just the religion that matters

- Further studies should consider the following:
  - Looking at more details for specific religions such as going into detail about the values in Protestantism
  - Looking at children as well as adults to determine if strength of religiosity matters as well

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