Opponents and Supporters of Marijuana Legalization*

Significant differences in opinion on marijuana legalization by age and political party

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Abstract

In 2021, marijuana had been legalized in 18 states in the U.S. However, the debate of the pros and cons for this legalization had never stopped. Who is supporting or not supporting? This paper aims to use the data collected from the U.S General Social Survey in 2021 to determine the characteristics differ between the supporters and opponents. Results have shown Significant differences among them by age and political party.

1 Introduction

There are three ways for individuals to define themselves: as distinct from others, based on their social groups or political groups, and according to their personal attributes (J. C. Turner 1987). Such self-categorization changes over time, but is highly related to one's attitudes. Groups with different features such as different ages, gender, or education can have different opinions on certain issues. Currently, there are 18 states in the U.S where marijuana has been legalized. As a drug that can be traced back to 1600, marijuana, has a dramatic history of its liberalization ("A Social History of America's Most Popular Drugs" 2014). Research has shown that gender can drive a gap between support and not supporting the legalization of marijuana (L. 2010). Females tend to be less likely to support this idea (L. 2010).

This paper employs the data collected from the U.S General Social survey in 2021 and R to explore how the attitudes regard to marijuana legalization vary due to characteristics of individuals (R Core Team 2020) (Smith and Morgan 1972-2018). We look through gender, age, education, political parties, and race of respondents to verify if any of them leads to significant differences (Friendly et al. 2020) (Wickham et al. 2019).

Results indicate that individuals from different age groups and political parties present different attitudes toward marijuana legalization. Strong democrat takes up the largest portion of the population who support it. At the same time, younger generations tend to show more positive feedback than the older generation. Interestingly, it is evident that the gap resulting from gender shrinks over time.

2 Data

2.1 The dataset

The data used here is obtained and merged based on the 2021 U.S General Social Survey(Smith and Morgan 1972-2018). Our data set stores responses of 4032 participants who answered a GSS questionnaire from December 2020 to May 2021(Smith and Morgan 1972-2018). We recode and create the following nine variables of interest that is used in our analysis:

^{*}Code and data are available at: https://github.com/zhongyuhuang/GSS_Analysis.git

- year: indicates the year for the respondent.
- Gender: indicates the gender of the respondent (female, male, transgender, none of these).
- age: indicates age of the respondent.
- Degree: respondent's degree (less than high school, high school, associate/junior college, bachelors, graduate).
- Race: indicates the race that the respondent considers her/himself (white, black, American indian or alaska native, Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, Other Asian, Native hawaiian, Guamanian or chamorro, Samoan, Other pacifis islander, Some other race, Hispanic).
- Party: indicates how do respondents usually think of themselves as a Republican, Democrat, or Independent (strong democrat, not very strong democrat, independent close to democrat, independent (neither or no response), independent close to republican, not very stong republican, strong republican).
- LegalVSIllegal: indicates whether respondents think the use of marijuana should be made legal or not (should be legal, should not be legal).
- Spend: indicates how do respondents think of the government's spend on dealing with drug addiction (too little, about right, too much).

2.2 The Survey and its methodology

The General Social Survey (GSS) in the U.S is a national-wide survey that studies any trends of attitudes or opinions on American society (Smith and Morgan 1972-2018). Its questionnaire covers lots of topics such as crime, civil liberties, morality, and so on(Smith and Morgan 1972-2018). Respondents are required to be 18 or older and live in the United States at the time of interviewing(Smith and Morgan 1972-2018). They are sampled based on address(Smith and Morgan 1972-2018).

During the COVID-19 pandemic, the GSS had changed its methodology from in-person interviews to the push-to-web method(Smith and Morgan 1972-2018). While the option of interviewing on phone remains available, participants can also obtain the survey through the web link that had been mailed to their houses. Different from in-person data collecting, the self-administered questionnaire based on the web provides the "skip" option when respondents are not willing to answer specific questions(Smith and Morgan 1972-2018). Initially, options like "No answer" or "Don't know" are not included in the in-person interview. But the interviewer can make a record when respondents do not want to answer specific questions(Smith and Morgan 1972-2018).

2.3 Weakness and strength of the survey and the questionnaire

Strength:

- The survey covers a wide range of topics which can provide informative trends of opinions or behaviors on the society.
- Methods used in designing the survey enabled objectivity.
- It is quick to gather a large amount of information through questionnaires.
- The transformation from in-person interview to web survey provides Convenience and safety during the pandemic.

Weakness:

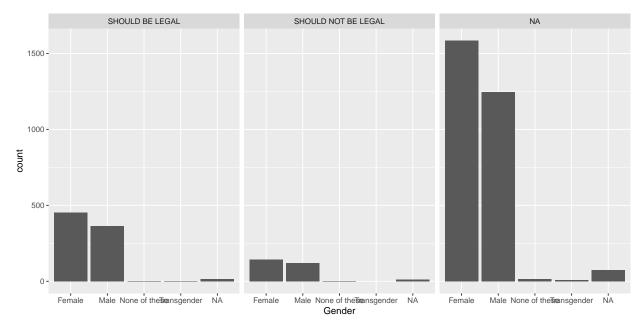
- The sample size of 4,032 completes of this survey might not be large enough to be served as a national-wide survey claimed by GSS.
- Although the push-to-web methodology ensures the safety of both the interviewers and respondents, such a method might unintentionally set restrictions on respondents. For example, individuals are required to have some basic knowledge of computers.

- It is harder for web surveys to achieve accurate information from respondents compared to the in-person interview. It is uncertain who is really answering the questionnaire.
- It might be more incentive for participants to give random or false responses during the web survey compared to the in-person method.
- Length of the questionnaire might be too long for participant to answer patiently.
- Changes in response can not be tracked.

3 Results

The histograms below have shown the composition of the respondents. (Figure 1). Generation X (35-50) and the silent (70-87) who identify themselves as white make up the largest portion of the respondents. Half of the participants are female. If we view them according to their favorite political party, we can see most of them think of themselves as the independent or strong democrat.

The majority of responses regarding whether marijuana should be legal or not fall on not applicable (Figure 2). Despite that, the number of individuals that support the legalization of marijuana is approximately 3.5 times larger than those who disagree with the legalization. The majority of the supporters have these characteristics: female, the strong democrat, obtain high school degree, at a younger age (approximately 35). The majority of the opponents have these characteristics: female, the independent, obtain high school degree, at a relatively higher age (approximately 65).



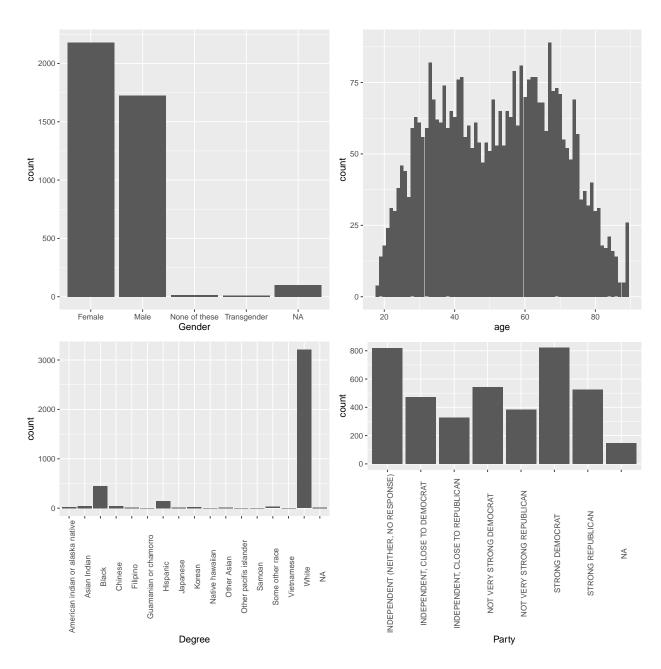


Figure 1: visualization of characteristics of respondents

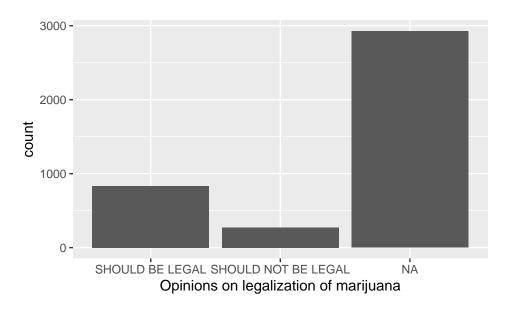
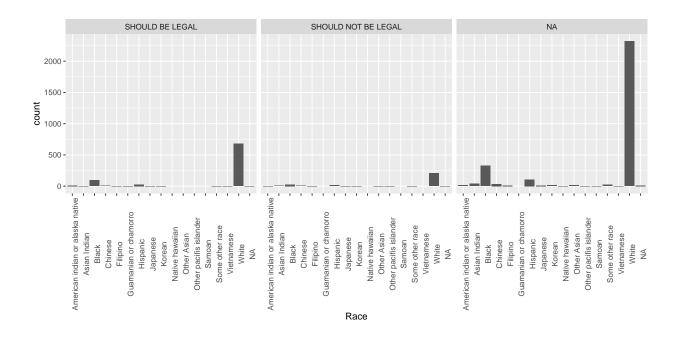
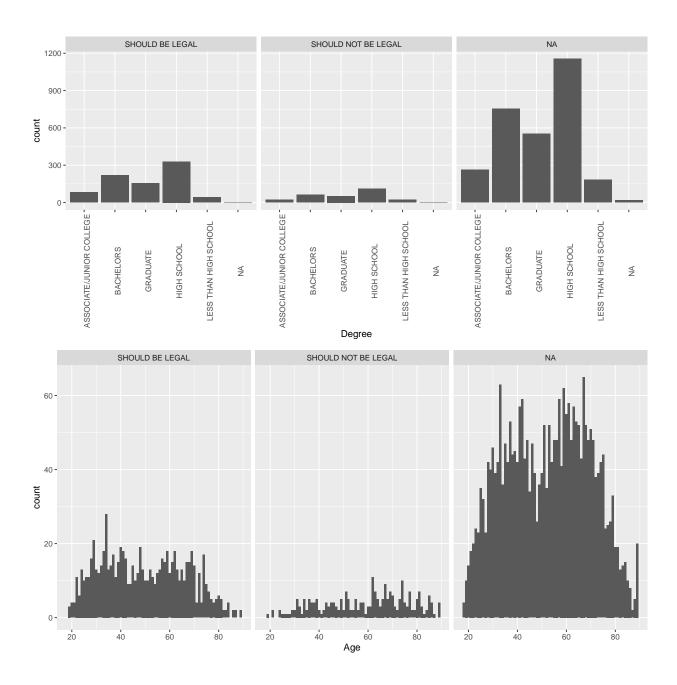


Figure 2: Opinions on legalization of marijuana





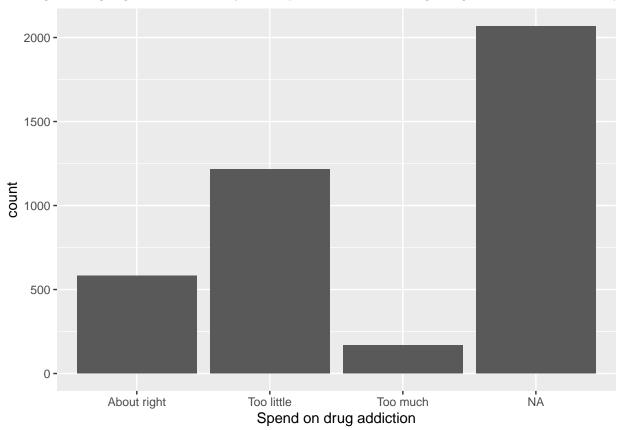
4 Discussion

4.1 Significant difference in opinion on marijuana legalization by favor of political parties and age.

The two variables age and party are strongly influencing the attitudes of marijuana. It might indicate that the partisanship has become more relevant in explaining trends of opinions in society. The difference in political parties leads to different views of issues. It is not surprising that the distribution of support legalization skewed to the younger generation since they were born with the trend of liberalization of marijuana.

4.2 The spend on dealing with drug addiction

It is ironic to find that the majority of the respondents believe the country is spending too little while they are supporting marijuana legalization. In fact, the United States has already spent a trillion dollars regarding the issue of drug addiction. The U.S has been fighting drugs since 1971, lots of anti-drug acts resulted from the drug war. Thus, although the transformation of thoughts on drugs is ongoing in an incredibly fast speed, the debates regarding this remain in society.



4.3 Weaknesses and next steps

The number of responses used in the analysis is relatively small. Besides, majority of the responses for some variables fall on not applicable. These might cause inaccurate of the conclusion made based on them. Regarding the race, we can see that white takes up almost 80% of the respondents. It might indicates the oneness of participants or errors in the sampling method. The survey only include one question about the legalization of marijuana. In order to obtain a deeper understanding of respondents' opinion about this, we can include related questions such as "What is the reason for you to (not) think marijuana should be legalized." A larger size of respond might help shape the characteristics of supporters and opponents more accurately.

Appendix

the supplemental survey link: https://forms.gle/tHJZ46Zwc45LJDLy5

Opinions on legalization of marijuana

In 2021, marijuana had been legalized in 18 states in the U.S. However, the debate of the pros and cons for this legalization had never stopped. What is your opinion. This survey is voluntary. You may choose to skip when having questions that you do not want to answer. By answering this survey, you understand that the General social survey will be using your responds. Your answers will be kept private. Thanks for taking this survey.

.1 Questions

- 1. Your Gender is:
- Male
- Female
- Transgender
- None of these
- 2. Generally speaking, do you usually think of your self as:
- Strong democrat
- Not very strong democrat
- Independent
- Not very strong republican
- Strong republican
- None of these
- 3. Your Age is:
- 18-30
- 31-55
- 56-75
- 76-95
- 95 or older
- 4. Your race is:
- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Other Pacific Islander
- None of these
- 5. Should marijuana be legalized?
- Yes
- No
- Maybe

- 6. If No, which reason most support your opinion?
- Marijuana is an addictive, harmful to body and brain.
- It hurts society.
- 7. If Yes, which reason most support your opinion?
- $\bullet~$ Lead to increase in government's revenues
- $\bullet\,$ Lead to decrease in crime and safer neighborhoods
- Lead to more effective in controlling the drug usage

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