Attitudes in 2020 towards medical and recreational marijuana in prohibitionist Nebraska

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ABSTRACT

Background - Despite considerable change in the legal status of marijuana in the United States in the 21st century, the state of Nebraska has seen very little legislative movement. With no legal allowances for medical or recreational use of marijuana, Nebraska has become an outlier in maintaining a complete prohibition on the substance. We examine overall public support for medical and recreational marijuana in the state of Nebraska, as well as support by intrastate region, political party, and the association between stigma and legal support.

Methods - We use data from the 2020 Nebraska Annual Social Indicators Survey (NASIS) which is paper survey mailed to an address-based sample of Nebraskans who are 19 and older. The 2020 NASIS was mailed to 8,000 addresses in Nebraska using a stratified sampling design. Using a question developed by Pew Research Center we ask if participants support legal marijuana for medical AND recreational use, medical use only, or if they think it should not be legal.

Results – We estimate that 83% of Nebraskans support medical marijuana legalization, a clear majority of opinion. Support is more divided between whether the substance should be legal for both medical and recreational use, or just for medical use. There are also associations between support preferences and age, political party, gender, and the amount of stigma a participant reports in their community towards people that use various substances.

Conclusion – A small percent of the Nebraska population are estimated to favor keeping marijuana illegal. The current legislative prohibition is out of step with public opinion in the state, suggesting that ballot initiatives will likely find success in the state should current legislation fail.

Keywords: Legal Marijuana, Nebraska, Public Opinion, Stigma

The announcement that the Judiciary Committee of Nebraska would advance LB 474 to legislative debate came with an acknowledgement of the power public opinion can exert over policy. Chairman Lathrop stated, “The opportunity for us to regulate medical marijuana is strongest if we do it legislatively, rather than try to react to a constitutional amendment that comes to us by way of a petition initiative” (Dunker 2021). Lathrop references both a previous initiative, which collected 196,000 signatures before the wording was unconstitutional, and the new initiative planned should current legislation fail in 2021. The message is if the legislature wants to retain the most control over medical marijuana in Nebraska, they need to do so with Senator Wishart’s LB 474, before a ballot initiative forces the legislative agenda.

Chairman Lathrop is right to be concerned about the possible loss of legislative control. The majority of the states with legal recreational marijuana, legalized through public ballot initiatives, not through legislative action (Beltz, Mosher, & Schwartz 2020). Ballot measures reflect that a majority of Americans support legal marijuana. Gallup reported in 2020 that 68% of Americans think marijuana should be legal, a vast increase over the 12% that supported it when Gallup first asked the question in 1969 (Brenan 2020). The General Social Survey (GSS) reported that 61% of Americans supported legal marijuana in 2018 and more than 50% of Americans have supported legal marijuana since 2014 (General Social Survey 2020). In this paper, we examine public support for recreational and medical marijuana in Nebraska among the general population of adults.

Despite rising national public support, Nebraska remains one of the few states to maintain a complete prohibition on medical and recreational marijuana. As of April 2021, 17 states (AK, AZ, CA, CO, IL, MA, ME, MI, MT, NJ, NM, NV, NY, OR, VA, VT, WA) and the District of Columbia have approved legal recreational and medical use of marijuana. An additional 18 states legalized medical use of marijuana, but continue to prohibit recreational use. Of the remaining 15 states, 13 allow for some products derived from marijuana but with greatly reduced or no purported psychoactive properties. This leaves Idaho and Nebraska as the only remaining two states with complete prohibition.

Nebraska first prohibited marijuana for recreational use in 1927 with HR74 (44th Session 1927). This law made it illegal to import, possess, or cultivate marijuana, but provided exceptions for medical and pharmaceutical use. Nebraska was one of several states in the west and southwest to prohibit marijuana before the federal prohibition in 1937. The first states were California and Utah in 1915, followed by Colorado in 1917, Texas in 1919, Iowa in 1921, and then New Mexico, Arkansas, Nevada, Oregon, and Washington in 1923. In 1927, Idaho, Kansas, Montana, and Nebraska all passed some form of prohibition (Davenport-Hines 2002:240). It is no accident that many of these states were those with higher numbers of migrant workers from Mexico, and that support for marijuana prohibition was often built on racist panics about the threat of Mexican immigrants (Brecher 1972, Davenport-Hines 2002, Musto 1999). Indeed, changing attitudes towards Mexicans at this time were reflected quite clearly by the 1930 US Census which introduced Mexican as a new racial category. Previously, the Census considered anyone from Mexico to be White (Parker et al. 2015). Politicians from the west and plains would continue pressure the federal government to restrict marijuana, leading to the eventual federal prohibition for recreational and medical use with the passing of 1937 Marijuana Tax Act (Musto 1999).

In the years since 1937, the states and the general population have slowly begun to reverse course on their opinions of marijuana and its legality. This change has not been ubiquitous in the United States, with some groups changing their support at higher rates than others. For example, national data

from the GSS revealed higher levels of support for legal marijuana in members of the Democratic party than the Republican party (Denham 2019). Members of both parties are increasingly in favor of legalization, but Democrats are changing their minds at a much faster rate than Republicans, especially since 2004 (Denham 2019).

Another common association found in the GSS is that older individuals have lower levels of support for legal marijuana. Schwadel and Ellison (2017) tested if the association between age and legal support might be explained by birth cohorts – attitudes shared by people born in the same five year period. However, they found that changes in attitudes towards marijuana legalization are far better explained as period effects, meaning there has been a general shift in opinion since 1990 that is not attributable to a birth cohort (Schwadel & Ellison 2017). Other consistent findings from the GSS include that men were more supportive of legalization than women, and, in some years, differences in support were associated with education and region of the country (Denham 2019, Schnabel & Sevell 2017, Stringer & Maggard 2016).

National studies, such as the GSS or polling from Gallup, provide us national estimates of public opinion, but there have been no national changes in marijuana laws. The federal government continues to classify marijuana as a Schedule I controlled substance with no recognized medical use, preventing any legal reform at the federal level. Instead, changes in legality of both medical and recreational use have been among the states.

States are themselves not uniform blocks of support or opposition. Beltz, Mosher, and Schwartz (2020) examined county-level differences in percent voting for recreational marijuana in four different ballot measure election cycles: California 2010, Colorado 2012, Washington 2012, and Oregon 2014. Three of these measures would pass, and the failed California measure would eventually pass in 2016. They found that a higher percentage of men, more Democrats, more people who say they are not Hispanic and White, more college graduates, and more arrests for marijuana possession per 1,000 residents in a county, were associated with a higher percentage of the county voting for marijuana legalization. They did not find an association with the rurality of a county (measured with the USDA's Rural Urban Continuum Codes treated as a continuous variable), the percent of religious adherence, or the percent of people over the age of 65 to be associated with support of legalization. These findings are similar to what Collingwood and colleagues (2018) found when surveying voters in Washington before the 2012 election. There they found associations with gender, political party and political ideology, and religious attendance, but not age, describing yourself as White or not, and marital status (Collingwood et al. 2018).

Attitudes on the legality of marijuana depend upon more than just a person's view of the substance alone. What may be more important is how a person thinks about people who use the substance or who they stereotypically think use the substance. People who use drugs are often stigmatized, a process whereby others view their identity as one that is marked and are then treated differently (Goffman 1963). Stigma can change how a person so marked thinks about themselves, how people they know think about them, and even how people think about hypothetical others who may use drugs (Link et al. 2015). The latter is an important link to policy because the stigma and stereotypes around people who use drugs may influence the attitudes of other people towards laws directed specifically at people who use drugs. A systematic review of stigma towards people with substance use disorders found several commonly endorsed stereotypes: that people who use drugs are dangerous and

unpredictable, have reduced decision making capacity, are blameworthy, less receptive to treatment, and are immoral (Yang et al. 2017). These types of stigma can be associated with policy opinions. A pilot study with an online convenience sample found that higher levels of stigma towards people who use drugs was associated with less favorable opinions about being unwilling to vote for a president with a history of using drugs, and being more likely to equate the harms of heroin with the harms of marijuana (Palamar 2013). Even among people who use drugs, stigma and stereotypes about different types of drugs may lead to very different views about policy. A focus group study in Australia with people who inject drugs found stark differences in opinion about policy that changed the legal status and penalties associated with people who use heroin compared to those who use methamphetamine (Lancaster et al. 2015). Zigon (2019) also reported this type of stigma towards people who use stimulants from people who use other drugs from his work with drug user unions in Europe. Although work on stigma around people who use drugs seems to be just beginning – Yang and colleagues (2017) found only 20 studies to review since 1999 – measuring stigma is likely an important consideration when assessing attitudes towards drug policy and legal changes.

Despite considerable change in the legal status of marijuana in the United States in the 21st century, the state of Nebraska has seen very little legislative movement. With no legal allowances for medical or recreational use of marijuana, Nebraska has become an outlier in maintaining a complete prohibition on the substance. However, the legality of marijuana continues to change with ballot initiatives and direct votes, not legislative action. With that in mind, we sought to answer four questions about public support for medical and recreational marijuana in the state of Nebraska.

Q1: What is the state-wide level of support for recreational and medical marijuana in Nebraska among Nebraskan adults?

Q2: Is support for recreational or medical marijuana associated with political party?

Q3: Does support for medical and recreational marijuana vary by intrastate region and rurality of where a person lives?

Q4: What is the association between an individual's perceived community stigma towards people that use marijuana and stigma towards people who use other drugs associated with support for recreational and medical marijuana?

SAMPLE

We use data from the 2020 Nebraska Annual Social Indicators Survey (NASIS) which is paper survey mailed to an address-based sample of Nebraskans who are 19 and older (19 is the age of majority in Nebraska). Address-based samples provide a high level of coverage for the housed population of the United States and lower cost compared to other survey modes (English et al. 2019; Iannacchione 2011; Link et al. 2008; Shook-Sa et al. 2013). The NASIS is an omnibus survey, and researchers can purchase space on the survey, and is run either yearly or twice yearly by the Bureau of Sociological Research (BOSR) at the University of Nebraska-Lincoln. In 2020, the NASIS was sent to sample of 8,000 addresses in Nebraska. The sample was stratified by the six Behavioral Health Regions in Nebraska and the two largest cities in Nebraska – Omaha and Lincoln. The eight resulting sampling strata are mutually exclusive and 1,000 addresses were selected at random from each strata. A map of these regions and the complete list of counties and ZIP codes used to create these eight strata are listed in the 2020 NASIS methodology report (BOSR 2020).

The 2020 NASIS was fielded between August 4, 2020 and November 20, 2020. All questions and procedures were approved by the IRB and the University of Nebraska-Lincoln. An initial survey packet was sent on July 28, 2020, a reminder postcard was sent on August 5, 2020, and a second survey packet was sent on August 24, 2020. Of the 8,000 addresses in the sample, 11% were returned unopened as a postmaster return due to vacancies, or other address ineligible codes. The overall response rate for the 2020 NASIS was 27.7% (AAPOR RR2). Because of the stratified sampling design, weights were created which account for the chance of selection by strata, within household probability of selection, nonresponse, and post-stratification weights for region, age, and gender. All analyses in this paper use weights in Stata version 15 using the svy command suite. Our data will be publically available after December 1, 2021 by contacting BOSR for a data release (<https://bosr.unl.edu/nasis>). Researchers external to the University of Nebraska are required to complete a data sharing agreement form.

MEASURES

We used a single question about views on marijuana legalization taken from the Pew Research Center's American Trends Panel, Wave 53 (Danillar 2019) and Wave 87 (Van Green 2021). The question reads, "Which comes closer to your view about the use of marijuana by adults?" Participants could respond: "It should be legal for medical AND recreational use," or "It should be legal for medical use only," or "It should not be legal." This question form provides more options for support than yes/no marijuana legalization questions often found in polls.

Stigma is assessed by adapting the brief opioid stigma scale developed by Yang and colleagues (2019). We take their four item awareness scale and adapt it towards people who use marijuana, and for people who uses other substances, creating two separate stigma scales. For both scales, participants were asked how much they agree or disagree with four statements that all start with "Most people in my community believe that a person who uses ____...": ...cannot be trusted; ...is dangerous; ...is to blame for their own problems; ...is lazy. For one scale, we asked participants to answer the questions while thinking about cocaine, methamphetamine, opioids, or heroin – the CMOH scale – and the second scale asked participants to think about marijuana. The CMOH scale was asked first and the blank in the question was filled with "these substances." Participants were then asked to think about marijuana and given the second stigma scale. For this scale, the blank was filled with the word "marijuana." Participants could say strongly disagree (0), disagree (1), neither disagree or agree (2), agree (3), or strongly agree (4). The alpha for the CMOH stigma questions was 0.7797, and 0.8525 for the marijuana stigma questions. Each final scale was constructed by averaging the responses across all four questions.

A total of eight geographic regions are used in analysis. Four of these are complete behavioral health regions defined by county borders: Panhandle, Southwest, South Central, and North. These four represent most of Nebraska's geographic area aside from the southeast. The last four regions are created by splitting the major cities out of their respective behavioral health regions. The cities of Omaha and Lincoln are on their own, both defined by ZIP codes, and the rest of their respective behavioral health regions are left on their own. A full map of these regions and the ZIP codes used to define Omaha and Lincoln are in the 2020 NASIS methodology report (BOSR 2020).

Participants responded if they lived in or on a farm; or in open country, but not on a farm; or if they lived in a town or city. This measures rural and urban variance within our larger regions and within the Omaha and Lincoln areas, both have been expanding rapidly into farming areas. For political party

we asked participants, “In general, what do you consider yourself politically?” Responses were either: Democrat, Republican, Independent, or “Other, specify:” with a write-in field. There were enough responses for both of the latter categories that we left them intact. Recent personal marijuana use measured by self-reported use of marijuana in the past year: yes (1) or no (0).

Age is measured in years and participants were asked if they were male (0) or female (1). The NASIS uses the US Census style questions for race and ethnicity. The first question asks if a participant is Hispanic or Latino/a. The second provides a list of six options and participants may select as many as they wish: White (Caucasian), Black or African American, Asian, American Indian or Alaska Native, Native Hawaiian or Pacific Islander, and Other with a write-in field. Because of low responses to non-White categories, we used a binary indicator for those who are White and not Hispanic or Latino/a (1) as opposed to everyone who is not (0). Using this binary category and with the sampling weights, we estimate that 90% (88.1%-92.0%) of our sample describe themselves as White and not Hispanic or Latino/a. Our estimate is about 12 percentage points higher than the most recent US Census estimate for people that are White alone and not Hispanic or Latino/a in Nebraska of 78.2% (U.S. Census 2020).

ANALYTIC STRATEGY

Listwise deletion of missing data provides a final analytic sample of 1,975 responses. Multinomial logistic regression models in Stata 15 are used with the marijuana support measure as the dependent variable. The measures for age, marijuana stigma, and CMOH stigma were treated as continuous; all other measures used dummy variables. All descriptive and model estimates used the svy command in Stata for complex sampling and post stratification.

RESULTS

The estimated percentages or means for each measure are shown in Table 1. The estimated average age is 50.45 years old, 50.7% are women, and 90.2% are White and not Hispanic or Latino. This latter estimate is higher than US Census estimates for Nebraska in 2019 which estimates that 78.2% of Nebraskans are White alone and not Hispanic or Latino (U.S. Census 2020). The largest political party in our sample is Republican (45.91%), followed by Democrat (25.02%), Independent (23.41%), and 5.65% said they were in another political party.

Regions of Nebraska were defined as eight separate areas based on county borders and ZIP codes. These regions were used as sampling strata to ensure that we had enough responses from each region to make comparisons, and then weighted to estimate proportion of Nebraskans in each region. The estimated percent that lived in a town or city was 81.56%, the remainder split between living on a farm (8.64%), or in open country but not on a farm (9.80%).

The average marijuana stigma scale score is 1.95 and the average CMOH stigma scale score is 2.69. Both scales range in value from 0-4 with a higher score indicating more stigma. We estimate that 10.96% had used marijuana in the past year. In response to the question about marijuana legality, 41% of respondents said that marijuana should be legal for medical and recreational use, 43% said that marijuana should be legal for medical use only, and 16% said marijuana should not be legal.

[Table 1 about here]

There are number of key differences shown in the multinomial logistic regression analysis shown in Table 2. Republicans are consistently different in their odds of supporting legal responses compared

to Democrats, but we do not see statistically significant differences between Democrats and Independents or those in other parties on this issue. Compared to the Omaha region, respondents from the Panhandle, Southwest, and South Central regions were more likely to say that marijuana should not be legal compared to allowing for medical marijuana. Older respondents are more likely to prefer medical marijuana only to recreational and medical, and to prefer that marijuana should not be legal at all compared to medical only. Participants who lived on a farm or in open country were less likely to support recreational and medical marijuana compared to medical marijuana only than those in towns. As participants report higher levels of the marijuana stigma scale, they have lower odds of supporting recreational and medical use, in favor of just medical, but also increasingly favor that marijuana should not be legal at all. The opposite occurs for CMOH stigma scale, where high levels are associated with more support for recreational and medical marijuana compared to medical only, and less support for saying that marijuana should not be legal compared to medical only. Having used marijuana at least once in the past year is strongly associated with being in favor of recreational and medical use of marijuana compared to medical only.

[Table 2 about here]

Using the models from Table 2, we calculate the average adjusted predictions and the 95% confidence intervals of the three legal options in Table 3 and Figures 1-5. Legal preference changes by age dramatically (Figure 1). Support for recreational and medical marijuana is predicted at just over 60% for the youngest participants and falling to 17% at the oldest range. As support for recreational and medical use falls, support for medical use only takes up most of the difference. Support for marijuana not being legal at all is predicted to increase as well, but does not exceed 30% at any age point.

[Table 3 & Figure 1]

Across regions of Nebraska, most of the support is either for recreational and medical, or medical only (Figure 2). Only two regions are estimated to have more than 20% support for marijuana not being legal at all (Southwest and South Central). Most of the regions are estimated to have somewhat close levels of support for the two legalization options, typically with overlapping confidence intervals.

[Figure 2]

We estimate that only 9.7% of Democrats support the not legal option; the remaining support either recreational and medical use (50.1%) or medical only (40.2%) (Figure 3). Republicans do have more support for the not legal position than Democrats at 21.4%, but the plurality favor medical use only (45.7%) with the rest supporting recreational and medical (32.9%). Independent participants are fairly split between recreational and medical support (42.5%) and medical only support (45.8%), with only 11.7% supporting a not legal option.

[Figure 3]

Support of marijuana legal options changes considerably with the amount of stigma towards people who use marijuana in the area where the participant lives. In Figure 4, we show that those who report low area stigma towards people who use marijuana also have a high level of support for recreational marijuana and medical use (77.8%). As reported stigma rises, support for recreational and medical use falls rapidly. A recreational support falls, support for medical use only rises, but then converts to high levels of support for it to be not legal at the highest levels of stigma. We estimate that

54.2% of average participants who said they “strongly agree” with all four stigma questions support keeping marijuana not legal.

[Figure 4]

Reported stigma towards people that use cocaine, methamphetamine, opioids, or heroin (CMOH) in the area where the participant lives is associated with support for marijuana legal options in the opposite fashion (Figure 5). Low levels of stigma towards people who use CMOH is associated with high levels of support for marijuana remaining illegal (44.9%) and low levels of support for marijuana being legal for recreational and medical use (17%). However, those reporting high levels of CMOH stigma reverse their levels of support. Of those reporting the highest area stigma towards CMOH, we estimate that 56.1% support recreational and medical marijuana, and only 8.1% think it should not be legal at all.

[Figure 5]

DISCUSSION

A minority (16.21%) of adult Nebraskans support keeping marijuana illegal. Combining our two response options of legal medical use, we estimate that 83.78% of adult Nebraskans support medical marijuana access, an overwhelming majority. Support for recreational and medical use is high (40.5%), but was not in the majority when the survey was fielded in 2020. Our findings are in line with what Pew recently reported when they fielded the same question in 2021. Pew estimates that 91% of U.S. adults think that marijuana should be legal for medical use and only 8% think it should be illegal (Van Green 2021).

In every region of Nebraska, a small minority think that marijuana should not be legal, exceeding 20% in only two regions (Southwest 25.7%, South Central 20.9%). Low support for prohibition holds for people who are living on farms (16%) or in open country (16.5%), or in a town or city (16.4%). Among Republicans, only 21.4% support keeping marijuana illegal, with lower support in other parties. Legalizing marijuana for medical use has an overwhelming majority in public opinion, and it is largely a bipartisan opinion in the state of Nebraska.

What differences there are for support between the legal options are important, especially geographic differences. Within-state studies have shown that even when states pass recreational marijuana laws there will likely remain considerable opposition in different parts of the states (Beltz, Mosher, & Schwartz 2020). This opposition can change the ways marijuana will be available in those locations through city and county controls over distribution licenses. As with alcohol distribution, local opposition can create “dry” counties, or those with special access laws (e.g. restricting business hours or days). However, opposition and support of marijuana policy is not fixed and will likely continue to shift after laws change. Subbaramn and Kerr (2017) found that support for legal recreational marijuana in Washington increased by 10 percentage points between 2014 and 2016, after the state voted for legalization in 2012. The authors note that favorability towards marijuana increased even among people who had never used the substance, suggesting a larger shift in how the substance is viewed.

The major differences in opinion among Nebraskans seem to be whether marijuana should be available for recreational use or just for medical access. In many regions of the state, we estimate less than a 5% difference in support between these two legalization positions. There are bigger differences based on the type of place a respondent lived. Participants living on a farm or in open country had much lower support for recreational use than those living in a town or city. Republicans also had lower

support for recreational than they did for medical alone, although we estimate 32.9% of Republicans do support recreational use. Compared to the recent national Pew study, support for recreational legalization is lower for both political parties in Nebraska (Van Green 2021). Pew found that 72% of U.S. Democrats support recreational (50.1% NE Democrats) and that 47% of U.S. Republicans support recreational (32.9% NE Republicans) (Van Green 2021). There are also differences by gender, with women having lower support for recreational use than men compared to medical use alone. Support for recreational use also falls quickly as people get older, with estimates of less than a third supporting recreational use over the age of 69.

When studies have measures of stigma available, there is typically an association between stigma towards people who use drugs and attitudes about legality of the substances (Yang et al. 2017). Some of the most dramatic shifts of support in Nebraska are in association with the reported levels of stigma in an area. As a participant's reported level of community stigma towards people that use marijuana rises, there is far less support for either legal marijuana option. The reverse is true for stigma toward people that use cocaine, methamphetamine, opioids, or heroin. In this case, as the level of reported perceived stigma rises, there is higher levels of support for recreational and medical marijuana. Clearly, these measures are capturing something quite different in how perceived stigma and its connection to legal opinions varies by substance type. One piece that may be driving the difference is endorsement of substituting marijuana for opioids. Although evaluations on the extent to which this substitution occurs in states with medical marijuana appears to be mixed (Wendelboe et al. 2019), there is evidence that patients self-report substituting marijuana for opioids (Ishida et al. 2019, Mercurio et al. 2019) and among people who inject drugs (Kral et al. 2015). We focused on comparing stigma towards marijuana to other commonly used illegal substances. However, this leaves us unable to tease apart differences by substances in the CMOH scale itself.

Limitations

A weakness of the CMOH stigma scale is we may have blurred the response by asking about opioids along with cocaine, methamphetamine, and heroin. Substituting marijuana for prescription opioids is a documented response to the current overdose crises (Ishida et al 2019, Mercurio et al. 2019, Wendelboe et al. 2019). In blending this category together, we may have captured items moving in opposite directions. In future studies we will split prescription opioids out of our CMOH scale and potentially split the stimulants from heroin as well. A further weakness of both stigma scales is that they do not provide a range of use. Instead, they contrast opinions about people who use a substance in any way towards those that do not. This masks the reality that a wide range of drug use is possible and that not all use is equivalent to misuse.

Another limitation of this project is the reduced ability to look at differences among non-White populations. Despite an initial mailing to 8,000 addresses and a 27.7% response rate, less than 10% of the sample selected categories that were not White. This leaves us with an excellent sample to discuss variation within people who identify as White in Nebraska, but less room for other categories.

CONCLUSION

It is clear from our estimates that despite a complete marijuana prohibition, the overwhelming majority of adult Nebraskans support medical marijuana and only a small minority think that marijuana should not be legal for adults. However, the nature of what the legal option should be is mixed. Although there is strong support of recreational use of marijuana in Nebraska, we estimate that it rarely

exceeds 50%. Given national trends, support for recreational marijuana among Nebraskans will likely continue to increase in the near future, particularly if neighboring states continue to legalize recreational marijuana and the overall number of states with legal recreational use increases. In the Nebraska Legislature, LB 474 will get a debate with the full legislature, but it is not clear if it will pass, as a previous medical law failed at this stage in 2019 (Dunker 2021). It does seem clear that Nebraska Governor Pete Ricketts intends to oppose LB 474 and may veto the bill. He recently made national headlines when he told reporters that, “If you legalize marijuana, you’re gonna kill your kids” (Lonas 2021). Although we did not ask about perceived risk of use in our study, it is clear that exceptionally few people in Nebraska support continuing the prohibition of marijuana in the state. Should LB 474 fail, the planned ballot measure should find a large base of support among Nebraskan adults.

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Table 1: Estimated Percent or Means of the Measures (N = 1975)

Measures	Estimated % or Mean	Linearized Standard Error	95% Confidence Intervals of the Estimated % or Mean	
Attitudes on Marijuana Use by Adults in Nebraska				
Legal for Medical And Recreational Use	40.50%	1.55%	37.50%	43.58%
Legal for Medical Use Only	43.28%	1.52%	40.32%	46.29%
Should Not be Legal	16.21%	1.07%	14.23%	18.41%
Age (mean)	50.45	0.44	49.56	51.29
Female	50.7%	1.6%	47.6%	53.7%
White and not Hispanic or Latino	90.2%	1.0%	88.1%	92.0%
Political Party				
Democrat	25.02%	1.33%	22.49%	27.73%
Republican	45.91%	1.53%	42.94%	48.92%
Independent	23.41%	1.34%	20.88%	26.15%
Other	5.65%	0.86%	4.19%	7.59%
Region of Nebraska				
Panhandle	3.25%	0.13%	3.00%	3.52%
Southwest	3.07%	0.13%	2.83%	3.33%
South Central	10.08%	0.40%	9.33%	10.89%
North	7.90%	0.35%	7.23%	8.62%
Southeast without Lincoln	16.40%	0.72%	15.03%	17.87%
Midlands without Omaha	11.86%	0.43%	11.05%	12.72%
Lincoln	27.13%	0.91%	25.38%	28.96%
Omaha	20.31%	0.72%	18.93%	21.77%
Do you Live on/in...				
Farm	8.64%	0.70%	7.36%	10.12%
Open country, but not a farm	9.80%	0.80%	8.34%	11.49%
Town or city	81.56%	0.98%	79.56%	83.40%
Marijuana Stigma Scale (mean)	1.95	0.03	1.89	2.00
CMOH Stigma Scale (mean)	2.69	0.02	2.64	2.73
Used Marijuana in the Past Year	10.96%	1.07%	9.03%	13.25%

Table 2: Multinomial Logistic Regression Models Predicting Support for Marijuana Policies (N = 1975)

	Model 1: Legal for Recreational AND Medical Use Compared to Legal for Medical Only				Model 2: Marijuana Should Not be Legal Compared to Legal for Medical Only			
Measure	exp(b)	P-Value	95% CI		exp(b)	P-Value	95% CI	
Age	0.965	<0.001	0.955	0.975	1.013	0.017	1.002	1.023
Political Party								
Democrat		(reference)				(reference)		
Republican	0.387	<0.001	0.246	0.609	2.229	0.001	1.373	3.620
Independent	0.645	0.067	0.403	1.031	1.104	0.748	0.604	2.018
Other Party	1.181	0.699	0.509	2.737	1.743	0.456	0.404	7.525
Gender								
Male		(reference)				(reference)		
Female	0.516	<0.001	0.362	0.736	0.858	0.378	0.609	1.207
Self Described Race								
White and not Hispanic or Latino	1.546	0.154	0.849	2.813	0.752	0.409	0.381	1.482
Not White		(reference)				(reference)		
Nebraska Behavioral Health Regions With Separate Omaha and Lincoln								
Panhandle	1.021	0.949	0.544	1.915	2.201	0.028	1.091	4.440
Southwest	0.708	0.296	0.371	1.353	3.535	<0.001	1.777	7.030
South Central	0.939	0.829	0.532	1.660	2.742	0.004	1.388	5.419
North	0.612	0.121	0.329	1.139	1.782	0.103	0.891	3.565
Southeast without Lincoln	0.603	0.099	0.331	1.099	1.944	0.069	0.949	3.983
Midlands without Omaha	0.614	0.078	0.358	1.056	1.612	0.180	0.801	3.243
Lincoln	1.177	0.554	0.686	2.018	1.962	0.077	0.929	4.143
Omaha		(reference)				(reference)		
Type of Place Where you Live								
Farm	0.443	0.017	0.228	0.862	0.806	0.372	0.502	1.294
Open country, but not a farm	0.475	0.006	0.278	0.812	0.855	0.524	0.528	1.385
Town or City		(reference)				(reference)		
Marijuana Stigma Scale Average	0.357	<0.001	0.284	0.450	2.609	<0.001	1.879	3.622
CMOH Drug Stigma Scale Average	1.904	<0.001	1.419	2.554	0.567	0.001	0.402	0.798
Used Marijuana in Past Year	15.448	<0.001	6.347	37.601	0.185	0.103	0.024	1.410
Intercept	10.423	<0.001	2.873	37.823	0.047	<0.001	0.013	0.170

Table 3: Average Adjusted Predictions of Support Based on Models Presented in Table 2

Measures	Recreational & Medical			Medical Only			Not Legal At All		
	Estimate	Confidence Interval		Estimate	Confidence Interval		Estimate	Confidence Interval	
Age									
19	60.5%	54.2%	66.9%	30.9%	24.9%	36.9%	8.6%	5.6%	11.6%
29	53.9%	49.1%	58.8%	35.4%	30.6%	40.3%	10.6%	7.8%	13.4%
39	47.4%	43.9%	50.8%	39.7%	36.0%	43.5%	12.9%	10.4%	15.4%
49	41.0%	38.4%	43.7%	43.7%	40.7%	46.6%	15.3%	13.2%	17.4%
59	35.1%	32.3%	37.9%	47.1%	44.1%	50.1%	17.8%	15.7%	19.9%
69	29.7%	26.3%	33.1%	49.9%	46.0%	53.7%	20.4%	17.7%	23.2%
79	24.9%	20.9%	28.9%	52.0%	46.9%	57.1%	23.1%	19.2%	27.1%
89	20.7%	16.3%	25.2%	53.4%	46.8%	60.1%	25.8%	20.2%	31.4%
99	17.2%	12.5%	21.9%	54.3%	46.0%	62.7%	28.5%	21.1%	35.9%
Political Party									
Democrat	50.1%	44.4%	55.7%	40.2%	34.3%	46.1%	9.7%	6.4%	13.0%
Republican	32.9%	29.2%	36.5%	45.7%	41.6%	49.9%	21.4%	18.3%	24.4%
Independent	42.5%	37.4%	47.6%	45.8%	40.1%	51.5%	11.7%	8.0%	15.4%
Other Party	51.0%	37.2%	64.9%	34.7%	21.5%	47.9%	14.3%	-0.7%	29.2%
Gender									
Male	45.5%	41.4%	49.7%	38.3%	34.0%	42.7%	16.1%	13.2%	19.0%
Female	36.0%	33.1%	39.0%	47.7%	44.3%	51.1%	16.3%	13.9%	18.7%
Self Described Race									
White and not Hispanic or Latino	41.2%	38.6%	43.9%	42.9%	40.1%	45.8%	15.8%	13.9%	17.8%
Not White	34.2%	26.8%	41.6%	45.3%	35.4%	55.1%	20.6%	12.3%	28.8%
Nebraska Behavioral Health Regions With Separate Omaha and Lincoln									
Panhandle	42.2%	35.1%	49.4%	40.0%	32.3%	47.6%	17.8%	12.9%	22.7%
Southwest	35.0%	28.3%	41.8%	39.2%	32.0%	46.5%	25.7%	20.1%	31.4%
South Central	40.1%	34.3%	45.9%	38.9%	32.7%	45.2%	20.9%	16.1%	25.8%
North	35.2%	28.6%	41.8%	48.0%	40.8%	55.2%	16.8%	12.0%	21.6%
Southeast without Lincoln	34.8%	28.6%	40.9%	47.3%	40.5%	54.2%	17.9%	12.9%	22.9%
Midlands without Omaha	35.5%	30.4%	40.7%	48.9%	42.5%	55.2%	15.6%	11.0%	20.2%
Lincoln	44.9%	39.0%	50.7%	39.2%	32.5%	45.9%	15.9%	10.4%	21.4%
Omaha	44.1%	37.7%	50.5%	46.0%	38.8%	53.2%	9.9%	5.5%	14.3%
Type of Place Where you Live									

Farm	30.8%	22.2%	39.5%	53.2%	44.3%	62.1%	16.0%	11.0%	21.0%
Open country, but not a farm	31.6%	24.8%	38.4%	51.8%	43.7%	59.9%	16.5%	11.6%	21.4%
Town or City	42.1%	39.4%	44.9%	41.5%	38.5%	44.5%	16.4%	14.1%	18.6%
Marijuana Stigma Scale									
Strongly Disagree	77.8%	71.7%	83.8%	21.0%	15.2%	26.8%	1.2%	0.4%	2.1%
Disagree	60.0%	55.7%	64.3%	35.2%	31.0%	39.3%	4.8%	3.1%	6.6%
Neither Disagree or Agree	39.5%	36.7%	42.2%	46.0%	43.0%	49.0%	14.5%	12.4%	16.7%
Agree	22.2%	18.7%	25.6%	45.5%	40.0%	51.0%	32.4%	26.8%	37.9%
Strongly Agree	11.3%	8.0%	14.7%	34.4%	23.9%	45.0%	54.2%	43.0%	65.5%
CMOH Drug Stigma Scale									
Strongly Disagree	17.0%	10.9%	23.2%	38.1%	23.1%	53.1%	44.9%	29.1%	60.7%
Disagree	24.3%	19.0%	29.7%	42.4%	32.9%	51.8%	33.3%	23.7%	42.9%
Neither Disagree or Agree	33.6%	30.3%	37.0%	43.6%	39.1%	48.0%	22.8%	18.8%	26.8%
Agree	44.5%	41.7%	47.3%	41.2%	38.3%	44.2%	14.3%	12.4%	16.1%
Strongly Agree	56.1%	49.6%	62.6%	35.8%	29.5%	42.1%	8.1%	5.4%	10.8%
Used Marijuana in Past Year									
No	36.7%	34.0%	39.5%	46.2%	43.2%	49.2%	17.1%	15.0%	19.2%
Yes	83.6%	74.1%	93.2%	14.8%	5.8%	23.9%	1.6%	-1.3%	4.4%

Figure 1: Predicted Support & 95% CIs by Age

Figure 2: Predicted Support & 95% CIs by Region

Figure 3: Predicted Support & 95% CIs by Political Party

Figure 4: Predicted Support & 95% CIs by Marijuana Stigma

Figure 5: Predicted Support & 95% CIs by CMOH Stigma