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## **Impact of Advertising Marijuana Among Minors in Sacramento**

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Running Head: IMPACT OF ADVERTISING MARIJUANA AMONG MINORS IN  
SACRAMENTO

Impact of Advertising Marijuana Among Minors in Sacramento

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### **Abstract**

California has begun the legal sale and advertising of recreational marijuana in counties, like Sacramento. While retailers are restricted from directly advertising to minors, any form of advertising can be inherently persuasive and studies have shown any exposure to pro marijuana advertising can lower the perceptions of danger and increases the likelihood of use in minors. Gathering advertising data and its effects on minors from Sacramento can help community members, parents, and city officials to better understand the impact of advertising marijuana. A review of relevant literature will discuss the effects pro- and anti-marijuana advertisements can have on minors. Examine the prevalence of advertising on the internet, and gather statistical data from legal states on marijuana use by minors. A mixed method of research will collect data from surveying the perceptions of community members on advertising marijuana. Collecting advertising information from the popular marijuana advertising website Weedmaps.com, and interviews with stakeholders at the Bureau of Cannabis control and Citizens Against Legalized Marijuana. With final results concluding the impact advertising marijuana will have among minors in Sacramento.

## **Introduction**

In November 2016, California voters approved Proposition 64, which immediately decriminalized the use and transport of an ounce of cannabis by residents. Starting on January 2018 California also begun the legal sale by licensed retailers and the purchase by residents 21 years or older of up to an ounce of cannabis. California joined eight states, including the District of Colombia, that have legalized recreational cannabis and five states that have established an open market for sale of cannabis products (Robinson, 2018). Most notable states are Colorado, and Washington, which passed legal cannabis in 2012, as well as Oregon in 2015. These three states were some of the first in the nation to bypass federal law and decriminalized the use and sale of recreational cannabis within their state boundaries. While California may be new to recreational marijuana its medical marijuana market has been established for over 20 years when voters approved the 1996 passage of Proposition 215. Becoming the first state in the nation to legalize medical marijuana California's set a precedence that has since saw, 29 states and the District of Colombia enacted medical marijuana laws of their own (Hanson, 2018).

Despite over half the states in the nation approving some form of marijuana sales, the federal government has never changed its position on it. The federal Controlled Substance Act still classifies cannabis as a "schedule 1" drug that has a high potential for abuse and currently no accepted use for medical treatments in the United States (usdoj.gov, 2016). While the federal government still considered cannabis a harmful drug in 2013, under President Obama's administration the Justice Department issued an update to their marijuana enforcement policy in response to state initiatives to legalize cannabis use and sales. The statement reiterated that cannabis is still illegal under federal law and, "The Department expects these states to establish strict regulatory schemes" (justice.gov, 2013). Furthermore the DOJ states, "These schemes must

tough in practice, not just on paper, and include strong, state-based enforcement efforts, backed by adequate funding” (justice.gov, 2013). If states gave these assurances the DOJ stated, “It is deferring its right to challenge their legalization laws at this time.” But reserve the right to prosecute if “stated harms do materialize” (justice.gov, 2013). This essentially gave states the freedom to continue the great experiment of legal cannabis sales, without fear of federal prosecution.

Since then, President Trump’s administration has rescinded this attempt by the federal government to establish a position and let states regulate themselves. As of 2018 the DOJ again updated its Marijuana Enforcement Policy stating, “Attorney General Jeff Sessions directs all U.S. Attorneys to enforce the laws enacted by congress and to follow well-established principles when pursuing prosecution related to marijuana activities” (justice.gov, 2018). States that had established a legal cannabis market without fear of federal interference, now no longer have that assurance. “It’s the mission of the department of Justice to enforce the laws of the United States, and previous issuance of guidance undermines the rule of law and the ability of our local, state, tribal, and federal law enforcement partners to carry out this mission” (Sessions, J., AG, 2018).

This flip-flopping by the federal government has added more questions to the effectiveness of states regulating cannabis on their own, and a particular grey area is the regulation is the advertising of marijuana. States have established regulations on advertising that include print, broadcast, televised and digital media, with Colorado and Washington using the existing tobacco and alcohol regulations to model marijuana regulation. “Voluntary standards adopted by the alcohol industry direct the industry to refrain from advertising where more than approximately 30 percent of the audience is reasonably expected to be under the age of 21” (Colorado Department of Revenue, 2018). Ultimately the State Licensing Authority concluded.

“In order to prevent advertising that has a high likelihood of reaching minors, it is appropriate to model the Retail Marijuana Advertising restrictions on this voluntary standard used by the alcohol industry” (Colorado Department of Revenue, 2018). California’s advertising regulations are similar, but more restrictive than Colorado’s, with California’s stating, “Any advertising or marketing placed in broadcast, cable, radio, print, and digital communications shall only be displayed where at least 71.6 percent of the audience is reasonably expected to be 21 years of age or older, as determined by reliable up-to-date audience composition data” (California Code of Regulations, 2018).

### **Statement of the Problem**

While both states restrict retailers from directly targeting minors, advertisements can still be displayed on storefronts, billboards, city buses, and digitally. Web pages such as, YouTube, and Facebook, along with smart phone apps has made digital media the easiest, and quickest way for minors to view cannabis advertisements. States like Colorado have age verification regulations in place for websites selling and promoting cannabis products, but enforcing those regulations is difficult and time consuming. Studies have shown many cannabis websites do not have age restricting verifications in place, allowing minors to view and participate in cannabis communities unrestricted. California’s regulations have the intentions of limiting minors from viewing cannabis advertisements, but with advertising in public still allowed. What will be the impact of advertising marijuana in cities like Sacramento?

The research collected in this paper will help determine an answer to that question. First we must understand the perceptions of the people that live in communities where marijuana advertising is present. Surveying adult perceptions of the acceptable or unacceptable nature of

the advertising can have on minors can help determine is a danger is present in allowing marijuana advertising in public. Second conducting research online focusing on the website Weedmaps.com, to investigate the online advertising practices among recreational marijuana retailers in Sacramento City. Researching retailers to determine if they market marijuana for recreational purposes only or for both recreational and medical use also. Examine health claims made by retailer, determine retailers that have a website outside of Weedmaps. Examined if age restriction for viewing the website is present, such as birthday verification to determine the user is over 21. This research can help determine the willingness of California regulations compliance from online recreational and medical marijuana retailers. Finally conducting interviews with stakeholders can further address the impact from recreational marijuana advertising exposure among minors.

### **Significance of the Study**

The Federal trade Commission (FCC) has remained silent of this issue and maintains the stance that cannabis is a “Schedule 1” drug, still illegal federally and remains open to prosecution. With the once persuasive, targeted and now heavily regulated tobacco advertising campaigns, studies have shown that minors perceptions of danger decrease when they seek out or unintentionally view advertising, which increases the potential of early use. The further study of state regulation and cannabis advertising are important in assessing the risks to public health, federal law and changing perceptions of marijuana and its benefits and hazards to minors. Researching the question, what will the impact be of advertising marijuana among minors in Sacramento? With a hypothesis that advertising marijuana in Sacramento will have a significant impact on declining the perception that marijuana is harmful among minors.



Then gathering this data in Sacramento could aid city officials in better understanding what the impact will be of advertising marijuana among minors in Sacramento? All responsible parties have the best intentions regarding advertising marijuana and limiting exposure to minors, but negative effects can still occur with the best intentions. This is why further research is necessary, by studying the states that have come before California, interviewing key informants and surveying community perceptions of advertising marijuana. This research can gauge the impact of advertising marijuana among minors in Sacramento minors.

### **Limitations**

This study will focus on the risk factors and potential impact of minors being exposed to cannabis advertising. Minors will not be directly involved in research collection. Therefore determining the impact of advertising marijuana among minors in Sacramento will be based on three areas of data collection. 1. Community perceptions and opinions on marijuana ads and minors. 2. Digital advertising practices and prevalence. 3. Interview responses by Sacramento stakeholders at the Bureau of Cannabis control and Citizens Against Legalized marijuana.

### **Impact of Research**

Gathering data in Sacramento could aid city officials in a better understanding on the impact of advertising marijuana among minors in Sacramento. All responsible parties have the best intentions regarding advertising marijuana and limiting exposure to minors, but negative effects can still occur with the best intentions. This is why further research is necessary to gauge the potential impact of advertising marijuana among minors in Sacramento.

### **Purpose of the Study**

California, the most populated state in the nation has legalized the sale and advertising of recreational marijuana to adults over the age of 21. A 2018 PEW research study found that 61% of Americans now favor legalizing marijuana (Geiger, 2018). More states will follow in California's footsteps and begin to allow the recreational sale and advertising of marijuana. The research collected in this study can help state official and community's members determine if advertising marijuana is having a significant or insignificant impact on minors exposed. As this "great experiment" unfold it is important not to forget past research into cigarette and tobacco advertising that has showed exposure to minors significantly increased usage. More research is needed to determine what path states must follow regarding recreational marijuana advertising and the exposure to minors.

### **Research Question and Hypothesis**

This research will examine the question, what will the impact be on advertising marijuana among minors in Sacramento? With a research hypothesis that advertising marijuana in Sacramento will have a significant impact on among minors declining the perception that marijuana is harmful. The research presented in this study will ultimately lead to a recommendation that regulations are adequate, further regulation is needed or should marijuana advertising be banned altogether.

### **Definition of Terms**

**Audience composition data:** "Demographic (age, gender, education level, etc.) Characteristics and geographic location of the listenership, readership, or viewership of a particular advertising medium" (businessdictionary.com, 2017).

### **Literature Review**

Recreational sale of cannabis may be in its infancy in California, but medical marijuana sales and its advertising have been established for over twenty years. *Gateway to Curiosity* a study focuses on the advertisement of medical marijuana and the changing attitudes towards it (D'Amico, Miles, & Tucker, 2015). The authors form a link between accessibility and changing tolerations of marijuana among adults, resulting in a perception by adolescents as it being more beneficial and less harmful. "Exposure to medical marijuana advertising may be an important influence on adolescents' perceptions about marijuana and marijuana use" (D'Amico, et al., 2015). The authors present an association between alcohol advertisements and eventual drinking among adolescents stating, "Regulations should be put in place on medical marijuana and recreational marijuana advertising, similar to regulations that are in place for the advertising of alcohol and tobacco products" (D'Amico, et al., 2015). They conducted a similar study of adolescents with the mean age of 13, over the course of 2010 and 2011 that comprised of 8,214 adolescents (D'Amico, et al., 2015).

The results showed, 22 percent of adolescents in 2010 and 30 percent in 2011, reported seeing at least one advertisement for medical marijuana on billboards or in magazines within three months (D'Amico, et al., 2015). Concluding, "Youth who reported seeing any ads for medical marijuana were twice as likely as youth who reported never seeing an ad to use marijuana and to report higher intentions to use marijuana 1 year later" (D'Amico, et al., 2015). They recommend professionals, "Must begin to educate young people about medical marijuana" (D'Amico, et al., 2015). Suggesting development of regulatory standards across the board, which "Could help decrease potentially numerous problems similar to those that have occurred with both alcohol and tobacco advertising" (D'Amico, et al., 2015).

*Gateway to Curiosity* forms a link between adolescents viewing advertisements and a higher intention to use. Many Marijuana advertisers are turning to digital media (i.e. social media, Twitter, Facebook, YouTube, Instagram, Cannabis websites, & smart phone applications), while these digital mediums are regulated by states like Colorado, it's difficult to detect and enforce age restrictions among them. This problem is further detailed by the authors of a study titled *Marijuana Advertising Exposure Among Current Marijuana Users in the U.S.* Surveying 742, people ranging 18-34 years old through anonymous online surveys the authors state, "We examined the prevalence of advertising exposure among young adult marijuana users through traditional and new media, and identified characteristics associated with seeking advertisements" (Krauss, Sowles, Sehi, Spitznagel, Berg, Bierut & Cavazos-Rehg, 2017). The survey sought data from individuals "passively viewing," and "actively seeking," marijuana advertisements and concluded 66 percent of the young adults viewed or heard marijuana advertisements in the past 30 days were its legal (Krauss, et al., 2017).

The majority of those advertisements, 67 percent came from digital media social sites like, Facebook, Instagram, Twitter and traditional websites like Weedmaps. Sites do take actions against the advertising of illegal drugs and Facebook has previously shut down pages prompting marijuana dispensaries (Krauss, et al., 2017). This is however difficult to maintain and enforce by states if websites neglect to participate through age restricting software. An examples of this is the website Weedmaps, a popular marijuana dispensary locator that does not have age restriction in place (Krauss, et al., 2017). The authors conclude that although their study did not specifically target younger youths, "The prevalence of young adult users who see such advertisements online and on social media sites where youth are known to spend a lot of time highlights the need for increased monitoring as well as research into better methods to regulate

online advertising” (Krauss, et al., 2017).

### **Significance of Literature**

The significance of these two studies presents a snapshot of how advertising cannabis affects minors and adults aged (18-34), and how further study on the impact advertising will have on minors is needed. *Gateway to Curiosity*, presented through surveying middle school students “Exposure to advertising for medical marijuana, marijuana intentions, and marijuana use.” “Showed a reciprocal association of advertising exposure with marijuana use and intentions during middle school” (D’Amico, et al., 2015). *Marijuana Advertising Exposure Among Current Marijuana Users in the U.S* findings concluded, “As more states legalize both medical and recreational marijuana consumption, it will be important to monitor who is exposed to advertisements, including youth and non-users, where advertisements are being seen, and the content of such advertisements in order to provide recommendations” (Krauss, et al., 2017).

### **Digital Marijuana Advertising**

Digital advertising and social media sharing are the most prevalent and accessible forms of marketing marijuana. The regulations regarding digital advertising vary, for example, Colorado requires that 30 percent of the audience be reasonably expected to be 21, age affirming software must be present on sites containing marijuana advertising, and no health claims can be made (Colorado Department of Revenue, 2018). Researchers examined the advertising content, and age verification practices on Weedmaps.com, along with health claims, and the characteristics of social media followers (Bierut, Krauss, Sowles, Cavazos-Rehg, 2016). The authors reviewing 146 retailers that are listed on Weedmaps from Colorado (89) and Washington (57), found that Weedmaps itself has no age restriction and among the independent retailers

listed, 41 percent (31/76) in Colorado, and 35 percent (13/37) in Washington lacked any form of restriction to verify the user's age before entering the website (Bierut, et al., 2016).

Health claims were also routinely made by advertisers and the authors found 61 percent in Colorado, and 44 percent in Washington made health claims such as treatment of depression, anxiety, and to control or aid with cancer, diabetes, skin irritations, and post-traumatic stress (Bierut, et al., 2016). As for the characteristics of Weedmaps users found, "Weedmaps had the greatest number of followers on Facebook (over 130,000) and YouTube (nearly 150,000), followed by Twitter (58,000), with 15 percent being under the age of 20" (Bierut, et al., 2016). The authors conclude that the internet is a constantly changing platform, but by capturing a snapshot of the current methods of online marijuana advertisements conclude, "Online advertising often emphasizes unproven health benefits without describing known harms of use. We additionally underscore practices that are worth regulators' consideration including targeting customers via social media and lax age restrictions prior to viewing content that may not suitable for children" (Bierut, et al., 2016).

### **Significance of Literature**

Marijuana retailers have a significant presence and well established advertising campaigns on the internet. Age verification was not present in 44 out of 113 Colorado, and Washington retailer listed online through Weedmaps.com. Finally online retailers routinely made health claims that had no scientific evidence behind them, and detailing no adverse affects. "Media literacy education about the influence of online advertising on marijuana use norms may be helpful in mitigating the harms of pro-marijuana use media messages among youth" (Bierut, et al., 2016). This study is significant to understanding the impact advertising on the internet will

have on minors.

### **Effects of Anti-Marijuana Advertising on Minors**

Understanding the effects of minors who view pro-marijuana advertisements and their intentions on use. Can a link can be drawn between minors that view pro-marijuana advertisements increases likelihood to use, between anti-marijuana advertisements having the reverse effect. The authors of, *Television campaigns and adolescent marijuana use: Tests of sensation seeking targeting*, a study supporting the need of targeted antidrug advertisements according to age range. Collected data using two communities where televised anti-marijuana advertisements were shown, then “Interviews were conducted with 100 randomly selected teenagers monthly in each county for 32 months” (Palmgreen, Donohew, Lorch, Hoyle, & Stephenson, 2001).

Examining the connection between anti-marijuana advertising and sensation seeking adolescents researchers state, “Interviews assessed television viewing and exposure to public service announcements, attitudes toward and use of marijuana and other substances,” with the, “population cohorts initially in grades 7 to 10” (Palmgreen, et al., 2001). They concluded, “With carefully targeted campaigns that achieve high levels of reach and frequency, and with messages designed specifically for the target audience on the basis of social scientific theory and formative research, we believe that public service announcements can play an important role in future drug abuse prevention efforts” (Palmgreen, et al., 2001).

Recent studies continue to support this conclusion on “carefully targeted ads,” and the authors of, *Adolescents’ Attitudes Towards Anti-marijuana Ads, Usage Intentions, and Actual Marijuana Usage*, conducted a study to determine if anti-drug ads have an effect on future or

current drug use. The “attitude towards the ads” was measured through data collected by the National Survey of Parents and Youth and computer assisted personal interviews on a sample size of 2,993, 12-to-18 year olds. The researchers state, “This study was designed to examine the relationship between respondents’ evaluations of marijuana prevention ads, their intentions to use marijuana, and their subsequent marijuana use after accounting for current usage status” (Johnson, & Nakawaki, 2013). The researchers hypothesize that “respondents who evaluate anti-marijuana ads favorably will be less likely to intend to use the substance and less likely to initiate usage 1 year later” (Johnson, & Nakawaki, 2013).

The study evaluated over a dozen ads featuring, “celebrity testimonials, refusal skills, alternatives to drugs, physical harms of use, and so forth” (Johnson, & Nakawaki, 2013). Measuring the respondent’s attitude towards marijuana, intentions to use marijuana, and actual marijuana use. The study used an independent variable of attitudes towards antimarijuana advertisements and a dependent variable of a decrease in desire to use by minors. Finding that the early interventional advertisements are introduced to potential users, they can be effective in curtailing use, but overall late stage users they had little to no effect on their potential use. “The next step that logically follows from these findings is to isolate specific ad features that appealed to individuals who fell along different points of the marijuana user continuum” (Johnson, & Nakawaki, 2013).

These authors examined the effectiveness of anti-marijuana advertising on young adults and concluded ads need to be carefully targeted to specific age ranges, attitudes and current use. What are the factors that make one anti-marijuana ad more effective than the other? The author of *Comparing Effects of “My Anti-Drug” and “Above the Influence” On Campaign Evaluations and Marijuana-Related Perceptions* studied this phenomenon. Testing the attitudes and



effectiveness of two different anti-drug video Public Service Announcements on 96 students with an average age of 21 (Comello, 2013). The author states a problem with the fundamental message of antimarijuana advertisements stating, “Although billions of taxpayer dollars have funded televised national campaigns to prevent youth substance use, most of these efforts have had null or even adverse effects” (Comello, 2013). The two advertising campaigns were designed to curb youth drug abuse, but targeted different attitudes and emotions to do so the author measures the effectiveness of the two.

The earlier used “My Anti-Drug” (MAD) was developed using the help of advertising agencies and behavior experts and ran from 1999 to 2004. MAD conveyed a mostly negative; fear based advertising campaign that highlighted the damaging consequences of drug use (Comello, 2013). MAD was deemed a failure and was overhauled in 2005 for the “Above the Influence” (ATI) campaign, which concentrated on more positive actions for avoiding marijuana. Comello states, “Increased personal autonomy and other positive consequences of avoiding substances, such as being able to pursue career goals or exciting activities” (Comello, 2013). The author determines, “Although differences emerged for emotional tone and perceived risk, there were no differences observed for attitude toward campaign or mean attitude toward ad” (Comello, 2013). With a conclusions that, “Targeting marijuana risk perceptions alone is not effective” and offers “An implication for future research is to determine what types of narratives evoke the optimal balance between negative and positive emotions with respect to drug prevention issues” (Comello, 2013).

### **Significance of Literature**

The potential influence of marijuana advertising exposure on minors is widely

understood by professionals and states. Anti-marijuana campaigns have had only a limited success at curbing drug use in the past. Fear-based anti-marijuana advertising is not as effective as emotional goal oriented campaigns (Comello, 2013). Carefully targeted anti-marijuana advertising can be as effective as anti-tobacco advertising campaigns in curbing use (Palmgreen, et al., 2001).

### **State Findings on Marijuana Advertising Effects on Minors**

Understanding the effectiveness of pro marijuana and anti-marijuana advertising discussed above, helps conclude that advertising in any aspects is a powerful medium in increasing or decreasing marijuana use among minors. Have legalized states that allow advertising like Oregon, Colorado and Washington seen this increased use in minors? *Exposure to Marijuana Marketing After Legalization of Retail Sales: Oregonians' Experiences, 2015–2016*, a study to examine this question was initiated in Oregon to, “To assess exposure to marijuana advertising in Oregon after the start of retail marijuana sales in October 2015” (Fiala, Dilley, Firth & Maher, 2018). Surveying over four thousand adults over 18 in 2015 and again in 2016, the findings report that 54.8 percent or half of the adults saw marijuana advertising in the past month, with over 50 percent of that advertising coming from storefront, street side and billboards (Fiala, et al., 2018). The authors note that exposure was not limited to only users, but “People who do not use marijuana and those aged 18 to 24 years were as exposed to advertising as other groups” (Fiala, et al., 2018).

The findings further showed there was a limited exposure to marijuana health warnings with, “Nearly 5 times as many adults overall reported near daily exposure to marijuana advertising 7.4 percent compared with health risk messages 1.5 percent” (Fiala, et al., 2018). The

authors conclude due to the mass appeal of advertising it will be difficult from stopping minors from viewing marijuana advertising. “Because of the positive association between industry marketing and youths’ tobacco<sup>[1]</sup> and alcohol use, advertising exposure will likely increase the appeal of marijuana for youths” (Fiala, et al., 2018).

Colorado and Washington State have also studied to determine if youth marijuana use has increased after legalization and conducted the 2015, Healthy Kids Colorado Survey, and the 2016, Washington State Healthy Youth Survey. The surveys resulted in both states concluding that marijuana use rates among teens have remained steady despite the legalization and sale of recreational marijuana. The data in both states did determine that the perceived risk of regular marijuana use is declining with Colorado seeing a drop from 54 percent in 2013 to 48 percent in 2015 (Healthy Kids Colorado Survey, 2015). While Washington saw a drop from 53 percent to 48 percent in 8<sup>th</sup> graders that perceive marijuana use as risky, and emphasizing “decreases in perceived risk are often followed by increased use” (Washington State Healthy Youth Survey, 2016).

The literature reviewed in this chapter sought to show a link between advertising marijuana and Retailers are banned from targeting advertising to minors but with the prevalence of internet advertising along with peer-to-peer interaction on social media minors will be exposed to advertising. Retailers will unintentionally encourage this attraction by making marijuana edibles mimicking popular candy names, brands and package designs. Along with giving marijuana childish, catchy names like “Fruity Pebbles,” will contribute to minors’ curiosity in seeking out advertisements.

### **Significance of Literature**

Surveying over 4,000 residents on cannabis advertising prevalence in Oregon showed half of adults saw marijuana advertising, and exposure was not limited to only users, “people who do not use marijuana and those aged 18 to 24 years were as exposed to advertising as other groups” (Fiala, et al., 2018). 2015, Colorado Survey, and 2016, Washington State Survey concluded that marijuana use rates among teens have remained steady despite the legalization of recreational marijuana. Interestingly both states did both see a drop in perceived risk of regular marijuana use in minors surveyed that could lead to a potential increase of use among them. Major California studies on ad prevalence and exposure to minors have yet to be concluded, and makes further research into marijuana advertising regulations essential to understanding the effects of minors viewing marijuana as less harmful.

### **Summary**

The literature reviewed focused on the persuasiveness advertising can have on minors and exposed an established presence of marijuana advertising on the internet and social media. Data collected from surveying minors showed a link between minors exposed to marijuana advertising and a greater likelihood to use than those who are not. This finding recommended the need for minors to be better educated on understanding the negative impact marijuana can have on their development. Further literature examined anti-marijuana ads, and the effects they can have on informing minors about the dangers of marijuana smoke. The results concluded that anti-drug ads could be effective educating and curbing marijuana use among minors. The literature reviewed sought to show a link that advertising any message can be a powerful influencer among minors. This literature supports the need for further research on a potential

impact advertising adult use marijuana will have on minors in Sacramento. The final section of the literature review examines what changes states have found among minors and use since the legalization of adult use marijuana. Statistical data was gathered by Colorado and Washington State from surveying over five thousand middle school students on marijuana use. While the states reported no significant increase in minors using marijuana, the survey found perception of marijuana use being dangerous was declining among youth. These findings are still significant in supporting the hypothesis that marijuana ads could eventually increase the use among minors that perceive marijuana as less harmful.

### **Research Methodology**

To understand an impact from advertising marijuana among minors, the research design will use a mixed method of data collection. First, this study will focus on adult use marijuana retail practices and compliance with state regulations. Secondly, Sacramento community members will be surveyed to gauge public opinion on advertising marijuana and sentiment on the potential impact among minors. Thirdly, interviews with members of the Bureau of Cannabis Control and Citizens Against Legalized Marijuana will seek to understand an impact from marijuana advertising.

### **Research Question**

What will the impact be of advertising marijuana among minors in Sacramento? The research question seeks to show a significant or insignificant impact from advertising adult use marijuana. Survey responses on ad prevalence, interviews with stakeholders, and examining internet advertising methods, will contribute to understanding the impact among minors.

### **Research Hypothesis**

Advertising marijuana in Sacramento will have a significant impact by contributing to a declining perception among minors that marijuana use can be harmful.

### **Data Collection**

Data collection will come from using a mixed method approach of quantitative and qualitative data. As minors are not directly involved in this study, the research design will use three areas of data collection. Surveying adult perceptions, examining ad methods and stakeholder interviews will determine support for the hypothesis.

### **Survey on Perceptions of Advertising Marijuana in Sacramento**

A target population of Sacramento community members over the age of 21 will be surveyed on views of advertising. Minors will not be surveyed so to understand a potential impact of advertising marijuana, adult views will be used. Using SurveyMonkey.com, a ten response questionnaire will be developed to gauge perceptions, tolerations, and positions on advertising marijuana. With the ultimate outcome being to capture measureable data on community members attitudes and opinions on a potential significant or insignificant impact advertising marijuana will have on minors in Sacramento. This survey will be disseminate through social media among Sacramento residents. The ability to measure perceptions will determine support for the research hypothesis.

### **Replicating the Examination of Advertising Marijuana on Weedmaps**

To understand the impact of advertising marijuana among minors in Sacramento, data must be collected on current methods used by marijuana retailers. This research will replicate the study, *Exploring Marijuana Advertising on Weedmaps, a Popular Online Directory*. Conducted by, Bierut, Krauss, Sowles, and Cavazos-Rehg, and referenced in the chapter two literature review. This replicated examination will focus on advertising characteristics Sacramento marijuana retailers that advertise on Weedmaps.com. Collecting information on, age restriction, health claims and social media presence by retailers. this data can create a snapshot of current internet advertising methods and the impact digital advertising could have on minors.

### **Interviews with Stakeholders**

Informative interviews with Sacramento's Bureau of Cannabis Control, Chief of Communications Alex Traverso will discuss city views and any potential impact advertising

could have among minors. Additionally an interview with Carla Lowe the Northern Chair of Citizens Against Legalized Marijuana will discuss the issues with regulating marijuana advertising.

### **Dependent and Independent variables**

Through research and data collection this study will examine the independent variable of advertising recreational marijuana among minors in Sacramento; and the relationship on the dependent variable minors perceptions on marijuana use. Examining marijuana advertising will determine if advertisings is effective at influencing minors.

### **Operational Definitions**

**Regulations:** Key Regulations (Full list found in [Appendix A.](#))

- Advertising or marketing placed in broadcast, cable, radio, print, and digital communications shall only be displayed where at least 71.6 percent of the audience is reasonably expected to be 21 years of age or older
- Market cannabis or cannabis products in a manner intended to encourage persons under 21 years of age to consume cannabis or cannabis products (California Code of Regulations, 2018).

**Sacramento City:** A city within greater Sacramento County with a population of just under five hundred thousand and as of January 16, 2018 has approved the sale by 22 retailers of recreational marijuana of up to 1 ounce (ABC10.com, 2018).

**Minors:** Adolescents and young adults aged (12-20) who cannot legally buy recreational marijuana in California.

**Bureau of Cannabis Control** - State regulation and enforcement agency.



**Citizens Against Legalized Marijuana** – A Volunteer political action committee dedicated to defeating legalized marijuana.

**Weedmaps.com** – The largest marijuana retailer dispensary website that lists retailers and advertises products

**Age verification** – conformation of being over a specific age before entering a website.

### **Procedure and Analysis**

Qualitative data gathered will be gathered from survey perceptions and an stakeholder interviews. Quantitative data gathered from an examination of Weedmaps.com, on age verification and health claims made. Gathering this information could help determine if online advertisers are following regulations. These regulations are important to protect consumers from false statements, because marijuana is often associated with positive health claims. Studies have shown minors are especially susceptible to advertising claims, therefore its crucial to understanding an impact among minors. Data collected from surveying adult perception will we analyzed to determine the mindset and views of community members. determining support or lack of support for recreational marijuana advertising. Finally interviews with Sacramento agencies can gather first hand information on advertising regulation struggles. Primary data from interviews can be analyzed to determine what areas of advertising city agencies are focusing on. This data collected from these three areas will determine support for the research hypothesis.

### **Challenges to Data and Validity**

There are numerous pressures and reasons why minors may use marijuana such as peer pressure, social conformity, lifestyle, and the black market. These threats along with minors not

being involved in the study present a challenge to data collection. The data collected by this study will come from Sacramento community members over the age of 21. Threats to data collection are preconceived notions, and current lifestyles.

### **Limitations**

Minors (below the age of 21) will not be involved in this research. Determining an impact among minors will be determined from perceptions of community members, online advertising prevalence, and interviews with stakeholders.

### **Summary**

Quantitative and qualitative data gathered through surveys, examining online retailers, and interviews with stakeholders is the methodology of this study. The data collected could aid city officials in a better understanding on the potential impact advertising marijuana could have among minors in Sacramento. All responsible parties have the best intentions, but negative effects can still occur with the best intentions. This is why further research is necessary for understanding the potentially significant or insignificant impact among minors exposed to marijuana advertising.

## **Results and Findings**

The finding of this research will determine an impact of advertising recreational marijuana among minors in Sacramento. The hypothesis of this study states advertising will present a significant impact among minors. Contributing to a declining perception that marijuana use is harmful. The data presented below will determine support for the research hypothesis.

### **Examination of Advertising Marijuana on Weedmaps**

Starting April 25th through April 30th an examination of the online advertising practices was conducted among recreational marijuana retailers in Sacramento City. The examination focused on Weedmaps.com, an internet site where retailers can create a page to advertise their business and products. On April 25, 2018 the Sacramento list of licensed recreational marijuana retailers was obtained through the Cannabis Policy & Enforcement office. The list included 28 retailers, and included license numbers, and addresses, which were then used to locate retailers on Weedmaps.com. Data collection included information regarding age verification, health claims, and social media characteristics. Having a Weedmaps page that displayed information and product advertising determined the eligibility for a retailer to be examined. Additionally if the retailer provided a link to an independent website, that website was examined for age verification.

Collection methods were based on the following criteria, 28 state licensed retailers currently operating in Sacramento. Of these 17 (61 %) were listed on Weedmaps, and 10 (36 %) operated an independent business website. Both of the retailers Weedmaps page and independent websites were examined for (1) Age verification, (2) Health claims, and (3) social media presence. 60 % (17/28) of recreational marijuana retailers in Sacramento were listed on

weedmpas.com. Majority of the retailers listed their business on Weedmaps.com, supporting the selection of Weedmaps.com for this examination.

### **Website Age Verification**

At the time of data collection Weedmaps did not require a user to be over 21 years of age. Only if a listed retailer required age verification on their independent website would a Weedmaps user be prompted with age verification to view that retailers product. (59 %) (10/17) of the examined marijuana retailers operated an independent website. Among these independent websites, 80 % (8/10) required the viewer to click “Yes” to being over 21 years of age before entering. Only 2 Sacramento retailers’ websites required no age verification from viewers, and 100 % of the examined independent websites did not require the viewer to enter a birthdate.

### **Health Claims**

Of the retailers listed on Weedmaps 59 % (10/17) made health claims about the products being advertised. These health claims suggested relief from such conditions as anxiety, depression, insomnia, general pain, glaucoma, appetite loss, and cancer. 50 % (5/10) of independent websites displayed a Proposition 65 warning, stating marijuana smoke has been known to cause cancer.

### **Examples of Product Description with Health Claims**



### Lemonade

SATIVA

1G	2G	1/8
22.00	---	---

Lemonade is suitable for pain relief, insomnia, and anxiety reduction.



### Deadhead

HYBRID

1G	2G	1/8	1/4	1/2	OZ
15.00	---	48.00	---	---	---

Deadhead has some strong heavy body effects. This strain helps with patients combating depression and anxiety, also a pain and stress reliever. Sold in pre-weighed grams and eighths.



### Girl Scout Cookies

HYBRID

1G	2G	1/8	1/4	1/2	OZ
15.00	---	50.00	---	---	---

Girls Scout Cookies is a cross between OG Kush and Durban Poison. This Cannabis Cup award winning strain is an Indica dominant hybrid with a strong Sativa component. The high is powerful, euphoric and effective at treating stress, depression, anxiety and appetite loss.

## Social Media Presence

Of the 17 retailers with a Weedmaps page 71 % (12/17) included a Facebook web link, with approximately 6,500 total number of followers. 71 % (12/17) of the retailer provided an Instagram link that totaled nearly 18,000 followers and 41 % (7/17) provided a Twitter link that

totaled over 2,300 followers. 25,000 total followers across the three main social platforms Facebook, Instagram and Twitter is found to be marginal, considering the population of Sacramento is half a million. This suggest as of right now marijuana advertising on social media in Sacramento is not widespread.

### **Summary**

Data collection replicated the process used by authors Bierut, Krauss, Sowles & Cavazos-Rehg in their examination of Washington and Colorado state retailers advertising on Weedmaps. This study was scaled down to encompass only the city of Sacramento, but produced a similar snapshot of current advertising practices among adult use marijuana retailers. The findings on the presence of age verification on both Weedmaps and independent websites surprisingly differed from the original study. The Bierut study found age verification largely lacking with a presence of 55 % from 113 online marijuana retailers across two states. Though on a smaller scale the findings for Sacramento showed a majority 80 % (8/10) of Sacramento online marijuana retailers required age verification before entering.

This studies examination shared similarities with the Bierut study both finding Weedmaps itself did not require users to be over 21. California regulation requires age verification only when, “advertising or marketing involving direct, individualized communication or dialogue” (California Code of Regulations, 2018). The effectiveness verification has at stopping under age viewers is debatable, but is nonetheless a tool at limiting underage viewership of marijuana advertising. The findings from Sacramento showed 80 % of retailers proactively employed this tool to limit underage users. Over half, 59 % (10/17) of Sacramento retailers were found to present health claims that attributed positive effects to the

consumption of marijuana. This is similar to the Bierut study, which also found over half 54 % (79/146) of Washington and Colorado retailers advertising on Weedmaps made positive health claims.

California regulations stipulate that health-related statements cannot be untrue or create a misleading impression as to the effects of cannabis use (California Code of Regulations, 2018). This is a gray area in regulation enforcement as medical findings regarding the health benefits of marijuana are debatable and scientific research can be argued for both sides. The Sacramento findings did reveal, half 50 % (5/10) of the independent websites displayed a Proposition 65 warning stating marijuana smoke has been known to cause cancer. In 2009 marijuana smoke was added to a list maintained by the California's Office of Environmental Health Hazard Assessment, which requires warning labels on marijuana products (oehha.ca.gov, 2018). Retailers posted this statement on their websites willingly, even though current California regulation does not require websites to display a proposition 65 warning (Grimaldi, 2018),

Weedmaps popularity among users and retailers made it a candidate for examining internet advertising methods. One of those methods is the use of social media sites like Facebook, Instagram, and Twitter. This emerging free form of advertising is an easy and effective way at promoting their business and products. The total number of followers across these three social media platforms used by Sacramento retailers was roughly 27,000 followers. Sacramento's population is approximately 500,000, if all 27,000 followers were speculated to be Sacramento residents that would equal less than 1 % of the population are participants' in social media advertising. While it is difficult to determine the age of these users, the Sacramento study reveals no significant impact from this form of advertising among minors. However the popularity of social media among minors and the potential growth of the marijuana industry still

present valid concerns. From this research it is determined that several factors will contribute to a significant decline in minors perceiving marijuana use as harmful to them. Without further regulation regarding the naming of marijuana products, defining what health claims are allowed or not allowed, and tougher age verification to enter websites. The perceptions of marijuana use being harmful among minors will steadily decline.

### **Interview with Stakeholders**

On May 24, 2018 Interview questions were emailed to members of the state Bureau of Cannabis Control (BCC) and Citizens Against Legalized Marijuana (CALM). Responses were received from Mr. Alex Traverso, Chief of communications with the BCC and Mrs. Carla Lowe Northern Chair of CALM. An understanding from first hand accounts of regulation enforcement and opposition efforts at stopping advertising marijuana offers key insight to this research. The informants were e-mailed questions that sought to understand what violations in advertising has Sacramento encountered, what steps were taken to enforce advertising regulations, and what dangers does advertising marijuana pose among minors in Sacramento?

In an e-mail response May 30, 2018, Chief of Communications Alex Traverso with the BCC responded to the questions above. His responses offer information into the main state cannabis agency and how they are addressing advertising regulations and violations. Alex Traverso's response to the question, "What challenges does internet advertising of adult use marijuana pose for your office?"

This has also been a big issue for us through the first five months of legalization. Getting the state's regulatory system up and running has been quite an effort in itself, but we quickly had to turn our attention to Weedmaps and other online platforms that advertise



illegal businesses. We sent Weedmaps a cease and desist letter several months ago. They sent a letter back in response. Now we've been working with Consumer Affairs to determine possible next steps (May 30, 2018).

The letter Traverso references was a cease-and-desist order sent in February 2018 by the BCC and the city of Sacramento to Weedmaps.com. According to author John Schroyer, the letter insisted, "California law mandates that any online advertisement of a marijuana business must include that company's state license number, a rule Weedmaps has not complied with" (2018). The BCC and city agencies contend that license numbers give to marijuana advertisers by Weedmaps is not the valid license number required by state law. The letter notes that Weedmaps must remove any and all businesses and advertisements from their website that do not have a state issued license number (Schroyer, 2018). In March 2018, Weedmaps responded to the BCC and city letters stating, "The company is not licensed by the bureau and therefore not subject to its enforcement" (Branan, 2018). Alex Traverso states,

We used online platforms like Weedmaps and others to identify illegal businesses and sent those businesses cease and desist letters. After the initial 700 letters we sent, we followed up and found that nearly 20 percent of those that received a letter had done one of the following things: 1) Created an online account on our licensing system; 2) Applied for a license; 3) Pulled their advertisement; or 4) Shut down their business. So the letters were pretty effective, but we know we have to do more to follow up on complaints as we receive them (May 30, 2018).

The regulation and enforcement of recreational marijuana advertising is relatively new in California. Mr. Traverso reiterates this stating, "Again, this is going to take some time... We need

to continue to build our team, particularly on the enforcement side, so we can ensure that all of our regulations are being followed to the letter” (May, 2018). Part of this study examined other states that have legalized recreational marijuana. This examination included surveys conducted by the American Public Health Association on cannabis advertising prevalence in Oregon. These surveys revealed advertising exposure was not limited to cannabis users, but those aged 18 were as exposed. It is important to understand the impact advertising can have when exposure is not limited to an intended audience. Mr. Traverso’s response to the question, “What similar challenges does Sacramento expect to encounter regarding adult use marijuana advertisements?” Stating,

It’s tough to compare California with other states that legalized before we did. We certainly talked to other regulators to hear some of the challenges they faced, but there are so many differences with California that it’s hard to know what to expect. We just have to remain flexible and do our best to resolve issues as they arise (May, 2018).

Stakeholder and opposition leader, Carla Lowe Northern Chair of Citizens Against Legalized Marijuana, argues that California advertising regulations will fail to stop minors from being exposed. Lowe references the state budget as the reason as it will not be large enough to go after every advertisement violation in a timely manner and the majority of recreation marijuana funds will be used to enforce regulation. Lowe expects California to face the same challenges that have presented themselves in other states that have marijuana advertising. She highlights two key statistics CALM supports that are directly resulted from advertising marijuana.

“Advertising is a key motivator to human behavior. As advertising increases, we can expect greater marijuana use. We can look to results in Colorado that legalized marijuana five years ago: Youth use is 74% higher, and ER visits for marijuana use increase 49%” (Lowe, 2018).

Lowe suggest that California regulations will not properly limit exposure to minors and states,

“It will be extremely difficult for the State to limit or regulate advertising to minors because of lack of funds for enforcement. However, federal regulations will carry with them funds to enforce at least the major violators of advertising restrictions. Until the federal government becomes actively involved in limiting advertisements in California, there is no hope to reducing further proliferation and use of marijuana for our youth” (Lowe, 2018).

Lowe gives examples of this “proliferation” among youth by sharing letters that CALM has received from minors.

“Recent letters to us from minors wonder why we are opposed to the use of such a wonderful drug with such healing powers. This is exactly the message the marijuana industry makes through all advertising media to promote sales of the drug, regardless of the disastrous health effects on users” (Lowe, 2018).

### **Summary**

Alex Traverso highlights an increasing popularity of advertising marijuana on the internet through websites like Weedmaps. The California recreational marijuana industry has advanced rapidly since the start of sales in January 2018. Cities like Sacramento have experienced unanticipated results to internet advertising and have had to adjust regulation accordingly. The importance of these interviews is to understand how stakeholders are addressing issues regarding

marijuana advertising. Stakeholder Alex Traverso discussed current BCC efforts to regulate major internet advertiser Weedmaps.com. Results of 20% of internet advertisers complying with the cease-and-desist letters, along with Weedmaps response to the BCC suggests regulatory agencies will struggle with future online advertising. Stakeholder, Carla Lowe offered insight into CALM and its efforts to educate youth and the public about the dangers of advertising recreational marijuana.

### **Surveying Perceptions of Advertising Adult Use Marijuana**

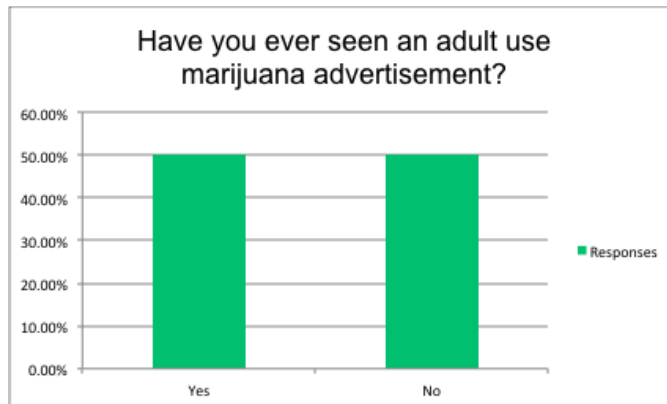
Starting May 30, 2018 and ending June 11, 2018 surveys were initiated to capture data on community member's opinions on the impact of advertising marijuana will have among minors in Sacramento. Data was collected through SurveyMonkey.com and disseminate through Facebook to known Sacramento residents. Respondents were asked to answer a 10-question survey titled, *Opinions On Advertising Adult Use Marijuana In Sacramento*: Q1, "What is your age?" (response options range from 18 to 50+). Q2, "Have you tried marijuana?" (Response options, Yes, No, Prefer not to answer). Q3, "What is your current position on adult use marijuana?" (Response options, For, Against, No position). Q4, "Have you ever seen an adult use marijuana ad?" (Response options, Yes, No). Q5, "Have you ever heard an adult use ad?" (Response options, Yes, No). Q6, "Have you ever seen an adult use marijuana ad on social media or the internet?" (Response options, Yes, No). Q7, respondents were asked to fill in the blank, "The ads I saw or heard (\_\_\_\_) my concerns on the dangers of marijuana use." (Responses options, Increased, Decreased, Did not effect). Q8, "Marijuana use among minors (under 21) can have harmful effects to their development?" (Responses ranged from 1= strongly disagree to 6= strongly agree, 0= I haven't seen or heard one). Q9, "Minors (under 21) who are exposed to marijuana ads (TV, radio, print, billboards, websites and social media) will be more likely to

use?” (Responses ranged from 1= strongly disagree to 6= strongly agree, 0= I haven’t seen or heard one). Q10, “I support the advertising of adult use marijuana?” (Response options, Yes , No, No position).

## Results

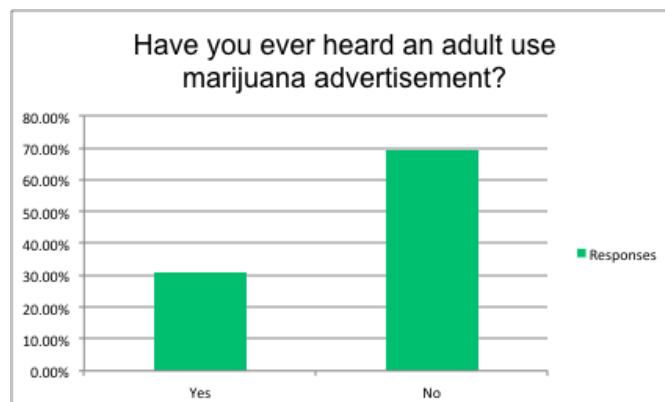
The survey sample size consisted of 42 individuals from the Sacramento city area. With Respondents ages ranging from (19-20, 2%), (21-29, 33%), (30-39, 24%), (40-49, 19%), and (50 & above, 21%). 67 % of the respondents reported having tried marijuana before, while 33 % have never tried it. 33 % of respondents supported recreational adult use marijuana, 21% were against it, and 45 % had no position. Figures A, B, and C represent ad methods and exposure among Sacramento respondents.

**Figure A.**

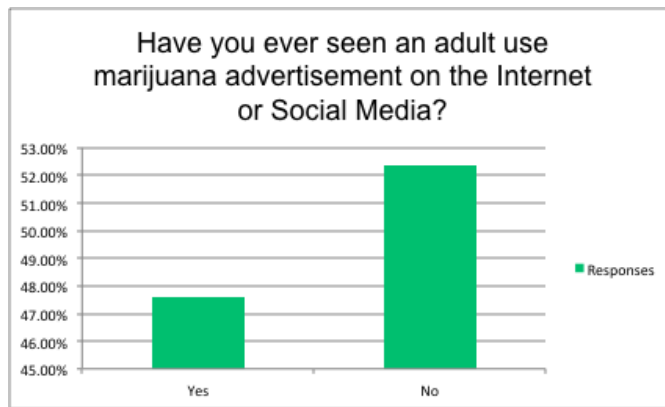


N=42

**Figure B.**



N=42



**Figure C.**

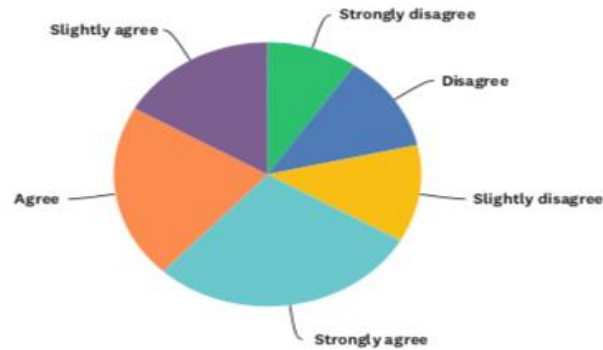
N=42

Opinions on seeing or hearing marijuana advertisements and if it increased or decreased concerns on the dangers of marijuana use showed, 24 % the ad had increased their concerns. 17 % the ad had decreased their concerns and the majority 45% selecting the ads did not affect their concerns on marijuana dangers. Figure D represents opinions to Question 8.

**Figure D.**

### Q8 Marijuana use among minors (Under 21) can have harmful effects to their development.

Answered: 42 Skipped: 0

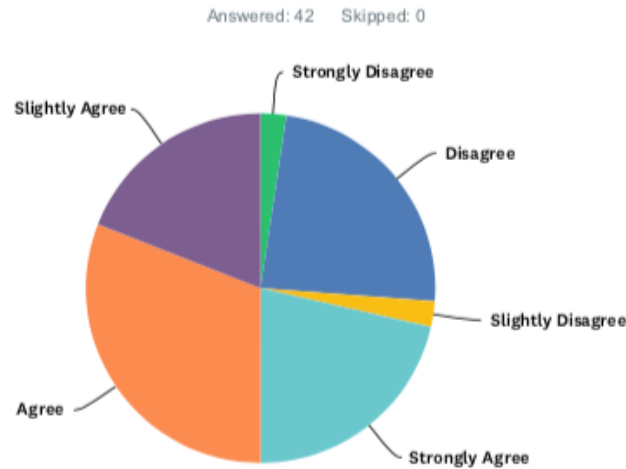


ANSWER CHOICES	RESPONSES	
Strongly disagree	9.52%	4
Disagree	11.90%	5
Slightly disagree	11.90%	5
Strongly agree	28.57%	12
Agree	21.43%	9
Slightly agree	16.67%	7
I haven't seen or heard one	0.00%	0
<b>TOTAL</b>		<b>42</b>

1= strongly disagree, 2= disagree, 3= slightly disagree, 4= agree, 5= slightly agree and 6= strongly agree. Data shows, strongly disagree ( $4 \times 1 = 4$ ), disagree ( $5 \times 2 = 10$ ), slightly disagree ( $5 \times 3 = 15$ ), agree ( $9 \times 4 = 36$ ), slightly agree ( $7 \times 5 = 35$ ), and strongly agree ( $12 \times 6 = 72$ ). Total score =  $4 + 10 + 15 + 36 + 35 + 72 = 172$ , points =  $172 / 42 = 4.1$ , majority 67% agree with the survey statement. The same math was applied to question 9, Figure E with data showing  $1 + 20 + 3 + 52 + 40 + 54 = 170$ , points  $170 / 42 = 4.0$ , or 71% agree with the statement.

**Figure E.**

**Q9 Minors (Under 21) who are exposed to marijuana advertising (TV, Radio, Print, Billboards, Websites, Social Media) will be more likely to use.**



Of the 42 respondents, 31% responded “Yes” to the statement I support marijuana advertising,” While 29% maintained “No position.” 40% responded with “No,” concluding the majority of the Sacramento community members does not support recreational marijuana advertising.

### Summary

The survey findings gathered data on community members’ exposure, views, and stance toward marijuana advertising. Results show that current marijuana exposure among Sacramento community members, ages ranging from 19-50 are minimal. Respondents’ who had or had not



seen an advertisement was split evenly at 50%. 69% of respondents' had not heard an ad, and 52% had not seen an ad on the internet or social media. This data suggests that current advertising of marijuana in Sacramento will have a insignificant impact among minors (under 21). Results do conclude the majority of the respondents agreeing with two-survey statement. Firstly, marijuana is harmful to the development of minors (67% agreed), and, secondly advertising exposure among minors will increase their likelihood to use (71% agreed) lends support the hypothesis. Concluding that recreational marijuana advertising in Sacramento will contribute to a declining perception among minors that marijuana use is harmful.

## **Conclusions and Recommendations**

### **Conclusions**

Recreational marijuana sales have been underway in Sacramento for the past 6 months. In this small amount of time the marijuana industry has already resulted in millions of dollars in sales and tax collection. Regulatory agencies, retailers, and community members must always be conscious that with great sums of money, comes great responsibility. The findings of this research do show a willingness by marijuana retailers to place age verification on their websites and offer both sides of information regarding health claims. Survey responses found current advertising exposure was limited to half (50%) of those surveyed had seen an advertisement. This in addition with retailers that use social media having only 25,000 total followers across the three main social media sites, Facebook, Instagram, and Twitter is found to be marginal considering the population of Sacramento is half a million. This suggest as of right now marijuana advertising in Sacramento is not widespread.

Despite this finding the majority of those surveyed were concerned over advertising, and data suggests online advertisements will be difficult to enforce by regulatory agencies. 40% of community members surveyed did not support advertising recreational marijuana and 71% agreed it would likely increase use among minors. The data collected ultimately supports the research hypothesis that advertising marijuana will contribute in a decline of the perceived risk from using marijuana among minors in Sacramento. Previous research on cigarette advertising and its effectiveness at influencing minors to smoke has set a precedence on the potential for marijuana ads to also influence minors. To this researchers knowledge this is the first such study conducted on understanding the impact of advertising among minors in Sacramento.

### **Recommendations**

The following recommendations are proposed to regulatory agencies, retailers and lawmakers. These recommendations are based upon the research findings of this study and are suggested to reinforce already in place regulations regarding advertising recreational marijuana. By strengthening current advertisement regulations, it is possible to deter or delay the supported hypothesis of this paper.

1. The Bureau of Cannabis Control must further regulate the naming of marijuana products and cartoonish labeling. In order to stop any positive perceptions and relationships between the naming of marijuana variants and known products associated with children. It is recommended by this research that the BCC by January 1, 2019, categorize and assign state serial numbers to all marijuana variants. With any future marijuana variants be submitted to state agencies for assigned serial number naming. This is recommended to remove established name loyalty, name associations and curiosity. This recommendation along with the data from the examination of Weedmaps.com will be presented to Alex Traverso Chief of Communications at the Bureau of Cannabis Control by July 1, 2018.

### **Examples of Product Names**

- a. Lemonade
- b. Girl Scout Cookies
- c. Thin Mint Cookies

### Examples of Cartoonish Labeling and Characters



2. The Bureau of Cannabis Control must clearly define what health claims are allowed or not allowed. Minors are especially susceptible to health claims through advertisements. Therefore it is recommended the BCC and city regulatory agencies by January 1, 2019 initiate state sponsored medical studies to determine if health claims can be supported by medical research. If health claims are determined scientifically, it shall be branded on product labeling as well as advertisements similar to the Federal Drug Administration (FDA). This recommendation will be presented to Alex Traverso Chief of Communications at the Bureau of Cannabis Control by July 1, 2018.
3. Tougher age verification “age-gates”, to enter websites must be established. This recommendation will be presented to the California Cannabis Industry Association (CCIA) by July 1, 2018. The CCIS must begin to inform Sacramento retailers that age-gates must be mandatory and more restrictive than current methods. Examples of tougher age-gates include: users are required to enter birthday information, users are required to

enter state drivers license or identification number, users are required to enter a credit card number. These examples could be easily adopted by retailers to strengthen age verification on websites.

4. It is recommended the Bureau of Cannabis Control expand youth education as well as advertising on early marijuana use dangers among minors and be adopted by January 1, 2019. California Department of Public Health currently maintains an informative website that details marijuana effects on the health, brain, goals, and driving of minors. This program must be expanded using recreational marijuana tax revenue allocated to a separate fund with its main priority being to inform and education minors in Sacramento. This recommendation will be presented to Alex Traverso Chief of Communications at the Bureau of Cannabis Control by July 1, 2018.

## References

- Alvaro, E.M., Crano, W.D., Siegel, J.T., Hohman, Z., Johnson, I., & Nakawaki, B. (2013). Adolescents' Attitudes Toward Antimarijuana Ads, Usage Intentions, and Actual Marijuana Usage. *Psychology of Addictive Behaviors*, Vol. 27, No. 4, 1027-1035. doi: [10.1037/a0031960](https://doi.org/10.1037/a0031960)
- Barcott, B. (2017, September 06). First Cannabis Ad Runs on CNN, Fox News, and MSNBC. Retrieved February 18, 2018, from <https://www.leafly.com/news/politics/first-cannabis-ad-runs-on-cnn-fox-news-and-msnbc>
- Bierut, T., Krauss, M.J., Sowles, S.J., Cavazos-Rehg, P.A. (2016). Exploring Marijuana Advertising on Weedmaps, a Popular Online Directory. *Society for Prevention Research*, No. 18, 183-192. doi 10.1007/s11121-016-0702-z
- Branan, B. (2018, March 12). Weedmaps to Bureau of Cannabis Control: You don't have the authority to police us. Retrieved June 6, 2018, from <http://www.sacbee.com/news/state/california/california-weed/article204783469.html>
- California Code of Regulations, Bureau of Cannabis Control, Title 16, Division 42. Article 4 & 5040. (2018). Retrieved January 20, 2018, from [https://govt.westlaw.com/calregs/Document/I683039CDC2054CC9A41CBFE647BB91AD?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Document/I683039CDC2054CC9A41CBFE647BB91AD?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default))
- Code Section Group. (n.d.). Retrieved March 01, 2018, from [http://leginfo.legislature.ca.gov/faces/codes\\_displayText.xhtml?lawCode=BPC&division=10.&title=&part=&chapter=15.&article](http://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=BPC&division=10.&title=&part=&chapter=15.&article)
- Colorado Department of Revenue, Marijuana Enforcement Division, 1 CCR 212-2, R 1104. (2013, September 9). Retrieved January 20, 2018, from [https://www.colorado.gov/pacific/sites/default/files/Retail%20Marijuana%20Rules,%20Adopted%20090913,%20Effective%20101513%5B1%5D\\_0.pdf](https://www.colorado.gov/pacific/sites/default/files/Retail%20Marijuana%20Rules,%20Adopted%20090913,%20Effective%20101513%5B1%5D_0.pdf)
- Comello, M. G. (2013). Comparing Effects of “My Anti-Drug” and “Above the Influence” On

Campaign Evaluations and Marijuana-Related Perceptions. *Health Marketing Quarterly*, 30(1), 35-46. doi-10.1080/07359683.2013.758014

D'Amico, E.L., Miles, J.N.V., & Tucker, J.S. (2015). Gateway to Curiosity: Medical Marijuana Ads and Intention and Use During Middle School. *Psychology of Addictive Behaviors*, Vol. 29, No. 3, 613-619. doi: <http://dx.doi.org/10.1037/adb0000094>

Dispensaries - City of Sacramento. (n.d.). Retrieved April 25, 2018, from <http://www.cityofsacramento.org/Finance/Revenue/Sacramento-Marijuana-Information/Business-Information/Dispensaries>

Drug Schedules. (n.d.). Retrieved February 18, 2018, from <https://www.dea.gov/druginfo/ds.shtml>

Fiala, S. C., Dilley, J. A., Firth, C. L., & Maher, J. E. (2018). Exposure to Marijuana Marketing After Legalization of Retail Sales- Oregonians' Experiences, 2015-2016. *American Journal Of Public Health*, 108(1), 120-127. doi-10.2105/AJPH.2017.304136

Geiger, Abigail. (2018, January 5). About six-in-ten Americans support marijuana legalization. Retrieved April 30, 2018, from <http://www.pewresearch.org/fact-tank/2018/01/05/americans-support-marijuana-legalization/>

Grimaldi, A. (2018, January 25). Just When You Thought You Had California Figured Out: Proposition 65 Can Threaten Your Cannabis Business. Retrieved June 6, 2018, from <https://www.cannabisbusinessexecutive.com/2018/01/just-thought-california-figured-proposition-65-can-threaten-cannabis-business/>

Hanson, K. (2018, February 15). State Medical Marijuana Laws. Retrieved February 18, 2018, from <http://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx>

Justice Department Announces Update to Marijuana Enforcement Policy. (2013, August 29). Retrieved February 18, 2018, from <https://www.justice.gov/opa/pr/justice-department-announces-update-marijuana-enforcement-policy>

Justice Department Issues Memo on Marijuana Enforcement. (2018, January 04). Retrieved February 18, 2018, from <https://www.justice.gov/opa/pr/justice-department-issues-memo-marijuana-enforcement>

- Krauss, M.J., Sowles, S.J., Sehi, A., Spitznagel, E.L., Berg, C.J., Bierut L.J., & Cavazos-Rehg, P.A. (2017). *Marijuana Advertising Exposure Among Current Marijuana Users in the U.S. Drug and Alcohol Dependence*, No. 174, 192-200. doi.org/10.1016/j.drugalcdep.2017.01.017.
- Mason, A.W. Ph.D., Fleming, C.B. M.A., Ringle, J.L. M.A., Hanson, K. M.A., Gross, T.J. Ph.D., & Haggerty, K.P. M.S.W., Ph.D. (2016). Prevalence of Marijuana and Other Substance Use Before and After Washington State's Change from Legal Medical Marijuana to Legal Medical and Non-Medical Marijuana: Cohort Comparisons in a Sample of Adolescents. *Department of Health and Human Services*, Vol. 37(2), 330-335. doi:10.1080/08897077.2015.1071723
- Marijuana Smoke Listed Effective June 19, 2009 As Known To The State Of California To Cause Cancer. (2016, February 25). Retrieved June 5, 2018, from <https://oehha.ca.gov/proposition-65/cmr/marijuana-smoke-listed-effective-june-19-2009-known-state-california-cause>
- Marijuana Use Among Youth in Colorado, Healthy Kids Colorado Survey* (Rep.). (2016). Retrieved February 18, 2018, from Department of Public Health and Environment website: [https://www.colorado.gov/pacific/sites/default/files/PF\\_Youth\\_HKCS\\_MJ-Infographic-Digital.pdf](https://www.colorado.gov/pacific/sites/default/files/PF_Youth_HKCS_MJ-Infographic-Digital.pdf)
- Oregon Secretary of State. (n.d.). Retrieved February 19, 2018, from <https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=239093>
- Palmgreen, P., Donohew, L., Lorch, E. P., Hoyle, R. H., Stephenson, M. T. (2001). Television campaigns and adolescent marijuana use: Tests of sensation seeking targeting. *American Journal of Public Health*, Washington, Vol. 91, Iss. 2, 292-6. Retrieved from <https://0-search.proquest.com.library.ggu.edu/docview/215118021?pq-origsite=summon>
- Roditis, M.L., Delucchi, K., Chang, A., Halpern-Felsher, B. (2016). Perceptions of social norms and exposure to pro-marijuana messages are associated with adolescent marijuana use. *Preventive Medicine*, Vol. 93, 171-176. <https://doi.org/10.1016/j.ypmed.2016.10.013>.
- Robinson, M. (2018, January 23). Here's where you can legally smoke weed in 2018. Retrieved February 18, 2018, from <http://www.businessinsider.com/where-can-you-can-legally-smoke-weed-2018-1/#alaska-1>



Schroyer, J. (2018, March 07). California orders Weedmaps to stop advertising unlicensed marijuana businesses. Retrieved June 6, 2018, from <https://mjbizdaily.com/california-orders-weedmaps-stop-advertising-unlicensed-marijuana-businesses/>

*Washington State Healthy Youth Survey, 2016 Analytic Report* (Rep.). (2017, June). Retrieved February 18, 2018, from Looking Glass Analytics, Inc. website: <https://www.doh.wa.gov/Portals/1/Documents/Pubs/160-193-HYS-AnalyticReport2016.pdf>

{{ ngMeta.title }}. (n.d.). Retrieved April 25, 2018, from <https://weedmaps.com/>

## Appendix A

### CHAPTER 15. Advertising and Marketing Restrictions [26150 - 26156]

- (a) “Advertise” means the publication or dissemination of an advertisement.
- (b) “Advertisement” includes any written or verbal statement, illustration, or depiction which is calculated to induce sales of cannabis or cannabis products, including any written, printed, graphic, or other material, billboard, sign, or other outdoor display, public transit card, other periodical literature, publication, or in a radio or television broadcast, or in any other media; except that such term shall not include:
  - (1) Any label affixed to any cannabis or cannabis products, or any individual covering, carton, or other wrapper of that container that constitutes a part of the labeling under provisions of this division.
  - (2) Any editorial or other reading material, such as a news release, in any periodical or publication or newspaper for the publication of which no money or valuable consideration is paid or promised, directly or indirectly, by any licensee, and which is not written by or at the direction of the licensee.
- (c) “Advertising sign” is any sign, poster, display, billboard, or any other stationary or permanently affixed advertisement promoting the sale of cannabis or cannabis products which are not cultivated, manufactured, distributed, or sold on the same lot.
- (d) “Health-related statement” means any statement related to health, and includes statements of a curative or therapeutic nature that, expressly or by implication, suggest a relationship between the consumption of cannabis or cannabis products and health benefits, or effects on health.
- (e) “Market” or “Marketing” means any act or process of promoting or selling cannabis or cannabis products, including, but not limited to, sponsorship of sporting events, point-of-sale advertising, and development of products specifically designed to appeal to certain demographics.

#### 26151.

- (a) (1) All advertisements and marketing shall accurately and legibly identify the licensee responsible for its content, by adding, at a minimum, the licensee’s license number.
- (2) A technology platform shall not display an advertisement by a licensee on an Internet Web page unless the advertisement displays the license number of the licensee.
- (3) An outdoor advertising company subject to the Outdoor Advertising Act (Chapter 2 (commencing with Section 5200) of Division 3) shall not display an advertisement by a licensee unless the advertisement displays the license number of the licensee.
- (b) Any advertising or marketing placed in broadcast, cable, radio, print, and digital communications shall only be displayed where at least 71.6 percent of the audience is reasonably expected to be 21 years of age or older, as determined by reliable, up-to-date audience composition data.
- (c) Any advertising or marketing involving direct, individualized communication or dialogue controlled by the licensee shall utilize a method of age affirmation to verify that the recipient is 21 years of age or older before engaging in that communication or dialogue controlled by the licensee. For purposes of this section, that method of age affirmation may include user confirmation, birth date disclosure, or other similar registration method.

(d) All advertising shall be truthful and appropriately substantiated.  
26152.

A licensee shall not do any of the following:

- (a) Advertise or market in a manner that is false or untrue in any material particular, or that, irrespective of falsity, directly, or by ambiguity, omission, or inference, or by the addition of irrelevant, scientific, or technical matter, tends to create a misleading impression.
- (b) Publish or disseminate advertising or marketing containing any statement concerning a brand or product that is inconsistent with any statement on the labeling thereof.
- (c) Publish or disseminate advertising or marketing containing any statement, design, device, or representation which tends to create the impression that the cannabis originated in a particular place or region, unless the label of the advertised product bears an appellation of origin, and such appellation of origin appears in the advertisement.
- (d) Advertise or market on a billboard or similar advertising device located on an Interstate Highway or on a State Highway which crosses the California border.
- (e) Advertise or market cannabis or cannabis products in a manner intended to encourage persons under 21 years of age to consume cannabis or cannabis products.
- (f) Publish or disseminate advertising or marketing that is attractive to children.
- (g) Advertise or market cannabis or cannabis products on an advertising sign within 1,000 feet of a day care center, school providing instruction in kindergarten or any grades 1 through 12, playground, or youth center.

26153.

A licensee shall not give away any amount of cannabis or cannabis products, or any cannabis accessories, as part of a business promotion or other commercial activity.

26154.

A licensee shall not include on the label of any cannabis or cannabis product or publish or disseminate advertising or marketing containing any health-related statement that is untrue in any particular manner or tends to create a misleading impression as to the effects on health of cannabis consumption.

26155.

- (a) The provisions of subdivision (g) of Section 26152 shall not apply to the placement of advertising signs inside a licensed premises and which are not visible by normal unaided vision from a public place, provided that such advertising signs do not advertise cannabis or cannabis products in a manner intended to encourage persons under 21 years of age to consume cannabis or cannabis products.