

The Case for Mary Jane: A Study of Student Perceptions on Marijuana Legalization

By

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About the Author

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Abstract

Marijuana legalization is continuously up for debate in the legislature and throughout the United States, many states have legalized a variety of marijuana uses and decriminalized minor marijuana offenses. While many studies have been conducted on individuals' opinions and perceptions on marijuana use and legalization, these studies are lacking in Texas.

This research primarily examines the attitudes and perceptions of undergraduate and graduate students, enrolled in Political Science and Public Administration programs at Texas State University. This research was accomplished through the distribution of a survey that focused on four categories: position, use, opinions/perceptions, and demographics. The research found that 89.4% of these students are for marijuana legalization. Additionally, student classification and parental status play a significant role in whether an individual is for or against marijuana legalization. The study also found that, although there is no correlation between age and annual income on student stance of marijuana legalization, as individuals age and their annual income increases, they are less likely to support marijuana legalization.

This study focused on student opinions/perceptions as public opinion is a strong driver of future legislative issues and the purpose for change. These students are potential future political and public leaders in Texas which could shape the future of marijuana in the state. Therefore, it is important that studies such as this one be conducted throughout Texas to gain insight and understanding as to what is driving Americans to change their views towards marijuana. By doing so, Texas representatives can make informed decisions for the wellbeing and interests of their citizens.

Chapter I: Introduction

In the last two decades, the topic of marijuana legalization has been debated in the news, social media, and in the legislature. From the decriminalization of marijuana offenses to the legalization of all forms of marijuana usage, the impact this would have on society and the economy is of great concern to many, both positively and negatively. Throughout the years, legislatures throughout the United States have heard countless stories from families regarding the need to consider medicinal uses for pain mitigation and to ease the burden on families with sick and afflicted members. The recent change in outlook towards this illegal substance is apparent and the public's views are changing and moving towards the want for national legalization for all uses as seen in many national polls (Gallup, 2018; Pew Research Center, 2018).

Although it appears that many Americans are leaning towards national legalization, there are those out there that are vehemently opposed to its legalization of any form. First and foremost is the federal government that classifies marijuana as a Schedule I narcotic (United States Drug Enforcement Administration [DEA], (n.d.b); Kamin, 2015; Scherf, 2015). The federal government consistently takes a strong stance against legalizing and decriminalizing this drug which creates confusion and conflict to many citizens throughout the U.S, especially those living in states in which marijuana is legal.

Despite the political and cultural climate change towards marijuana legalization today, legalization of this drug has gone through many trends throughout the history of the United States. Since 1996, with California taking a progressive step by introducing the first legal use of medicinal marijuana, to the legalization of adult recreational use in 2014 in Colorado and Washington and many states after, the legislature continues to propose and pass a variety of regulations concerning

legal marijuana uses (Kamin, 2015; National Conference of State Legislatures, 2019). Unfortunately, Texas is far behind towards progressive views on marijuana use and legalization.

The legalization of marijuana not only benefits sick individuals, but potentially the economy as seen through the revenues produced in Colorado (Colorado Department of Revenue, 2019). Research continues to find the medical benefits attributed to marijuana, and the economic benefits to producers, the community and the States (Scherf, 2015). With the benefits seemingly outweighing the negatives, many States are taking this into consideration and taking their own stance towards the consideration of legalization of this “illegal” drug despite the federal government’s views. With the increase of states legalizing marijuana production and use, and as seen throughout the United States’ latest legislative sessions, one can deduce that this hot topic will continue to remain in the public’s eye and, therefore, it is worthy of further research.

Although many states are on the forefront in addressing the needs of their residents, Texas has taken a stance that is nowhere near reaching the progressive views that will best serve the community. This is apparent by the continuous introduction of bills concerning marijuana during past legislative sessions and the lack of follow-through by Texas Representatives (Texas Legislative Council [TLC], n.d.). Despite Texas’ conservative view towards marijuana, the 84th Texas Legislative Session (2015) took one small step forward by enacting the Texas Compassionate Use Act, which allows the production and prescription of low-THC cannabis to treat individuals that suffer from intractable epilepsy (Texas Department of Public Safety [DPS], n.d.) and recently expanded this Act during the 86th Texas Legislative Session (2019). Meanwhile, many other individuals suffering from other severe medical diseases or ailments that would benefit from the alleviating capabilities of low-THC cannabis products have to resort to other measures to

treat their illness or relocate to another state altogether to take advantage of products in which the use is legal.

Purpose

Given the recent interest in the expansion of marijuana production and uses in Texas, it would be noteworthy in exploring the benefits from following actions of the other states. Texas is a state that could benefit vastly from the legalization of marijuana and its potential revenues as seen in Colorado. Being one of the largest states in the country and with an array of industry, the Texas legislature should take a closer look into the benefits (economic and medicinal) of this federally illegal and controlled substance. Therefore, it is of greatest worth exploring the perceptions and attitudes of the Texas community on the legalization and use of marijuana.

The purpose of this research is to describe the attitudes and perceptions of the Texas State University community regarding their position on marijuana legalization. This research aims to bring awareness to the consideration of marijuana legalization in Texas. This research is noteworthy as the current 86th Texas Legislative Session (2019) has introduced an array of bills concerning the various uses of marijuana or “marihuana”, most prominently the legalization of industrial hemp (Texas Department of Agriculture [TDA], n.d.).

For this reason, this research primarily examines the attitudes and perceptions of undergraduate and graduate students, targeting those enrolled in the Political Science and Public Administration programs at Texas State University. This research focuses on these individuals as they are a multicultural and diverse representative subgroup of the population, and are potential future policymakers, political leaders, and public administrators of Texas. Therefore, it is imperative to take a closer look at where Texas may be heading.

Chapter Summaries

This ARP is presented in five chapters and begins with a brief introduction to the subject matter and purpose of this ARP. Chapter II continues with the Literature Review of this topic, which discusses material such as what marijuana is, it's long history in the United States and the conceptual framework. Chapter III follows with the conceptualization of the operationalization table and methodology used for this research study and presents the research setting and the target research participants. Chapter IV presents the results and descriptive statistics obtained from the survey distribution pertaining to student perceptions on marijuana legalization and marijuana use. Lastly, Chapter V: Conclusion discusses the importance of this research study, its limitations, and what the results tell us about the climate of marijuana legalization at a Texas university today.

Chapter II: Literature Review

Marijuana legalization is a recurring topic many Americans have on their minds, largely in part to highly publicized media coverage across the United States (McGinty, Samples, Sachini, Saloner, Bachhuber, & Barry, 2016). Legislators across the nation have succeeded in legalizing a variation of marijuana use (cannabidiol [CBD], medicinal, recreational) in their respective state (National Conference of State Legislatures, 2019; NORML, n.d.b) while others have ensured it never occurs. With such an increase in media coverage and legalization, many are left to wonder why is marijuana such an interesting phenomenon today? What is it and how does it affect us? How many Americans are for or against legalization? Who are these individuals? Your educator? Parents? Your neighbor? Why do Americans across the nation want or need this highly versatile herbal product? For fun? For medical needs? Because it is safe to use?

There is a multitude of factors that come into play when discussing marijuana legalization. The purpose of this chapter is to provide an in-depth look at marijuana and its uses, the history of marijuana legalization in the United States, the State of Texas and marijuana legalization, and categorial information from the conceptual framework considered for the research study. This chapter will also present some data on what Americans have to say on marijuana legalization.

Legalization: The Answer or More Questions?

Marijuana legalization encompasses a variety of uses. Legalization of this illicit drug can result in economic success as seen in Colorado (Colorado Department of Revenue, 2019) or can leave many to wonder if it will lead to an increase in crime (Morris, 2018)? Overall, legislators maintain the need to consider a multitude of facets that encompass the consequences or successes attributed to marijuana legalization. Additionally, there are many markets (e.g. tobacco, food, and

beverage) that “are prepared to enter the marijuana market with the intention of increasing its already widespread use” which can expand the “issue” that is marijuana (Barry, Hiilamo, & Glantz, 2014, p. 207).

Now, keeping this in mind, it must be factored where future public and political leaders stand on the subject. Will marijuana increase crime? Is it harmful to your overall health or will it improve it? Will legalizing any variation of use act as a segue to other illicit drug use (Dills, Goffard, & Miron, 2016)? Once considering all this information, which type of legalization is adequate for the needs of the constituents? Should Texas follow suit in expanding legalization from that set forth in the Texas Compassionate Use Act (DPS, n.d.)?

Marijuana: What is it?

With all the dialogue on marijuana, it is imperative to inform the public on exactly what marijuana is and how its components can or may affect an individual. Marijuana, often spelled “marihuana” in the legislature, goes by many names publicly. It is commonly referred to as pot, weed, Mary Jane, grass, and herb to name a few (Centers for Disease Control and Prevention [CDC], n.d.; Hajizadeh, 2016; National Institute on Drug Abuse, n.d.). Marijuana, *Cannabis sativa*, is a greenish-gray mixture of the dried leaves, flowers, stems, and seeds of the plant and it is cultivated throughout the world, “in both indoor and outdoor settings” (CDC, n.d.; DEA, n.d.a; Clark, Capuzzi, & Fick, 2001; Hajizadeh, 2016; National Institute on Drug Abuse, n.d.; Sharma, Murthy, & Bharath, 2012). It is mainly cultivated for its medicinal, psychoactive, and therapeutic properties. The cannabis plant is composed of hundreds of chemicals, some known as cannabinoids, that include the mind-altering, delta-9-tetrahydrocannabinol or THC, and the nonpsychoactive, cannabidiol or CBD (CDC, n.d.; DEA, n.d.a; National Institute on Drug Abuse,

n.d.; Shannon, Lewis, Lee, & Hughes, 2019; Sharma et al., 2012). Marijuana has various methods of consumption which include smoking through “joints” [hand-rolled cigarettes], pipes, “bongs,” and “blunts” [cigars with marijuana in place of the tobacco] and mixing into food, commonly referred to as “edibles” (Barry et al., 2014, p. 209; National Institute on Drug Abuse, n.d.; Sharma et al., 2012). Many studies have been conducted to determine health effects, both positive and negative, from marijuana consumption. These range from the therapeutic benefits of THC and CBD to effects on mood and brain development but will not be further discussed in this study (Sharma et al., 2012) as the focus is mainly on the opinions/perceptions of students.

History of Marijuana Laws in the United States

Marijuana has had a long history in the United States and throughout the world. “As early as the 1600s, European settlers used the stalk of the cannabis plant to produce hemp, a versatile material whose fiber, seed and oil were utilized to make a multitude of products such as twine, paper, and clothing” (Hull, 2014, p. 336). In the United States, up until the 1900s marijuana was widely used and found to be ubiquitous with “no social stigma attached to its use” (Hull, 2014, p. 337). Due to increased fears from the public over the usage of marijuana and the recent prohibition of alcohol, the United States Congress moved forward with enacting the Marihuana Tax Act (“the Act”) of 1937 which imposed a tax on marijuana with the goal to indirectly “prohibit the production, use, and distribution of cannabis within the states” (Dills et al., 2016; Houser & Rosacker, 2014; Hull, 2014, p. 337). The Act was in effect for decades until it was later found to be unconstitutional by the Supreme Court in 1969.

As a result of the Act being repealed, the United States federal government followed with enacting Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970, otherwise

known as the Controlled Substances Act (CSA) (Dills et al., 2016; Houser & Rosacker, 2014; Hull, 2014). The CSA classified marijuana as a “Schedule I Controlled Substance” which “denotes that the federal government has determined that marijuana has a high potential for abuse with no acceptable medical use” and “the production, distribution, and possession of marijuana are all serious federal crimes, punishable by long terms of imprisonment” (Houser & Rosacker, 2014, p. 133; Kamin, 2015, p. 429). Despite the implementation of the CSA, states like Oregon began decriminalizing “possession or use of limited amounts of marijuana between 1973 and 1978” and “a second wave of decriminalization began with Nevada in 2001” (Dills et al., 2016, p. 3; Houser & Rosacker, 2014, p. 133)

Following suit in further straying away from federal regulations, in 1996, California became the first state to legalize the use of medical marijuana through Proposition 215. Many states have passed regulations allowing personal production and use, and industrial production of CBD, medical marijuana and recreational uses thereafter (National Conference of State Legislatures, 2019; NORML, n.d.b). As presented by the National Conference of State Legislatures, in July 2019, 34 states, the District of Columbia, Guam and Puerto Rico have implemented a variation of medical marijuana regulations (National Conference of State Legislatures, 2019). In 2012, Washington and Colorado became the first states to legalization a variation of recreational use, and as of June 2019, “14 states and territories have approved adult-use cannabis” (Barry et al., 2014; Dills et al., 2016; National Conference of State Legislatures, 2019; NORML, n.d.b).

Lastly, Texas made a progressive step towards medical marijuana use by enacting the Texas Compassionate Use Act approved by legislature during the 84th legislative session (Texas Department of Public Safety, n.d.). The Act allows for the legal use of medical marijuana for the

treatment of epileptic seizures and has been recently expanded. During the 86th legislative session, representatives presented a total of 30 bills to expand the use of marijuana, or “marihuana” as it is referred to by the Texas Legislative Office (TLC, n.d.). Of greatest note is the progressive step to legalize the production of industrial hemp and manufacture of CBD containing products (Texas Department of Agriculture, n.d.). This noteworthy legalization came through during the 86th Texas Legislative Session and which will be enacted starting September 1, 2019.

This section on the “History of Marijuana Laws in the United States” is not an exhaustive list of regulations that have been implemented throughout the United States. It simply denotes the key accomplishments of marijuana legalization.

State of Texas

The State of Texas was declared the 28th state in the U.S. on December 29, 1845 and is divided into 254 counties with the City of Austin serving as its capital (Texas Association of Counties, n.d.; Texas State Library and Archives Commission, 2011). Texas is ranked the second largest state in the United States with a total estimated population of 28,701,845 as of July 1, 2018. Of the total population, females account for 50.3% and males for 49.7% (U.S. Census Bureau, n.d.b). It is also ranked second in size in regard to area and land coverage. The U.S. Census Bureau has reported the following race and Hispanic origin as inhabitants of Texas: White (78.8%), Hispanic or Latino (39.6%), Black or African American (12.8%), American Indian and Alaska Native (1%), Asian (5.2%), Native Hawaiian and Other Pacific Islander (0.1%), Two or More Races (2%), White (not Hispanic or Latino) (41.5%) (U.S. Census Bureau, n.d.b).

Texas is not only diverse in race and ethnic groups, but its land is versatile in use and home to many industries. As of 2017, The American Community Survey has reported the following

industries in Texas: agriculture, forestry, fishing and hunting, and mining (3.3%), construction (8.2%), manufacturing (8.8%), wholesale trade (3%), retail trade (11.5%), transportation and warehousing, and utilities (5.5%), information (1.8%), finance and insurance, and real estate and rental and leasing (6.6%), professional, scientific, and management, and administrative and waste management services (11.3%), educational services, and health care and social assistance (21.6%), arts, entertainment, and recreation, and accommodation and food services (9.1%), other services, except public administration (5.2%), and public administration (4.1%) (U. S. Census Bureau, n.d.a).

Economic sales and revenues as of 2012 reported by the U.S. Census Bureau in the \$1,000's include: accommodation and food services sales (\$54,480,811), health care and social assistant receipts/revenue (\$145,035,130), manufacturers' shipments (\$702,603,073), merchant wholesaler sales (\$691,242,607), and retail sales (\$356,116,376) (U.S. Census Bureau, n.d.b). The diversity in industries and potential economic revenues are what make Texas an ideal candidate for consideration in marijuana legalization, and potential taxation, and sales.

Demographics for the Texas State University community and the Department of Political Science are outlined in the methodology section.

Conceptual Framework

The literature on marijuana and Texas is what aided in conceptualizing the purpose of this Applied Research Project (ARP). The conceptual framework presented in Table 2.1 depicts the categories that were used to develop an understanding of undergraduate and graduate students' opinions/perceptions of marijuana use and legalization. The four categories: Position, Use, Opinion/Perception, and Demographics, allow to gain insight on how this subset of the population

views marijuana and by comparing this to data in the literature we can gather a snapshot of what the future marijuana climate may look like in Texas. Following this section is a discussion of what the literature presents on these categories of interest.

Position and Opinion

In today's modern society, there is not a newspaper, online news source or a TV news channel that is not reporting an opinion on marijuana. This dialogue is of utmost importance as media reporting can influence public opinion and political agendas (McGinty et al., 2016; Xiong & Liu, 2014). Time and time again there are policy debates on whether marijuana should be legalized, with recreational use of marijuana causing much more of a stir. From legislators to the general public, opinions concerning full legalization to a variation of legalization have been reported annually and generally public opinion on various issues have been considered for over 50 years (Barrett, 1995; Gallup, 2018; Pew Research Center, 2018). Whether Americans are for, or against legalization, it is essential that we understand why individuals take on their position. If we can gain an understanding of the citizenry's needs, we can determine if national or state legalization is worth considering.

Lavrakas (2008) defines opinion as "subjective attitudes, beliefs, or judgements that reflect matters of personal (subjective) preference" (p. 552). Public opinions are those opinions that individuals are willing to openly share and are most commonly obtained through surveys. With that in mind, public opinion establishes a "bottom up communication from citizens to their government" (Lavrakas, 2008, p. 636). These opinions are essential when legislators and public administrators are interested in implementing laws and policies that affect the citizenry, either locally or statewide. This is key for political and public officials to realize as research has shown

that public policy is heavily influenced through public opinion, when the issue at hand may be highly salient and holds more weight with the public, and as public opinion is key in American democracy to ensure collective representation (Burstein, 2003; Page & Shapiro, 1983; Wlezien & Soroka, 2016). Additionally, as public interests may affect the way in which appointed or elected officials make decisions this, in turn, may influence how public administrators implement and handle regulations, policy, and programs that are set forth through legislation (Barrett, 1995; Uslaner & Weber, 1979). In contrast, there is another train of thought that policymakers and appointed/elected officials are the drivers of policies as the public relies on them as an educational resource when it comes to the certain subject matter (Page & Shapiro, 1983; Uslaner & Weber, 1979). Therefore, when attempting to analyze the public's view on legalization, as researchers and future political and public leaders, we must ask and inform ourselves on what the American position (opinion) is towards legalization and how they believe marijuana legalization may or could affect the future of the economy, crime, health, and other facets that come along with newly implemented laws. This is of utmost importance as "a fundamental principle of democratic government is that policy will be a function of opinion" (Wlezien & Soroka, 2016, p. 2).

Throughout the United States, researchers and organizations have conducted numerous survey studies on how Americans feel towards marijuana legalization. Since 1969, the Pew Research Center (2018) and Gallup (2018) have distributed surveys and polls to gather everyday American's opinion on the subject. Statistics on their position is presented below.

Pro-Marijuana Attitudes

Studies show that many individuals have moved towards a liberal stance concerning the legalization of marijuana. In 2016, the Pew Research Center reported that "The share of

Americans who favor legalizing the use of marijuana continues to increase.” The survey reports “57% of U.S. adults say the use of marijuana should be made legal” compared to 37% who say it should remain illegal. This is a dramatic shift for legalization compared to the 12% that favored the legalization of marijuana in 1969. When comparing generational groups, the Pew Research Center (2016) reported an increase in support for legalization across all generations. Millennial (ages 18-35) support for legalization has increased two-fold to 71% from the 34% reported in 2006. Generation X (Gen Xers, ages 36-51) and Baby Boomers (ages 52-71) were reported as 57% and 56% for marijuana legalization, respectively. Democrats (66%) and Independents (63%) favor legalization of marijuana over Republicans (41%). Lastly, White (59%) and Black (59%) Americans are equally for legalization, as opposed to Hispanics (46%) which have been reported as far less likely to support legalization.

Two years later in 2018, the Pew Research Center conducted another survey asking the same question to U.S. adults and found 62% now support legalization, a 5% increase. “Majorities of Millennials (74%), Gen Xers (63%) and Baby Boomers (54%) say the use of marijuana should be legal. Members of the Silent Generation continue to be the least supportive of legalization (39%), but they have become more supportive in the past year” (Pew Research Center, 2018). The data presented by the Pew Research Center closely resembles polled data by Gallup. In a survey distributed in 2018, Gallup reported 66% “of Americans now support legalizing marijuana,” translating to two in three Americans (p. 2). Data from Gallup (2018) in 1969 reported only 12% for legalization of marijuana, the same percentage as data presented by the Pew Research Center.

Attitudes Against Marijuana

On the other hand, there are those individuals who are of the opposition. From data collected in 2016 by Pew Research Center, 37% of those surveyed were opposed to legalization. In 2018, the percentage for those against legalization dropped by 3% to 34%. This is an astounding 50% decrease from an 84% reporting to opposition by Pew Research Center in 1969. It is apparent that in the last 50 years Americans are less inclined to oppose legalization.

Public Perception on Marijuana Legalization

“Perception is the subjective process of acquiring, interpreting, and organizing sensory information” (Lavrakas, 2008, p. 579). An aspect of public opinion, perception is integral in understanding how individuals perceive the effects of new laws and trending topics such as marijuana. Perception questions in surveys can inform legislators and public administrators on how their constituency feels towards matters that may affect them directly or indirectly (Burstein, 2003; Page & Shapiro, 1983; Wlezien & Soroka, 2016). More importantly, work must be done on closely understanding how the public is forming their perceptions as they may influence their responses in surveys and the information used to form these opinions may be inaccurate. Many studies have been conducted regarding Americans’ perception of marijuana use and legalization. These studies focus on various demographic groups and are useful to assess the American climate regarding the expanding legalization of marijuana.

In a study by Kosterman et al. (2016), researchers were interested in assessing parents’ perceptions towards marijuana legalization in Washington State. This study is valuable as parents’ attitudes towards marijuana may play a role in determining if their children are prone to future marijuana use and if children are receiving appropriate and educated guidelines regarding

marijuana. In this study, researchers were particularly interested in assessing: parents' understanding of the new law, parents' approval and perceived harm of adult and adolescent use, parents' marijuana use, and parents' marijuana-related communication and behavior with their children (p. 451). Kosterman et al. (2016), began by surveying fifth-grade students in 1985 and continued up to they were 39 of age in 2014. Reporting results "focused on 395 participants who lived in Washington State at the time...and were parents who had face-to-face contact with their child (age 19 or younger) at least once a month" (p. 451). Results indicated that parents were misinformed "about the details of Washington State's new marijuana law" (p. 452). By age 39, approval of marijuana use had increased to 52%, with a "decline in perceived harm of regular marijuana use." Interestingly, "89% said it was not okay to be under the influence of marijuana when a parent is actively caring for his or her child," (p. 452) and similarly opposed to having their children witnessing them smoke marijuana, and teen use as harmful. Parental use of marijuana varied throughout the years of the study but found that with legalization by the age of 39, "monthly use among current past-year users nearly doubled to over 10 times per month" (p. 452). Lastly, it was reported that 81% of parents forbid or would discourage using marijuana before high school graduation and have told their child that teen marijuana use is not acceptable or that it should be used for medical reasons only. Overall, this study demonstrated that there are mixed opinions towards marijuana use of their child or teens in a state where marijuana use is legal. In addition, the fact that parents are misinformed on what is legal calls for a need for more public outreach so that any negative perceptions or misperceptions may be corrected to better inform potential new users.

In a study by Khatapoush & Hallfors (2004), the aim was to understand whether medical marijuana legalization in California changed the attitudes about and use of marijuana among

youths and young adults after Proposition 215 passed in 1996. Telephone surveys were administered in 1995, 1997, and 1999. Research determined that “perceptions of harm from marijuana use have decreased over time in California and in other states” (p. 760). Some concerns presented by those surveyed included that “legalizing medical marijuana would ‘send the wrong message to youth’ and lead to greater drug use” (p. 761). Other respondents “increasingly believed that marijuana was not terribly harmful” (p. 761). Overall the research determined that perceptions of increased marijuana use by youths were not corroborated and opinions are shifting towards approval of variations of marijuana legalization. The “findings suggest that recent policy changes have had little impact on marijuana-related behavior” (p. 751).

Most importantly, despite specific studies on certain demographic groups, the question remains as to why there is much support for legalization? The Pew Research Center (2015) reported the following from the reported 53% of supporters: 1. Medicinal benefits (41%), 2. Not as dangerous as other drugs (36%), 3. Benefits of regulation, such as tax revenues (27%), 4. Current enforcement is expensive, problematic (12%), and 5. People should be able to do it if they want to (9%). Arguments on the conservative side of the spectrum range from the promotion of illegal activities to negative health effects. As reported by the Pew Research Center (2015), “To opponents, it is a dangerous drug, one that inflicts damage on people and society more generally” (p. 2).

The research conducted on marijuana effects and perceptions is seemingly endless. Because of its popularity to the public and in the legislature, perception studies of the public concerning marijuana should continue as some states are recently venturing into a variation of legalization of marijuana uses. Therefore, it is adequate for this study to focus on the perception and opinions of future public and political leaders at Texas State University. By becoming

informed on what future leaders perceive on marijuana uses a better understanding can be gained on how the future of marijuana legalization may be influenced and take shape in Texas.

Why do individuals use marijuana?

Thus far, a look has been taken on statistics concerning Americans position for or against marijuana legalization and their opinions on the potential effects of using marijuana and the general understanding of the topic. In addition to investigating the aforementioned information, it is just as important to investigate why constituents would like to use marijuana. Across the United States Americans use components of the marijuana plant for therapeutic purposes, medicinal uses, or for simple recreational use (National Conference of State Legislatures, 2019).

Survey research previously conducted on high school and college students have found an array of reasons as to why they chose to use or stop using marijuana. Friese (2017) examined “how youth in the San Francisco Bay Area perceive marijuana and their motives for using or not using marijuana” (p. 209). The study found that among regular marijuana users they “did not perceive marijuana as a hard drug or even a drug” (p. 213). Other findings included that youths view smoking marijuana “as an enjoyable activity that enhanced social interactions” and helped teens socialize if they would not normally. Some regular users viewed it as safe as it had been legalized for medical purposes, and that it was safer to use than consuming alcohol. Occasional users only used it if it was offered by another individual or for “special occasions” or “to fit in” (p. 213-214). Former regular users stopped using only because they “were getting in trouble with parents, law enforcement, or the school, and in some cases having to submit to drug testing” (p. 215). Former occasional users mentioned discontinuing use of the drug because of the “somatic effects they experienced” which included the feeling of sickness, paranoia, laziness, and anxiety

or “feeling nothing” (p. 215). Lastly, those youths that never used marijuana did so because of the negative health effects relations to using. Overall, the reasoning behind using or discontinuing use is imperative to understand what motivates the future adults of America to partake in illegal drug use in a state that legalizes variations of use. This is valuable information to consider as the legalization of marijuana could motivate youths in other states to use illegally despite what law age requirements are.

Overall, there is a multitude of reasons as to why many individuals choose to consume marijuana. With this information in mind, it is imperative that we gather data as to why future political and public administrators may have used marijuana. With gathering this information, we can get a general assessment as to what they feel would be adequate for the needs of their constituents.

Population Demographics

Legislators and public administrators are influenced by their constituency. Policy ruling on a high-profile subject such as marijuana must be examined through and with the public opinion from a multitude of demographic groups. When working with members of a large community, such as a university, it is essential to consider their demographic information and recognize the diversity of the population for transparent reporting and high-quality data and because demographics are continuously evolving (Robinson, McMichael, & Hernandez, 2017). Demographic information can clue us in on whether responses to questions are influenced by an “individual’s environment,” and “typically are used to identify key respondent characteristics that might influence opinion and/or are correlated with behaviors and experiences” (Lavrakas, 2008, p. 185). This information is of the utmost importance when considering marijuana legalization as

it may affect an array of individuals, from youths to senior citizens, Republicans and Democrats, Blacks, Whites, and Hispanics, and other representative groups.

Demographic characteristics include a multitude of categories such as age, race, gender, ethnicity, religion, income, education, homeownership, sexual orientation, marital status, family size, health, and disability status, and psychiatric diagnosis, just to name a few (Salkind, 2010, p. 346; Fernandez et al., 2016; Smith, 2018, Survey Monkey, n.d.). The collection of this data is essential to give researchers a picture in time of the intended target population and one which demonstrates a sample that is representative of the larger U.S. population. This information “provides valuable insights about a community’s future” and may “profoundly affect how important decisions are made” (French, 2014). Demographics may heavily impact services in a community and which individuals in the community may receive these services. Research has determined that decisions are data-driven partly through demographics and aid legislators in making holistic decisions “with a goal of unbiased, high quality, data that rationally represents a population for decision-making purposes” (Fernandez et al., 2016, p. 1).

From the many surveys and polls conducted in the United States, demographic information is a key aspect of the questionnaire design and studies have shown that demographics may affect the results of the questionnaire in many ways (Hughes, Cambden, & Yangchen, 2016, Pew Research Center, 2018). Therefore, when collecting demographic data, research indicates a need to consider that the questions being asked are phrased correctly and up to date to reflect inclusivity of all individuals in our population (Hughes et al., 2016). Demography questions allow researchers to develop an understanding on if and why views are changing and if they are collectively shifting in a population or for a specific sample subset. Demography questions also allow for “more efficient ways to target and serve” (Smith, 2018). In addition, when survey research is taking

inclusive demographics into account, the general population may feel as if their social and personal identities and representative views are being considered when making life-altering legislative and policy decisions (Fernandez et al., 2016).

Survey studies on marijuana use, perception, and legalization have focused on demographic groups such as youths, young adults, and teens (Friese, 2017; Khatapoush & Hallfors, 2004), high school (Palamar, 2014) and college students (Garner, 2016; Kerr, Bae, Phibbs, & Kern, 2017; Pearson, Liese, Dvorak, & Marijuana Outcomes Study Team, 2017), parents (Kosterman et al., 2016), average Americans (Schuermeyer et al., 2014), federal and state governments (Rubens, 2014), and various other demographic groups (Spackman, Haines-Saah, Danthurebandara, Dowsett, & Noseworthy, 2017). These studies have found that throughout the demographic groups there is a lack of knowledge on the subject, illegal use of the substance, an assumption that marijuana is safe as it is now legalized in some states, and a need for more research to make informed decisions, just to name a few of an array of findings. This demonstrates the need for a deeper understanding of marijuana use and legalization and public perception from as many demographic groups as possible.

Because surveys and polls are generally taken from the overall U.S. population, this research study will gather demographic information from undergraduate and graduate students to demonstrate if the future political and public leaders from Texas State University are a representative sample of the U.S. population demographic groups. Collection of this information is vital to determine what demographic groups may be represented in the future public and political culture which could affect the future of marijuana legalization and policies in Texas.

Marijuana Studies and Demographic Groups

The Pew Research Center (2018) and Gallup (2018) has polled Americans since 1969 on marijuana legalization and the research demonstrates an increase of proponents from various demographic groups. The Pew Research Center (2018) found men (68%) supported marijuana legalization more than women (56%). Whites (66%) and Blacks (56%), favored legalization more than Hispanics (48%). Generational groups demonstrated that those in favor for, increased in percentage with the younger demographics: Millennials (1981-97) 74%, Gen Xers (1965-80) 63%, Baby Boomers (1946-64) 54%, and Silent (1928-45) 39%. When considering education, those with some college education (67%) were in higher favor for legalization compared to those as postgrads (63%), college degrees (64%) and high school or less (56%). Lastly, the Democratic political party affiliation also demonstrated a higher percentage for legalization: Republic (45%), Independent (68%), Democrat (69%).

Gallup (2018) found some slightly higher statistics in their poll reporting for some demographic groups. Democrats led with 75% for marijuana legalization, Independents followed with 71%, and Republicans with 53%. Age groups had the following results: 18-34 (78%), 35-54 (65%), and 55 and older (59%).

From this information, we can gather that the Pew Research Center reports on a variety of demographic group findings demonstrating a representative view of how the average American feels towards marijuana legalization. This demonstrates the need for asking extensive demographic questions during survey research. Legislators and public administrators can then make informed decisions based on the representative and inclusive views of their constituency.

Conceptual Framework

Table 2.1 presents the conceptual framework as discussed in the previous sections and the supporting literature for each category.

Table 2.1. Conceptual Framework Table

Title: The Case for Mary Jane: A study of student perceptions on marijuana legalization Purpose: The purpose of this research is to describe the attitudes and perceptions of political science and public administration undergraduate and graduate students regarding marijuana use and its legalization.	
Category	Supporting Literature
1. Position	Barrett, 1995; Burstein, 2003; Gallup, 2018, 2015; Lavrakas, 2008; McGinty et al., 2016; Page & Shapiro, 1983; Pew Research Center, 2018, 2015; Uslaner & Weber, 1979; Wlezien & Soroka, 2016; Xiong & Liu, 2014
2. Use	Friese, 2017; National Conference of State Legislatures, 2019
3. Opinion/Perception	Barrett, 1995; Burstein, 2003; Gallup, 2018, 2015; Khatapoush & Hallfors, 2004; Kosterman et al., 2016; Lavrakas, 2008; McGinty et al., 2016; Page & Shapiro, 1983; Pew Research Center, 2018, 2015; Uslaner & Weber, 1979; Wlezien & Soroka, 2016; Xiong & Liu, 2014
4. Demographics	Fernandez et al., 2016; French, 2014; Friese, 2017; Gallup, 2018; Garner, 2016; Hughes et al., 2016; Kerr et al., 2017; Khatapoush & Hallfors, 2004; Kosterman et al., 2016; Lavrakas, 2008; Palamar, 2014; Pearson et al., 2017; Pew Research Center, 2018; Robinson et al., 2017; Rubens, 2014; Salkind, 2010; Schuermeyer et al., 2014; Smith, 2018; Spackman et al., 2017; Survey Monkey, n.d.

Chapter III – Methodology

The purpose of this chapter is to present the methodology used to identify undergraduate and graduate, political science and public administration student's position on marijuana legalization and to understand their opinions/perceptions regarding marijuana use and legalization. This chapter discusses the research setting and its participants, and the operationalization table which presents the categories and questions asked of the research participants at Texas State University. The importance of surveys and questionnaires for understanding opinions/perceptions of individuals, the strengths and weaknesses to survey distribution in today's digital world, and the research procedure and data collection method to include the Human Subject(s) Protection process through the Institutional Review Board (IRB) are also discussed. A brief synopsis is presented at the end of this chapter.

Texas State University

Texas State University, originally Southwest Texas State Normal School, opened its doors in 1903, with a population of 303 students. Since 1903 the university has grown to a population of 38,661 (34,200 undergraduates; 505 post-baccalaureates; 3,447 master's; 509 doctoral) students as of Fall 2018 and offers 98 bachelor's, 93 master's and 14 doctoral degree programs. The university's main campus resides in San Marcos, Texas, with a satellite campus located in Round Rock, Texas (1,984 students). Texas State University ranks 4th in Texas and 30th in the United States, in public university size (Texas State University, 2019b). "Texas State University is accredited by the Southern Association of Colleges and Schools Commission on Colleges" (Texas State University, 2019a).

The student population at Texas State is diverse with attending individuals spanning from across the globe. As of 2018, the ethnic breakdown of students enrolled at Texas State was: 45% White, 37% Hispanic, 11% African American, and 5% Other, with a total of 53% comprised of ethnic minorities. Of the total population of students, 58% are reported to be females, and 42% males (Texas State University, 2019a, 2019b). The diverse population of Texas State University is what makes this university the ideal research setting for this survey research distribution.

Research Participants

The sample of research participants for this study was drawn from undergraduate and graduate students of the Political Science and Public Administration Programs, offered through the Political Science Department. The Political Science Department, operating under the College of Liberal Arts, offers two bachelor's degrees (Political Science and Public Administration), three undergraduate minors (Political Science, Public Administration, and Public Communication) (Texas State University, 2019e), three master's degrees (Political Science, Public Administration, and Legal Studies), graduate certificates and graduate minors (Texas State University, 2019c).

Texas State University's political science department mission statement is as follows: "The Department of Political Science is committed to quality teaching and learning, research and scholarship, public service, and responsible citizenship. Building upon the bodies of knowledge in the disciplines of political science, public administration and legal studies, the department seeks to prepare students to read and think critically about the enduring questions of political life, to fulfill their responsibilities as citizens, to engage in community service and to excel in their professional lives" (Texas State University, 2018). This mission is clearly representative of the

interest of this study, to gain knowledge to further expand services for the community as public administrators have a responsibility to its citizens.

Operationalizing the Conceptual Framework

Chapter II: Literature Review presented the conceptual framework of this study which identified four categories of interest that include: position, use, opinion/perception, and demographics. As explained by Shields & Rangarajan (2013), “once the categories and elements are mostly determined, the process of operationalizing of the categories and elements can begin” (p. 77). Through “survey research, the conceptual framework (categories) is operationalized through creation of the corresponding questionnaire item” (p. 77). Table 3.1 presents the operationalization table as described. A total of 40 questions (to include a question on participant consent) were asked of the research participants. Questions in each category varied from one question in the Position category to up to 23 questions in the Opinion/Perception category. The questions presented in the operationalization table were modeled after those gathered from national polls (Gallup, 2018; Pew Research Center, 2018), the literature (as presented in Chapter II), and some were developed specifically for this research study. Questions were modified to fit this study and their form of measurement varied to include: multiple-choice questions (35), open-ended questions (2), and those with the option to choose more than one response (3). It was imperative to gather as much information as possible to identify student position and understand their opinions/perceptions of marijuana use and legalization.

Table 3.1. Operationalization Table

Title: The Case for Mary Jane: A study of student perceptions on marijuana legalization Purpose: The purpose of this research is to describe the attitudes and perceptions of political science and public administration undergraduate and graduate students regarding marijuana use and its legalization.	
Category	Questionnaire Items
1. Position	
	Q1 Do you think the use of marijuana should be made legal? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> No opinion/indifferent (3)
2. Use	
	Q2 Keeping in mind that all of your answers in this survey are anonymous, how would you categorize your marijuana use? <input type="checkbox"/> Currently use (1) <input type="checkbox"/> Have used (2) <input type="checkbox"/> Never used (3) <input type="checkbox"/> Prefer not to answer (4) (skip to Q7 if answer is "Never used")
	Q3: At what age did you first use/try marijuana? _____
	Q4 How often do/did you use? <input type="checkbox"/> Daily (1) <input type="checkbox"/> Weekly (2) <input type="checkbox"/> Monthly (3) <input type="checkbox"/> Rarely (1-3 times per calendar year) (4)
	Q5 Why do/did you use? (Check all that apply) <input type="checkbox"/> For fun (1) <input type="checkbox"/> To overcome stress (2) <input type="checkbox"/> To overcome depression (3) <input type="checkbox"/> To overcome anxiety (4) <input type="checkbox"/> Medical reasons (5) <input type="checkbox"/> Peer pressure (6) <input type="checkbox"/> Other (7)
	Q6 I have been under the influence: (Check all that apply) <input type="checkbox"/> At school (1) <input type="checkbox"/> At work (2) <input type="checkbox"/> While driving (3) <input type="checkbox"/> While operating heavy machinery (4) <input type="checkbox"/> At home (5) <input type="checkbox"/> Other (6) <input type="checkbox"/> Prefer not to answer (7)
	Q7: Have you used or tried any of the following substances? (Check all that apply) <input type="checkbox"/> Alcohol (1) <input type="checkbox"/> Tobacco (2) <input type="checkbox"/> Cocaine (3) <input type="checkbox"/> Ecstasy (4) <input type="checkbox"/> LSD (5) <input type="checkbox"/> Heroin (6) <input type="checkbox"/> Synthetic marijuana (7) <input type="checkbox"/> Other (8) <input type="checkbox"/> Prefer not to answer (9)
	Q8 Do you know someone who currently uses marijuana? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)
3. Opinion/Perception	
	Q9 Do you think marijuana is a gateway drug? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)
	Q10 Do you think marijuana is addictive? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)

	Q11 Do you think marijuana is damaging to the brain? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)
	Q12 Do you think marijuana is damaging to overall health? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)
	Q13 Do you think marijuana is less harmful to your health than alcohol use? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)
	Q14 Do you think marijuana is less harmful to your health than tobacco use? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)
	Q15 Do you think consuming edible marijuana is safer than smoking it? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)
	Q16 Marijuana should be legalized for what use? (Check all that apply) <input type="checkbox"/> Cannabidiol (CBD) (it is derived directly from the hemp plant, which is a cousin of the marijuana plant) (1) <input type="checkbox"/> Medicinal (2) <input type="checkbox"/> Recreational (3) <input type="checkbox"/> Do not support any (4) <input type="checkbox"/> No opinion/indifferent (5)
	Q17 If legalized, do you believe Americans should be allowed to grow their own plant(s) at home? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> No opinion/indifferent (3)
	Q18 Do you think legalizing marijuana makes its use seem safer? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)
	Q19 Do you think legalizing marijuana makes it more socially acceptable? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)
	Q20 If legalized, what should be the legal age for recreational use? <input type="checkbox"/> 18 (1) <input type="checkbox"/> 21 (2) <input type="checkbox"/> No opinion/indifferent (3)
	Q21 Do you think legalizing marijuana for recreational purposes will make it more accessible to those under the legal age? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)
	Q22 Do you think legalizing marijuana for recreational purposes will cause individuals to start using at a younger age? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)
	Q23 Do you think legalizing marijuana for recreational purposes will cause more people to try it? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)

	<p>Q24 If legalized, do you believe robberies, homicides, or other crimes related to marijuana will be reduced?</p> <p><input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)</p>
	<p>Q25 If legalized, do you think America will be safer?</p> <p><input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)</p>
	<p>Q26 If legalized, how should state/city taxes on marijuana and/or licensing revenues be budgeted for?</p> <p><input type="checkbox"/> Education (1) <input type="checkbox"/> Healthcare (2) <input type="checkbox"/> Housing (3) <input type="checkbox"/> Transportation (4) <input type="checkbox"/> Other (5)</p>
	<p>Q27 Do you believe government efforts to enforce marijuana laws cost more than they are worth?</p> <p><input type="checkbox"/> Agree (1) <input type="checkbox"/> Disagree (2) <input type="checkbox"/> Unsure (3)</p>
	<p>Q28 Some states have decided to allow marijuana use, but it is still prohibited under federal law. Do you think the federal government should or should not enforce federal marijuana laws in these states?</p> <p><input type="checkbox"/> Should (1) <input type="checkbox"/> Should not (2) <input type="checkbox"/> No opinion/indifferent (3)</p>
	<p>Q29 Do you think politicians, policymakers, elected or appointed officials, and/or public administrators currently use marijuana?</p> <p><input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)</p>
	<p>Q30 Overall, do you think the general U.S. population is misinformed concerning marijuana?</p> <p><input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Unsure (3)</p>
4. Demographics	
	<p>Q31 What is your degree program?</p> <p><input type="checkbox"/> Political Science (1) <input type="checkbox"/> Public Administration (2)</p>
	<p>Q32 What is your student classification?</p> <p><input type="checkbox"/> Undergraduate (1) <input type="checkbox"/> Graduate (2) <input type="checkbox"/> Non-degree seeking (3)</p>
	<p>Q33 What is your age? _____</p>
	<p>Q34 What is your gender?</p> <p><input type="checkbox"/> Male (1) <input type="checkbox"/> Female (2) <input type="checkbox"/> Other (3)</p>
	<p>Q35 What is your race/ethnicity?</p> <p><input type="checkbox"/> White (1)</p> <p><input type="checkbox"/> Hispanic or Latino (2)</p> <p><input type="checkbox"/> Black or African American (3)</p> <p><input type="checkbox"/> American Indian or Alaska Native (4)</p> <p><input type="checkbox"/> Asian (5)</p> <p><input type="checkbox"/> Native Hawaiian or Pacific Islander (6)</p> <p><input type="checkbox"/> Other (7)</p>
	<p>Q36 Are you currently employed?</p> <p><input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2) <input type="checkbox"/> Prefer not to answer (3)</p>

	<p>Q37 What is your annual income?</p> <p><input type="checkbox"/> Less than \$10,000 (1)</p> <p><input type="checkbox"/> \$10,000 - \$19,999 (2)</p> <p><input type="checkbox"/> \$20,000 - \$29,999 (3)</p> <p><input type="checkbox"/> \$30,000 - \$39,999 (4)</p> <p><input type="checkbox"/> \$40,000 - \$49,999 (5)</p> <p><input type="checkbox"/> \$50,000 - \$59,999 (6)</p> <p><input type="checkbox"/> \$60,000 - \$69,999 (7)</p> <p><input type="checkbox"/> \$70,000 - \$79,999 (8)</p> <p><input type="checkbox"/> \$80,000 - \$89,999 (9)</p> <p><input type="checkbox"/> \$90,000 - \$99,999 (10)</p> <p><input type="checkbox"/> \$100,000 - \$149,999 (11)</p> <p><input type="checkbox"/> More than \$150,000 (12)</p>
	<p>Q38 Are you a parent?</p> <p><input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)</p>
	<p>Q39 What is your political party affiliation?</p> <p><input type="checkbox"/> Democrat (1) <input type="checkbox"/> Republican (2) <input type="checkbox"/> Independent (3)</p> <p><input type="checkbox"/> Unsure (4)</p>

The Importance of Surveys and Distribution Methods

Today, there is no escaping surveys. Whether it be after receiving a service, shopping, or attending a conference, individuals are regularly asked to complete a questionnaire of our experience(s) (Mathers, Fox, & Hunn, 2009, p. 4). This method of data collection is “used to gather information to generate knowledge and to help make decisions” and is “frequently used to collect information on attitudes and behaviour” (Lavrakas, 2008, p. XXXV, Mathers et al., 2009, p. 5). Survey research is a traditional and common method of gathering information and can be conducted using various delivery methods: face-to-face, over the telephone, mailed in, online, or a combination of these (Kelley et al., 2003, p. 262; Ponto, 2015, p. 170; Visser, Krosnick, & Lavrakas, 2000, p. 243-244). Surveys also allow for a combination of question design to include open-ended and closed-ended questions, rating and ranked questions (e.g. Likert scale), the ability to skip questions dependent on a previous response and other forms (Driscoll, 2011, p. 166; Kelley, Clark, Brown, & Sitzie, 2003, p. 263; Regmi, Waithaka, Paudyal, Simkhada, & Teijlingen, 2016,

p. 641; Ponto, 2015, p. 170; Visser et al., 2000, p. 237-239). Despite the researchers' approach or strategy to data collection, surveys have proven to be effective to demonstrate the perceptions/opinions of individuals/groups that may be representative of a wider population or "population of interest" (Kelley et al., 2003, p. 261; Ponto, 2015, p. 169). Additionally, survey research allows for the use of descriptive statistics to better understand the "meaning" behind participant responses and potentially identify a relationship between the responses and the population (Kelley et al., 2003, p. 261).

While it is of importance to discuss the importance of surveys, it is also noteworthy to discuss potential downfalls to this methodology that should be considered. Many times, participants are more than willing to share their opinion but sometimes, the content of the survey is sensitive in nature which may pose a concern for others. For this reason, it is important to consider the way in which questions are worded, offer a no opinion option, and keep demographic questions for the end of the survey to increase participation and so that a participant may be more inclined to complete a survey they understand (Regmi et al., 2016, p. 641, Visser et al., 2000, p. 240-241).

Strengths and Weaknesses of Surveys

Survey research presents strengths and weaknesses with this form of methodology and researchers should carefully weigh these before pursuing this methodology to gather information. It is important for a researcher to consider both as they can severely impact the responses to surveys and the effectiveness of the research. A primary strength of using surveys is their versatile distribution method and flexibility to be tailored to specific populations of interest (Mathers et al., 2009, p. 6, Ponto, 2015, p. 170). Regmi et al. (2016) explains the advantage of the convenience

of online surveys, “for example, a) [the] respondent can answer at a convenient time; b) [the] respondent can take as much time as they need to response questions; c) [the] respondent can complete survey in multiple sessions” (p. 641). Draugalis, Coons, & Plaza, (2008) also explain how “the use of Internet or e-mail based surveys...has grown in popularity as a proposed less expensive and more efficient method of conducting survey research” (p. 5). Additionally, as discussed previously, “surveys are capable of question diversity” and allow for a “user-friendly design and layout” (Regmi et al., 2016, p. 641). Online surveys also allow for the easement of the researcher to follow-up with desired participants with a quick reminder to participate in or complete the survey as it could be sent electronically. Lastly, surveys can produce large quantities of data in a relatively short period of time with little to no cost to the researcher (Kelley et al, 2003, p. 262).

On the other hand, surveys do present some weaknesses. First and foremost, although presented as a strength of survey research, online surveys can also pose a problem as they may be inaccessible to individuals without access to a computer or could be sending a survey to an undeliverable email addresses (Draugalis et al., 2008, p. 5; Ponto, 2015, p. 170). Not only could an email survey be inaccessible or undeliverable, but it could be easily “forwarded to inappropriate or unintended subjects” (Draugalis et al., 2008, p. 5). Aside from distribution, a poorly designed survey can highly impact the response rate of research participants. Studies have demonstrated that an ill-designed layout or question formation may cause participants to lose interest or opt-out of completing it due to the length or difficulty in understanding (Driscoll, 2011; Ghic, Bentoiiu, & Moraru, 2014; Glasow, 2005; Kelley et al., 2003). Additionally, surveys can leave some unanswered questions. For example, this research focuses on quantitative measures which do not necessarily explain the why behind participant responses (Mathers et al., 2009, p. 6). Lastly,

Glasow (2005) explains a potential for “intentional misreporting of behaviors by respondents to confound the survey results or to hide inappropriate behavior” (p. 1-2).

The strengths and weaknesses presented in this section should be carefully evaluated to ensure optimal result reporting. Although a researcher may consider these potential obstacles, the effectiveness of a survey may still be impacted by other reasons not discussed here.

Research Procedure and the Data Collection Method

The survey research in this study focused on the email survey distribution method. Through Qualtrics, “an advanced, secure, professional survey tool” offered through the Division of Information Technology at Texas State University, the survey was created for distribution to the targeted research participants (Texas State University, 2019d). The Qualtrics system allows for the creation of surveys and produces an anonymous link to the survey which students can access to submit responses to their surveys. Anonymity is key to this study which enables students to respond honestly to sensitive questions they wouldn’t otherwise respond to or participate in.

An Excel file detailing characteristics of students to include their campus email, age (those 18 years and older), enrollment in programs within the Political Science Department, their undergraduate and graduate level, degree program, and major was compiled by the Political Science Department, Administrative Assistant to the MPA Program. The Administrative Assistant was provided with these specific identifiers to filter the target research population. Therefore, this survey method approach followed a non-random sampling method. A total of 820 students enrolled in the Spring semester (January – May 2019) were identified and an email invitation for participation in the research study was sent initially on May 29, 2019, and subsequently on June 5, 12, and 19, 2019 to maximize participation. Email reminders would prompt students to the

importance of this research and increase the exposure to the study. In the email, students were provided contact information of the student researcher, the faculty advisor, and the IRB Chair and Regulatory Manager if they were to have any questions or concerns pertaining to the survey research. The survey was closed on June 26, 2019, allowing a four-week response period for participants to complete the survey.

Through Qualtrics, 40 questions (including a question on participant consent) pertaining to this study were created and can be viewed in Appendix B. Consent from the research participants was received before delving into marijuana use and legalization questions. If the research participant consented to the survey they could continue with the survey. If a research participant did not consent to the survey, the survey was terminated, and they were forwarded to a “thank you screen” for their limited participation. Although it was encouraged to complete the survey in its entirety, participants had the option to abstain from answering certain questions if they were uncomfortable with the content.

Although the email requesting survey participation was distributed five times, participation was expected to be lower than usual as it was distributed during the Summer semester. A majority of students opt out of taking courses in the Summer semester, therefore limiting their usage of university email. In addition, the list compiled of students were those enrolled as of January 2019 and included students who may have graduated in May, prior to the initial distribution of the survey. This presents a limitation to this research study.

Human Subject(s) Protection and the IRB

Before a research study of this magnitude, sensitive subject matter, and involving the distribution of a survey can commence, the research investigator sought approval of the Texas

State Institutional Review Board (IRB) to verify the research protocol ensures human subject(s) protection (Draugalis et al., 2008, p. 4). Review from an IRB is common practice in most universities that involve human subjects (Lupu & Michelitch, 2018, p. 204). The IRB Protocol #6500 was approved by the IRB on May 22, 2019, at the Expedited Review Level. The approval packet documentation is presented in Appendix A. The IRB found this protocol: “(1) research procedures consistent with a sound research design and they did not expose the subjects to unnecessary risk; (2) benefits to subjects are considered along with the importance of the topic and that outcomes are reasonable; (3) selection of subjects are equitable; and (4) the purposes of the research and the research setting are amenable to subjects’ welfare and produced desired outcomes; indications of coercion or prejudice are absent, and participation is clearly voluntary.” Additionally, the IRB found that: “(1) Informed consent is required; (2) Provision is made for collecting, using and storing data in a manner that protects the safety and privacy of the subjects and the confidentiality of the data; (3) Appropriate safeguards are included to protect the rights and welfare of the subjects. (4) Compensation will not be provided for participation.”

This research study presented benefits such as exploring the perception and attitude of the Texas community to bring awareness towards the consideration of marijuana legalization and to anticipate the climate towards future legislative sessions. No foreseeable consequences were anticipated regarding this research as the information is meant to educate the Texas community.

The data collected is kept and stored under lock and key in the University Academic Center 347, accessible only through a password protected university computer and server and will be destroyed after three years from the end of the study to safeguard anonymity and confidentiality of the participants.

Chapter Summary

This chapter presented the methodology used to collect data pertinent to this research study. The operationalization table (Table 3.1) presented the questions posed to the research participants developed from the conceptual framework (Table 2.1) in Chapter 2: Literature Review. Strengths and weaknesses of survey research were also discussed, in addition to the research procedure used specifically to this study. Chapter 4: Results presents and discusses the information gathered from the survey distribution in detail as well as the descriptive statistics.

Chapter IV: Results

The purpose of this chapter is to present the results of the survey of students pertaining to marijuana legalization. This chapter discusses the descriptive statistics in-depth and presents the opinions/perceptions of its participants. The chapter is organized as follows: the response rate of the survey, student position on marijuana legalization, use of marijuana, the opinions/perceptions of marijuana and its legalization, and demographic characteristics of participating students. The results presented in this chapter are limited to Texas State University and results pertaining to some survey items will be compared against national polls and other studies which have used the same or similar survey items.

Response Rate

During the four-week data collection period which lasted from May 29, 2019, to June 30, 2019, the survey was distributed to 820 Texas State University students that met the study qualifications. Table 4.1 presents the breakdown of the students who participated in this survey, to include those that consented and those that did not consent to participation. Of 156 students that responded to the survey inquiry only 153 of those consented to the survey. This survey had an 18.6% response rate for consent. The overall response rate for survey questions, beginning with the question on student stance on marijuana legalization, ranged from 5.5% to 18.4%. There are many reasons as to why the rate to survey responses varied which may include the sensitivity of the questions to the length of the survey. While most studies only report data that includes responses that were entered in its completion, this study reports all responses that were entered by the participants to gain an overall view and understanding of what the students' opinions/perceptions are. In addition, because the information was collected anonymously,

through Qualtrics, it is not possible to ascertain which individuals responded to specific questions and therefore could not determine which data response came from each individual, a greater reason to include all responses.

Table 4.1. Participant Survey Consent

	Consented	Did not consent	Total
Frequency (n)	153	3	156
Percentage	18.6%	0.4%	19%

Position

The survey's most important question pertained to the participants' stance on marijuana legalization. Of the 153 participants that consented to the survey, only 151 went on to respond to this question which resulted in a 99% response rate. Table 4.2 presents the results pertaining to this question. Of the individuals who responded, 89.4% are for marijuana legalization, while 7.3% are against, and 3.3% have no opinion or are indifferent towards marijuana legalization.

When comparing this to the Gallup (2018) and Pew Research Center (2018) national polls both reported a 66% and 62% approval rating for the legalization of marijuana, respectively. In 2015, Gallup reported a 58% approval of the U.S. population while the Pew Research Center (2015) reported 53% in favor of. This data clearly shows us that the approval for marijuana legalization continues to rise. The Texas State University participant approval of 89.4% for marijuana legalization can serve as an indicator of what the national polls may expect in 2019 and future years.

Table 4.2. Student Position on Marijuana Legalization

Do you think the use of marijuana should be made legal?				
	Yes	No	No opinion/indifferent	Total
Frequency (n)	135	11	5	151
Percentage	89.4%	7.3%	3.3%	100%

Use

Following the question on their stance on marijuana legalization, participants were asked questions regarding their usage of marijuana. The questions on the use of marijuana focused on their past or present use, how often they use(d), reasons why they use(d), instances in which they have been under the influence, other illicit drug use, and their knowledge of knowing someone that currently uses. Regarding the first question on use, pertaining to their characterization of use (Table 4.3), 39% currently use marijuana while 40% reported having used in the past. Only 17% of participants claimed they have never used marijuana and 4% preferred not to answer.

Participants that reported never having used marijuana were forwarded to the question on other illicit drug use as further questions of marijuana use would not pertain to them. Those that preferred not to answer were given the option to continue with the rest of the marijuana use questions but also had the option to opt-out of answering them by skipping these questions. Of those individuals who provided their stance on marijuana legalization, two individuals did not respond to their current or past use of marijuana.

In 2015, Pew Research Center asked a similar question, “Keeping in mind that all of your answers in the survey are confidential, have you, yourself, ever happened to try marijuana?” It was reported that 49% said yes, and 51% as no. As compared to the Pew Research Center, it

appears that the majority of individuals have used marijuana and results greatly differ as seen in Table 4.3.

Table 4.3. Characterization of Use

How would you categorize your marijuana use?					
	Currently use	Have used	Never used	Prefer not to answer	Total
Frequency (n)	58	60	25	6	149
Percentage	38.9%	40.3%	16.8%	4.0%	100%

Individuals who reported having used or currently using marijuana were asked to provide the age at which they first used/tried this controlled substance. Ages of these students ranged from 12-23, 26-27, and 48 years. The average age of first usage is 17 years. Table 4.4 presents the frequency and percentage of each reported age. Participant response dropped for this question with only 110 participants reporting their age. This could be attributed to the fact that they had to fill in their answer rather than choosing a multiple-choice option of age or age ranges.

In a Canadian study by Spackman et al. (2017), the researchers asked the participants the age they first used marijuana. They “reported a median age of first use of 17” (p. 21), which is the average age of first use determined in this study. Reported ages in the study by Spackman et al. (2017), ranged from “9 to 78 years old” (p. 21). While the study included participants throughout Canada, and this study focused on university students, the median age for first use may be indicative of when individuals are first exposed to marijuana.

Table 4.4. Age Distribution of First Use of Marijuana

Age	Frequency (n)	Percentage
12	2	1.8%
13	4	3.6%
14	8	7.3%
15	18	16.4%
16	22	20.0%
17	19	17.3%
18	17	15.5%
19	7	6.4%
20	6	5.5%
21	2	1.8%
22	1	0.9%
23	1	0.9%
26	1	0.9%
27	1	0.9%
48	1	0.9%
Total	110	100%
\bar{x}	17	

Participants were then asked to describe the frequency in which they do or did use marijuana with the majority (37%) reporting daily use. Following daily use, individuals reported using rarely (32%), and weekly and monthly use can be seen in Table 4.5. It appears that the majority were at opposite ends of the spectrum with some using daily and others rarely (1-3 times per calendar year). This data could be telling on whether marijuana is truly an addictive substance for some users.

In the study by Spackman et al. (2017), “forty-three percent of respondents reported that they used marijuana yearly while 17% reported daily use” (p. 21). Marijuana use of students at Texas State University does not compare to results reported in the Canadian population study.

Table 4.5. Characterization of Marijuana Consumption

How often do/did you use?					
	Daily	Weekly	Monthly	Rarely (1-3 times per calendar year)	Total
Frequency (n)	42	20	15	36	113
Percentage	37.2%	17.7%	13.3%	31.9%	100%

When asked why they did or do use marijuana, 31% of respondents reported primarily using for fun, 22% to overcome stress, 19% to overcome anxiety, and 14% to overcome depression as depicted in Table 4.6. Only 4% reported using for medical reasons while 4% used under the influence of peer pressure. Seven percent of respondents reported using for other reasons that are not detailed. This data demonstrates that a combined 58.3% of participants mainly use or did use for a mental or medical ailment. If over half of the respondents report this as the main reason, we should highly consider the expanded use of medicinal purposes of marijuana as a portion of the population may benefit from its use. In addition, because only four percent reported using as a result of peer pressure this may be indicative of whether marijuana legalization may cause others to use. It appears as if despite the availability of illegal marijuana, a limited number of participants (12) felt as if they had to partake in using marijuana because their peers were doing so.

While qualitative data explaining specifics as to why students used was not collected in this study, it would be useful to find out why students felt they had to use marijuana to relieve their stress, depression, anxiety, and other medical reasons. Studies such as that of Garner (2016) and Pearson et al. (2017) provide an in-depth look on marijuana use among college students and graduate students and could be used as a reference to conduct a future study of such at Texas State University. Additionally, Friese (2017) discusses the reasons for marijuana use among high school

students, which should be considered as they are potential future college students throughout the United States.

Table 4.6. Reasons for Using Marijuana

Why do/did you use?							
	For Fun	To overcome stress	To overcome depression	To overcome anxiety	Medical reasons	Peer pressure	Other
Frequency (n)	85	61	38	53	10	12	19
Percentage	30.6%	21.9%	13.7%	19.1%	3.6%	4.3%	6.8%

Table 4.7 depicts environments in which individuals who reported currently using or have used, with the majority (34.0%) reporting being under the influence at home. Following being under the influence at home, 18.4% equally reported being under the influence at school and while driving. Thirteen percent reported being under the influence at work and 11.5% at other locations. Lastly, 2.4% equally reported being under the influence while operating heavy machinery while others preferred not to answer. This data presents the fact that despite marijuana being illegal many individuals are under the influence in a variety of environments, even those of which may cause an individual's dismissal.

Table 4.7. Environments Where Participants Have Been Under the Influence of Marijuana

I have been under the influence:							
	At school	At work	While driving	While operating heavy machinery	At home	Other	Prefer not to answer
Frequency (n)	53	37	53	7	98	33	7
Percentage	18.4%	12.9%	18.4%	2.4%	34.0%	11.5%	2.4%

Although this survey focused on marijuana, participants were also asked to identify additional illicit drug use. Participants were given the option to check all that applied. Data presented here does not represent a correlation between marijuana use and other substance use. Regardless of whether individuals reported using marijuana previously or not, individuals reported using a variety of other substances and this data is presented in Table 4.8. Substances of primary use were alcohol (36%) and tobacco (25%). Other illicit drugs used included cocaine (10%), ecstasy (9%), LSD (7%), other (7%), synthetic marijuana (4%), heroin (1%), and some preferred not to answer (1%). It appears that regardless of their opinion on the legalization of marijuana, many individuals have chosen to partake in other recreational and illicit drug use. Additionally, this is not an exhaustive list of illicit drugs and individuals may have used others not mentioned in this study. This question was presented to predominantly establish that individuals use a variety of illicit drugs independent of its legal/illegal status in the U.S.

Table 4.8. Participant Illicit Drug Use

Have you used or tried any of the following substances?									
	Alcohol	Tobacco	Cocaine	Ecstasy	LSD	Heroin	Synthetic marijuana	Other	Prefer not to answer
Frequency (n)	132	92	38	32	25	5	15	24	5
Percentage	35.9%	25.0%	10.3%	8.7%	6.8%	1.4%	4.1%	6.5%	1.4%

Of 140 participants, 91% reported knowing someone who currently uses marijuana (Table 4.9). So, despite marijuana being illegal in Texas, the majority know someone that uses this “controlled substance.” Only 8% reported that they do not know someone who currently uses and 1% were unsure if their peers currently use marijuana. The information reported here is made under the assumption of the participants. The information provided by participants could have

been gathered through hearsay or through actual visualization of peer marijuana consumption, so this data may not be factual.

Table 4.9. Knowledge of Someone Using Marijuana

Do you know someone who currently uses marijuana?				
	Yes	No	Unsure	Total
Frequency (n)	127	11	2	140
Percentage	90.7%	7.9%	1.4%	100%

Opinion/Perception

Following questions on use, participants were asked several opinion/perception questions on marijuana and its legalization. The responses to these questions are based solely on how participants felt at the time of the study and are not indicative of any information presented in the literature review of this paper or read elsewhere.

The first set of seven questions are presented in Table 4.10. These questions pertained to participant views on marijuana as a gateway drug, it being addictive, whether it is damaging to the brain and overall health, its harm in relation to alcohol and tobacco use, and whether it is safer to consume edible marijuana rather than smoking it.

Regarding marijuana as a gateway drug, 79% of individuals do not believe it is a gateway drug, while 9% believe it is, and 12% are unsure. Pertaining to addictiveness, 59% reported marijuana as not addictive while 35% do believe it does have addictive qualities and 6% are unsure if it is. Whether marijuana use is damaging to the brain, 51% believe it is not damaging to the brain, while 27% believe it is and 22% are unsure of this. In relation to overall health, 64% believe it is not damaging to overall health while 18% believe it is. When comparing to alcohol and

tobacco use, a vast majority believe marijuana use is less harmful than alcohol (82%) and tobacco (83%). This is an intriguing response as these two substances are legal and are reported as the cause of major disease effects in relation to their consumption and account for many causes of death. Lastly, when asked if edible marijuana is safer to consume than smoking marijuana, 51% believe it is safer while 34% are unsure if the difference in the type of consumption makes it safer or not, 15% do not believe it is safer. Collectively, 138 participants responded to each of these seven questions. Overall, the data demonstrate that participants feel marijuana is relatively safe to use and not as damaging to health as legalized substances. A study conducted by Q Market Research for the Hazelden Betty Ford Foundation (2015) focused on current or former college students ages 18-25 and posed the same or similar questions of the participants. Key outcomes in that study found that: “40.8% think marijuana is not addictive,” “34.6% think it is not damaging to the brain,” “31.9% think edible marijuana is safer than smoking marijuana,” “56.0% believe marijuana is less harmful than alcohol,” and “60.8% believe marijuana is less harmful than tobacco” (p. 4). The Hazelden Betty Ford Foundation (2015) study goes on to present information on other questions that were also the same or similarly posed in this study. It is recommended that this study be referred to for additional data.

Table 4.10. Opinions/Perceptions of Marijuana Use

	Yes (n)	%	No (n)	%	Unsure (n)	%	Total (n)
Do you think marijuana is a gateway drug?	12	9	109	79	17	12	138
Do you think marijuana is addictive?	48	35	82	59	8	6	138
Do you think marijuana is damaging to the brain?	37	27	70	51	31	22	138
Do you think marijuana is damaging to overall health?	25	18	88	64	25	18	138
Do you think marijuana is less harmful to health than alcohol use?	113	82	14	10	11	8	138
Do you think marijuana is less harmful to health than tobacco use?	115	83	13	9	10	7	138
Do you think consuming edible marijuana is safer than smoking it?	70	51	21	15	47	34	138

Participants were then asked what types of marijuana use they support for legalization; they could check all options that applied. The options given were for cannabidiol (CBD), medicinal, and recreational use. The participants were also given the choice not to support any or the option of no opinion or indifferent. Table 4.11 outlines support for medicinal (36%) and recreational (35%) use with a difference in one percent, followed by support for CBD (26%) use. Only one percent of the sample population does not support any form of legalization, and less than one percent (0.60%) has no opinion or is indifferent regarding the matter. This data shows us that on average 98% of the survey population believes a variation of marijuana use should be legalized in Texas. Although Texas allows CBD consumption for some ailments, the Texas legislature should consider additional uses and expanding legalization overall.

Table 4.11. Support for Types of Use of Marijuana

Marijuana should be legal for what use?					
	Cannabidiol (CBD)	Medicinal	Recreational	Do not support any	No opinion/ indifferent
Frequency (n)	89	122	119	4	2
Percentage	26.5%	36.3%	35.4%	1.2%	0.6%
\bar{x}	98% Support some form of marijuana use				

Table 4.12 depicts whether Americans should be allowed to grow their own plant(s) at home. Regarding the cultivation of marijuana plants at home, 67% of respondents felt this should be allowed while 20% do not agree with Americans growing their own plants at home. Currently, Alaska (Alaska, n.d.), Colorado (Colorado, 2019), Maine (Maine State Legislature, 2019), Massachusetts (Commonwealth of Massachusetts, 2019), Michigan (Michigan Legislature, n.d.), Nevada (Marijuana in Nevada, 2019), Oregon (Oregon, n.d.), Vermont (Vermont General

Assembly, 2019) and the District of Columbia (Metropolitan Police Department, n.d.) are the only states which allow for the home cultivation of marijuana plants for those at the legal age and above for recreational use (does not include those for medicinal uses). The only state which allows for the recreational use of marijuana but not the cultivation of plants at home is Washington state (Spokane, 2019).

Table 4.12. Opinions on Home Cultivation

If legalized, do you believe Americans should be allowed to grow their own plant(s) at home?				
	Yes	No	No opinion/ indifferent	Total
Frequency (n)	93	27	18	138
Percentage	67.4%	19.6%	13.0%	100

Table 4.13 presents responses to two questions that ask whether legalizing marijuana makes its use seem safer and whether legalization makes using marijuana more socially acceptable. Regarding if legalization of marijuana makes its use seem safer, 70% felt that legalization would make its use seem safer, 20% did not agree, and 11% are unsure of this. Pertaining to whether legalization of marijuana makes it more socially acceptable, the vast majority (86%) of respondents agreed that it does.

Table 4.13. Opinions on the Appearance of Safe Use and Social Acceptance of Marijuana Legalization

	Yes (n)	%	No (n)	%	Unsure (n)	%	Total (n)
Do you think legalizing marijuana makes its use seem safer?	96	69.6%	27	19.6%	15	10.9%	138
Do you think legalizing marijuana makes it more socially acceptable?	119	86.2%	13	9.4%	6	4.4%	138

Table 4.14 presents the opinions of participants on what they believe should be the legal age for recreational use under the assumption that marijuana is legalized. The age options represented the current legal ages for tobacco use (18) and for alcohol consumption (21). Sixty-four percent of participants believe the legal age for recreational use should be 21. Of the states which have legalized marijuana, the legal age of marijuana consumption has been set at 21 and over. Thirty percent of the participants believe the legal age for recreational use should be 18 and six percent have no opinion or are indifferent.

Table 4.14. Legal Age for Recreational Marijuana Use

If legalized, what should be the legal age for recreational use?				
	18	21	No opinion/ indifferent	Total
Frequency (n)	42	88	8	138
Percentage	30.4%	63.8%	5.80%	100

Table 4.15 presents responses to five questions pertaining to opinions on the recreational use of marijuana and accessibility to those under the legal age, whether recreational legalization

may cause more people to try it, relative perception of safety pertaining to crimes related to marijuana, and whether they believe America would be safer if marijuana were to be legalized.

When asked if legalization of recreational uses of marijuana would make it more accessible to those under the legal age, 58% of respondents do not believe it will be more accessible while 36% believe that it would be, 7% are unsure of this. Whether legalization of recreational use would cause individuals to start using at a younger age, 60% believe that it would not, 28% believe that it would and 12% are unsure of this. A study by Friese (2017) was conducted on high school students who have reported using marijuana. This demonstrates that marijuana is already accessible to individuals below the legal age of consumption. With that in mind, marijuana legalization may not play a factor in accessibility and how younger individuals are resourceful in obtaining this substance. Furthermore, when asked if legalization would cause more people to use marijuana a vast majority (84%) agree that it would. Nine percent of individuals believe it would not and 7% are unsure if it would.

Currently, there are many individuals who are incarcerated for marijuana-related crimes and therefore participants were asked if legalization would reduce robberies, homicides, or other crimes related to marijuana. Seventy-four percent of individuals believe marijuana-related crimes would be reduced, 14% are unsure of this, and 12% believe they would not be. Lastly, participants were asked if overall legalization would make America safer. Of the participants, 53% believe America would be, 28% are unsure of this, and 20% believe American would not be safer. Overall, 138 participants responded to each of these questions.

Table 4.15 Opinions on Recreational Use of Marijuana and Safety after Legalization

	Yes (n)	%	No (n)	%	Unsure (n)	%	Total (n)
Do you think legalizing marijuana for recreational purposes will make it more accessible to those under the legal age?	49	35.5	80	58.0	9	6.5	138
Do you think legalizing marijuana for recreational purposes will cause individuals to start using at a younger age?	38	27.5	83	60.1	17	12.3	138
Do you think legalizing marijuana for recreational purposes will cause more people to try it?	116	84.1	13	9.4	9	6.5	138
If legalized, do you believe robberies, homicides, or other crimes related to marijuana will be reduced?	102	73.9	17	12.3	19	13.8	138
If legalized, do you think America will be safer?	73	52.9	27	19.6	38	27.5	138

Under the assumption that marijuana is to be legalized, the respondents were asked how they believe state/city taxes and/or licensing revenues should be appropriated. Table 4.16 demonstrates that students closely believe monies should be allocated primarily to Education (45%) and Healthcare (43%). The options that were presented to the participants were limited as there is an array of categories in which revenues could be budgeted for. The options provided represent those most commonly budgeted categories by states across the U.S.

Table 4.16. Proposed Appropriations of Tax and Licensing Revenues of Marijuana Legalization

If legalized, how should state/city taxes on marijuana and/or licensing revenues be budgeted for?		
	Frequency (n)	Percentage
Education	61	44.5%
Healthcare	59	43.1%
Housing	5	3.7%
Transportation	3	2.2%
Other	9	6.6%
Total	137	100%

Table 4.17 depicts opinions on whether participants believe that government efforts to enforce marijuana laws cost more than they are worth. Of 137 respondents, 86% believe that government efforts to enforce laws cost more than they are worth. In the recent years, many states have implemented laws decriminalizing marijuana offenses to offset penalties and costs and reduce the number individuals that are incarcerated for minor possession crimes as this can be costly to States and taxpayers (NORML, n.d.a).

Table 4.17. Opinion on Costs Related to Enforcing Marijuana Laws

Do you believe government efforts to enforce marijuana laws cost more than they are worth?				
	Agree	Disagree	Unsure	Total
Frequency (n)	118	10	9	137
Percentage	86.1%	7.3%	6.6%	100%

An important aspect of state marijuana legalization is the continued involvement of the federal government in regulating and enforcing marijuana regulations under the Controlled Substances Act. Therefore, participants were asked if they believed the federal government should continue to enforce federal marijuana laws in states that have decided to allow marijuana use. Table 4.18 presents the results that demonstrate that 84% of participants do not believe that the federal government should enforce federal marijuana laws in these states. This may be attributed to the fact that oversight will remain through some level of government.

Table 4.18. Opinion on Federal Government Enforcement of Marijuana Laws in States That Have Legalized Marijuana

Some states have decided to allow marijuana use, but it is still prohibited under federal law. Do you think the federal government should or should not enforce federal marijuana laws in these states?				
	Should	Should not	No opinion/ indifferent	Total
Frequency (n)	15	115	7	137
Percentage	11.0%	83.9%	5.1%	100%

As demonstrated in Table 4.3 participants currently use (39%) or have used (40%) marijuana. The survey went on to ask participants if they believe politicians, policymakers, elected or appointed officials, and/or public administrators currently use marijuana as well. Table 4.19 depicts that of the 137 respondents, 82% believe that these individuals currently use marijuana, 15% are unsure of this, and 3% do not believe they do. This data demonstrates that a vast majority of Texas State University students feel the political and public officials they rely on to follow the law indeed violate the law with marijuana consumption. Table 4.19 also presents data on whether the participants feel that the general U.S. population is overall misinformed concerning marijuana.

Of 138 respondents, 87% feel that the general U.S. population is misinformed while 3% believe they are not. Therefore, it is of vital importance that political and public officials do their best to inform themselves and the public on the benefits or downfalls of marijuana consumption and legalization.

Table 4.19. Opinions on Marijuana Use by Political and Public Leaders and General Knowledge of Marijuana in the U.S.

	Yes (n)	%	No (n)	%	Unsure (n)	%	Total (n)
Do you think politicians, policymakers, elected or appointed officials, and/or public administrators currently use marijuana?	113	82.5%	4	2.9%	20	14.6%	137
Overall, do you think the general U.S. population is misinformed concerning marijuana?	120	87.0%	4	2.9%	14	10.1%	138

Demographics

At the end of the survey, participants reported demographic characteristics that included their degree program, student classification, age, gender, race/ethnicity, employment status, annual income, parental status, and political party affiliation. These characteristics were chosen to give a closer look at the participants of this survey. Some of these demographic data will be compared against data from Gallup (2018) and Pew Research Center (2018) national poll results on marijuana legalization. In addition, some of the demographic characteristics will be compared against the main question of this study: do you believe the use of marijuana should be legal? It is of utmost importance to demonstrate which demographic groups are for or against marijuana legalization and whether there is a significant correlation between demographic characteristics and marijuana legalization.

Degree Program

As mentioned in Chapter III: Methodology, a list of undergraduate and graduate Political Science and Public Administration students were compiled that identified 820 qualified participants. Of the individuals who participated in this survey and answered the question on their stance on marijuana legalization, only 137 (17% of the total qualified participants) reported their degree program. The individuals that went on to answer which degree program they fell under consisted of 62% Political Science students and 38% were under the Public Administration program as seen in Table 4.20.

When it came to the question on their position on marijuana legalization results can be seen in Table 4.21. The data presented in this table accounts for 137 students of the 151 that presented their stance on marijuana legalization. Of these, 56% of Political Science students felt that marijuana should be legal, 4% are against marijuana legalization, and 2% of these students have no opinion or are indifferent. Concerning Public Administration students, 34% of students believe marijuana should be legal, 4% do not, and 2% have no opinion or are indifferent. These results accounted for 91% of the students which responded to the question on their stance on marijuana legalization. A chi-squared test of the data, as seen in Table 4.22, demonstrated there is no significant ($p > .05$) relationship between a student degree program and their stance on marijuana legalization.

Table 4.20. Degree Program

What is your degree program?			
	Political Science	Public Administration	Total
Frequency (n)	85	52	137
Percentage	62.0%	38.0%	100%

Table 4.21. Degree Program and Stance on Marijuana Legalization

		Do you think the use of marijuana should be made legal?					
		Yes (n)	%	No (n)	%	No opinion/ indifferent (n)	%
What is your degree program?	Political Science	77	56.2%	6	4.4%	2	1.5%
	Public Administration	45	32.8%	5	3.6%	2	1.5%
	Total	122	89.1%	11	8.0%	4	2.9%

Table 4.22. Degree Program/Marijuana Legalization Chi-Squared Test

Chi-Squared Test		
Statistical Significance (P-Value)	Not significant	0.753
Effect Size (Cramér's V)	No relationship	0.064
Sample Size		137

Student Classification

Table 4.23 presents the students that met the qualifications of the survey and which the survey was distributed to. Of the individuals that took the survey, 58% consisted of undergraduate students and 42% as graduate students as seen in Table 4.24. All participants that took this survey were degree-seeking students at Texas State University. Table 4.25 further describes the student's stance on marijuana legalization by their student classification. This data shows that 55% of undergraduate and 34% of graduate students are for marijuana legalization. The individuals for marijuana legalization comprised of 89%. Pertaining to those against the legalization of marijuana it was reported that only 2% of undergraduate and 6% graduate students are opposed while a total of 3% of both student classifications have no opinion or are indifferent. When determining if there

is a statistical significance between student classification and marijuana legalization, a chi-squared test demonstrates a strong correlation ($p < .001$) between these two categories as seen in Table 4.26.

Table 4.23. Student Classification of Participants that Met Survey Qualifications

	Undergraduate	Graduate	Non-degree seeking	Total
Frequency (n)	627	193	0	820
Percentage	76.5%	23.5%	0	100

Table 4.24. Student Classification of Survey Participants

What is your student classification?				
	Undergraduate	Graduate	Non-degree seeking	Total
Frequency (n)	80	58	0	138
Percentage	58.0%	42.0%	0	100

Table 4.25. Student Classification and Stance on Marijuana Legalization

		Do you think the use of marijuana should be made legal?					
		Yes (n)	%	No (n)	%	No opinion/indifferent (n)	%
What is your student classification?	Undergraduate	76	55.1%	3	2.2%	1	0.7%
	Graduate	47	34.1%	8	5.8%	3	2.2%
	Total	123	89.1%	11	8.0%	4	2.9%

Table 4.26. Student Classification/Marijuana Legalization Chi-Squared Test

Chi-Squared Test		
Statistical Significance (P-Value)	Clearly significant	0.000
Effect Size (Cramér's V)	Large	0.639
Sample Size		135

Age

Participants were asked to provide their current age to determine which age groups were represented in this study. Reported ages ranged from 18-54. Ages and frequency of each are presented in Table 4.27. The following ages were represented the most: 19 (11%), 21 (10%), and 22 (14%). Ages 31 and above were each represented at 2% or less, with an average age of 27 years. One of the reported ages was excluded from the results as it was reported as “40s” and cannot be evaluated. Additionally, Table 4.28 presents the age groups that are represented in this study and as classified by Gallup (2018) and Pew Research Center (2018). Millennials are the age group that is mainly represented at 83% followed by Generation X at 17%. Baby Boomers and the Silent Generation are not represented in this study.

In 2018, Pew Research Center reported 74% of Millennials and 63% of Generation X as supporting marijuana legalization. Gallup (2018) reported 78% support by Millennials and 65% of Generation X. While Millennials are largely represented in this study, Generation X is not and therefore is not a good indicator of true marijuana legalization support for Gen X.

Table 4.27. Reported Age Frequency

What is your age?		
Age	Frequency (n)	Percentage
18	4	3.0%
19	15	11.2%
20	9	6.7%
21	14	10.5%
22	19	14.2%
23	6	4.5%
24	5	3.7%
25	7	5.2%
26	7	5.2%
27	3	2.2%
28	6	4.5%
29	4	3.0%
30	4	3.0%
31	2	1.5%
32	2	1.5%
33	2	1.5%
34	1	0.8%
35	1	0.8%
36	2	1.5%
37	1	0.8%
38	3	2.2%
40	2	1.5%
41	2	1.5%
43	3	2.2%
45	1	0.8%
47	1	0.8%
48	1	0.8%
49	1	0.8%
50	1	0.8%
51	1	0.8%
54	3	2.2%
Total	133	100%
\bar{x}	27	

Table 4.28. Represented Age Groups

Age groups	Frequency (n)	Percentage
Millennials (18-34)	110	82.7%
Generation X (35-54)	23	17.3%
Baby Boomers & Silent Generation (55+)	0	0.0%
Total	133	100%

Gender

Table 4.29 demonstrates the breakdown of participants by gender. The participants were given the options to choose from Male, Female, and Other in the case that they didn't identify as Male nor Female. Of the 137 participants that responded to this question, 45% were Males, 54% Females, and 1% identified as Other. When comparing the data on the percentage of females and males with the Texas State University population as presented in Chapter III, it appears as if it is close to the reported statistics of 58% females and 42% males. This information indicates that the sample population of this survey study is close to representative of the Texas State University population.

Table 4.29. Gender

What is your gender?				
	Male	Female	Other	Total
Frequency (n)	62	74	1	137
Percentage	45.3%	54.0%	0.7%	100%

Next, of the 137 individuals who responded to this survey question, Table 4.30 gives the breakdown of those that were for or against marijuana legalization. Females were 47% for marijuana legalization while 4% were not and 2% had no opinion or were indifferent. Males were 42% for marijuana legalization and 4% were not. Lastly, of the 1% that identified as other, they were for marijuana legalization. This information shows us that females are more likely to be for marijuana legalization than males. When comparing this information to that reported by the national polls, the Pew Research Center (2018) found that 68% of men support marijuana legalization while 56% of women support legalization. Gender statistics for 2018 could not be located for the Gallup poll for comparison.

In determining whether there is a statistical correlation between gender and marijuana legalization, the data in Table 4.31 demonstrates that there is no correlation of the gender groups and their position.

Table 4.30. Gender and Stance on Marijuana Legalization

		Do you think the use of marijuana should be made legal?					
		Yes (n)	%	No (n)	%	No opinion/ indifferent (n)	%
What is your gender?	Female	65	47.4%	6	4.4%	3	2.2%
	Male	57	41.6%	5	3.6%	0	0.0%
	Other	1	0.7%	0	0.0%	0	0.0%
	Total	123	89.8%	11	8.0%	3	2.2%

Table 4.31. Gender/Marijuana Legalization Chi-Squared Test

Chi-Squared Test		
Statistical Significance (P-Value)	Not significant	0.607
Effect Size (Cramér's V)	Small	0.099
Sample Size		137

Race/Ethnicity

Another aspect of demographic characteristics is the reported race/ethnicity of survey participants. The survey presented seven options for students to choose from in which they best identified with. The options include White, Hispanic or Latino, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Pacific Islander, and Other. Of 145 students which reported their race/ethnicity, as seen in Table 4.32, 64% identified as White, 25% as Hispanic or Latino, 7% as Black or African American, 2% as Other, and American Indian or Alaska Native, Asian, and Native Hawaiian or Pacific Islander each reported at less than one percent. When comparing this to the statistics reported by Texas State University as discussed in Chapter III (45% White, 37% Hispanic, 11% African American, and 5% Other, with a total of 53% comprised of ethnic minorities), a greater percent of White students seem to be enrolled in the Political Science and Public Administration programs. This data may demonstrate that in the future there may be less ethnic minority representation in political and public leadership positions in Texas.

Table 4.32. Race/Ethnicity

What is your race/ethnicity?		
	Frequency (n)	Percentage
White	93	64.1%
Hispanic or Latino	36	24.8%
Black or African American	10	6.9%
American Indian or Alaska Native	1	0.7%
Asian	1	0.7%
Native Hawaiian or Pacific Islander	1	0.7%
Other	3	2.1%
Total	145	100%

Additionally, Table 4.33 presents these results. This data demonstrates that of the 64% of White individuals, 57% of these are for marijuana legalization, 6% are against this, and 1% have no opinion or are indifferent. Of the 25% Hispanic or Latino individuals, 22% are for marijuana legalization, 1% have no opinion or are indifferent, and 2% are against it. Black or African American individuals accounted for 7% and of these, 100 % of them are for marijuana legalization. Lastly, of the remaining 7% of race/ethnic groups, 100% of these individuals are also for marijuana legalization. It appears as if the less represented ethnic minorities in this survey research are less inclined to oppose marijuana legalization. Overall, the least represented ethnic minorities may be more inclined to favor marijuana legalization and it would be of importance to inquire as to why these groups feel this way.

Table 4.33 Race/Ethnicity Groups Stance on Marijuana Legalization

What is your race/ethnicity?	Do you think the use of marijuana should be made legal?					
	Yes (n)	%	No (n)	%	No opinion/indifferent (n)	%
American Indian or Alaska Native	1	0.7%	0	0%	0	0%
Asian	1	0.7%	0	0%	0	0%
Black or African American	10	6.9%	0	0%	0	0%
Hispanic or Latino	32	22.1%	3	2.1%	1	0.7%
Native Hawaiian or Pacific Islander	1	0.7%	0	0%	0	0%
Other	3	2.1%	0	0%	0	0%
White	83	57.2%	8	5.5%	2	1.4%
Total	131	90.4%	11	7.6%	3	2.1%

Employment

Since marijuana use and production is illegal in Texas and many employers test for drug use before and during employment, it was pertinent to inquire about the participants' current employment status. Of those that responded to this question (137), 84% reported they were employed and 16% were not (Table 4.34). Table 4.35 further presents how many of these individuals whether employed or not are for, against, or have no opinion or indifferent on marijuana legalization. Of the 84% that are employed, 74% are for legalization, 8% are against, and 2% have no opinion or are indifferent. Those that reported being unemployed (16%), 100% are for marijuana legalization. When determining if there is a statistical significance, a chi-squared test demonstrates that there is no significant ($p > .05$) correlation between employment status and marijuana legalization (Table 4.36).

Table 4.34. Employment Status

Are you currently employed?				
	Yes	No	Prefer not to answer	Total
Frequency (n)	115	22	0	137
Percentage	83.9%	16.1%	0.0%	100%

Table 4.35. Employment Status and Stance on Marijuana Legalization

		Do you think the use of marijuana should be made legal?					
		Yes (n)	%	No (n)	%	No opinion/indifferent (n)	%
Are you currently employed?	Yes	101	73.7%	11	8.0%	3	2.2%
	No	22	16.1%	0	0.0%	0	0.0%
	Total	123	89.8%	11	8.0%	3	2.2%

Table 4.36 Employment Status/Marijuana Legalization Chi-Squared Test

Chi-Squared Test		
Statistical Significance (P-Value)	Not significant	0.225
Effect Size (Cramér's V)	Small	0.148
Sample Size		137

Annual Income

In addition to employment status, participants were asked to provide their annual income. Although 115 individuals reported they were employed at the time of the survey, 135 individuals reported receiving an annual income. The survey provided participants with eleven income

categories to choose from of which only one category was not elected (\$80,000 - \$89,999). The results are provided in Table 4.37. Of the eleven options, the lower-income level was reported the most for students at 34%. Table 4.38 provides the breakdown of annual income per student classification. A chi-squared test of this data (Table 4.39) identifies a strong correlation ($p < .001$) between annual income and student classification.

Table 4.40 presents comparison data of annual income and stance on marijuana legalization. The data shows that the income class of less than \$10,000 reported a higher percentage of 33% for marijuana legalization. Of the income classes, the higher the income ($\geq \$70,000$) one percent or less for each category are for marijuana legalization. Although Table 4.40 demonstrates that there is no correlation between annual income and stance on marijuana legalization, the data from Table 4.41 indicates that the higher the income the less likely individuals are for marijuana legalization.

Table 4.37. Annual Income

What is your annual income?		
	Frequency (n)	Percentage
Less than \$10,000	46	34.1%
\$10,000 - \$19,999	21	15.6%
\$20,000 - \$29,999	15	11.1%
\$30,000 - \$39,999	14	10.4%
\$40,000 - \$49,999	13	9.6%
\$50,000 - \$59,999	9	6.7%
\$60,000 - \$69,999	11	8.1%
\$70,000 - \$79,999	1	0.7%
\$80,000 - \$89,999	0	0.0%
\$90,000 - \$99,999	2	1.5%
\$100,000 - \$149,999	1	0.7%
More than \$150,000	2	1.5%
Total	135	100%

Table 4.38. Annual Income and Student Classification

		What is your student classification?			
		Undergraduate (n)	%	Graduate (n)	%
What is your annual income?	Less than \$10,000	42	31.1%	4	3.0%
	\$10,000 - \$19,999	17	12.6%	4	3.0%
	\$20,000 - \$29,999	7	5.2%	8	5.9%
	\$30,000 - \$39,999	6	4.4%	8	5.9%
	\$40,000 - \$49,999	2	1.5%	11	8.1%
	\$50,000 - \$59,999	3	2.2%	6	4.4%
	\$60,000 - \$69,999	2	1.5%	9	6.7%
	\$70,000 - \$79,999	0	0.0%	1	0.7%
	\$80,000 - \$89,999	0	0.0%	0	0.0%
	\$90,000 - \$99,999	0	0.0%	2	1.5%
	\$100,000 - \$149,999	0	0.0%	1	0.7%
	More than \$150,000	0	0.0%	2	1.5%
	Total	79	58.5%	56	41.4%

Table 4.39. Annual Income and Student Classification Chi-Squared Test

Chi-Squared Test		
Statistical Significance (P-Value)	Clearly significant	0.000
Effect Size (Cramér's V)	Large	0.639
Sample Size		135

Table 4.40. Annual Income and Stance on Marijuana Legalization

		Do you think the use of marijuana should be made legal?					
		Yes (n)	%	No (n)	%	No opinion/ indifferent (n)	%
What is your annual income?	Less than \$10,000	44	32.6%	1	0.7%	1	0.7%
	\$10,000 - \$19,999	20	14.8%	1	0.7%	0	0.0%
	\$20,000 - \$29,999	13	9.6%	2	1.5%	0	0.0%
	\$30,000 - \$39,999	13	9.6%	1	0.7%	0	0.0%
	\$40,000 - \$49,999	12	8.9%	1	0.7%	0	0.0%
	\$50,000 - \$59,999	8	5.9%	1	0.7%	0	0.0%
	\$60,000 - \$69,999	7	5.2%	2	1.5%	2	1.5%
	\$70,000 - \$79,999	1	0.7%	0	0.0%	0	0.0%
	\$80,000 - \$89,999	0	0.0%	0	0.0%	0	0.0%
	\$90,000 - \$99,999	2	1.5%	0	0.0%	0	0.0%
	\$100,000 - \$149,999	1	0.7%	0	0.0%	0	0.0%
	More than \$150,000	1	0.7%	1	0.7%	0	0.0%
	Total	122	90.2%	10	7.2%	3	2.2%

Table 4.41. Annual Income/Marijuana Legalization Chi-Squared Test

Chi-Squared Test		
Statistical Significance (P-Value)	Not significant	0.181
Effect Size (Cramér's V)	Medium	0.308
Sample Size		135

Parental Status

Just as important as employment status, is whether any of the participating individuals are parents. While using marijuana during employment could jeopardize an individual, there is often

a negative perception related to parents using or approving of marijuana legalization. Table 4.42 outlines that of 136 individuals that responded to this question, the majority (85%) are not parents while 15% are. When determining how many of these individuals are for, against, or have no opinion or are indifferent the data shows us in Table 4.43 that of the 15% that are parents, 12% are for marijuana legalization and 4% are not. Parents appear to be sure as to what their stance is. Of those that are not parents (85%), 78% are for marijuana legalization, 4% are not, and 2% have no opinion or are indifferent. When conducting a chi-squared test to determine a correlation ($p < .05$), the data shows (Table 4.44) that parental status does impact an individual's stance on marijuana legalization. Although a correlation is demonstrated, many individuals (15) who reported their stance of marijuana legalization opted out of answering this question. This could be attributed to the fact that the option of "Prefer not to answer" was not given or that they may feel they would not want to be judged on their response in relation to their parental status.

Table 4.42. Parental Status

Are you a parent?			
	Yes	No	Total
Frequency (n)	21	115	136
Percentage	15.4%	84.6%	100%

Table 4.43. Parental Status and Stance on Marijuana Legalization

		Do you think the use of marijuana should be made legal?					
		Yes (n)	%	No (n)	%	No opinion/indifferent (n)	%
Are you a parent?	Yes	16	11.8%	5	3.7%	0	0.0%
	No	106	77.9%	6	4.4%	3	2.2%
	Total	122	89.7%	11	8.1%	3	2.2%

Table 4.44. Parental Status and Stance on Marijuana Legalization Chi-Squared Test

Chi-Squared Test		
Statistical Significance (P-Value)	Clearly significant	0.013
Effect Size (Cramér's V)	Small	0.252
Sample Size	136	

Political Party Affiliation

Of the 135 participants that went on to report their political party affiliation as seen in Table 4.45, 46% identified as Democrats, 19% as Republican, 25% as Independent, and 10% were unsure what political party they identified with. An analysis was conducted to determine how many individuals of each political party affiliation were for or against marijuana legalization. The results are shown in Table 4.46 and those that are for marijuana legalization are as follows: Democrat-42%, Independent-23%, Republican-16%, and Unsure-9%. Pertaining to those against marijuana legalization, Democrats account for 3%, Independents and Republicans are equally against at 2%, and those that are Unsure account for 1%. The only political party affiliations that were unsure of their stance were Democrats (1%) and Republicans (2%). A chi-squared test does not reveal a correlation ($p > .05$) of this data (Table 4.47).

Table 4.45. Political Party Affiliation

What is your political party affiliation?					
	Democrat	Republican	Independent	Unsure	Total
Frequency (n)	62	26	34	13	135
Percentage	45.9%	19.3%	25.2%	9.6%	100%

Table 4.46. Political Party Affiliation and Stance on Marijuana Legalization

		Do you think the use of marijuana should be made legal?					
		Yes (n)	%	No (n)	%	No opinion/ indifferent (n)	%
What is your political party affiliation?	Democrat	57	42.2%	4	3.0%	1	0.7%
	Independent	31	23.0%	3	2.2%	0	0.0%
	Republican	21	15.6%	3	2.2%	2	1.5%
	Unsure	12	8.9%	1	0.7%	0	0.0%
	Total	121	89.6%	11	8.2%	3	2.2%

Table 4.47. Political Party Affiliation Chi-Squared Test

Chi-Squared Test		
Statistical Significance (P-Value)	Not significant	0.477
Effect Size (Cramér's V)	Small	0.143
Sample Size		135

Chapter Summary

This chapter discussed the results of the survey that was distributed to Texas State University undergraduate and graduate students in the Political Science and Public Administration Programs. Categories that provided valuable information included student position on marijuana legalization, student use of marijuana, opinions/perceptions on marijuana and marijuana legalization, and demographic characteristics of the target sample population. This chapter has provided insightful information on how potential future political and public leaders feel towards marijuana today. An in-depth discussion and implications on what this data tells us will be presented in Chapter V: Conclusion.

Chapter V: Conclusion

The purpose of this chapter is to discuss the significant outcomes of this study. The chapter is organized as follows: summary of findings and key outcomes, limitations of this research, and recommendations for future research and for the State of Texas. The purpose of this study was to detail the current climate of Texas State University students' stance on marijuana legalization and their opinions/perceptions of marijuana use and marijuana legalization. Through this information, political and public leaders of Texas may gain an understanding of the citizens of Texas view on marijuana and gain some insight into the climate of future legislative sessions.

Summary of Findings

Overall, this study was insightful pertaining to the information that was gathered from the participants. Table 5.1 provides a list of key outcomes that will be further discussed here. Of 820 qualified participants that the survey was distributed to, five to eighteen percent of participants responded to all or portions of the survey. The survey research was divided into four categories (position, use, opinions/perceptions, demographics) of which each provides information on marijuana and marijuana legalization, but some responses were limited. Of primary interest is the high percentage (89%) of students that are favor/support the legalization of marijuana. When comparing demographic characteristics to their stance of marijuana legalization, the data found that student classification and parental status have a significant impact on the individual's stance on marijuana legalization. The fact that so many students are for marijuana legalization is telling of how opinions have vastly changed throughout the years and will continue to do so in the future. Additionally, it is important to note that a larger study may find significant correlations between various demographic characteristics and individuals' opinion on marijuana use and legalization.

Pertaining to personal marijuana use, of the 79% of participants that reported having used or currently using marijuana, 58.3% reported doing so to treat or address a mental or medical ailment. Additionally, 98% of participants support some form of marijuana use that includes either CBD, medicinal, or recreational use. This information is valuable as while illegal, many individuals have or are currently using marijuana, and more than half of individuals reported doing so to treat themselves and this may be indicative as a need for uses that Texas should consider. Lastly, participants believe that politicians, policymakers, elected or appointed officials, and/or public administrators currently use marijuana. While this is only an assumption, it is important to note because these individuals are responsible for molding the future of Texas laws and policies of which decriminalization of marijuana crimes and marijuana legalization is a top priority throughout the United States.

The study demonstrated that the bulk of respondents were between the ages of 19-22 (43%). This information is of importance as within a few years some these individuals will be joining the Texas workforce, and many may become drivers of Texas laws and policies. The study was representative of age groups classified as Millennials (18-34) and Generation X (35-54) but the Baby Boomers and Silent Generation, those 55 and older, were not represented.

Lastly, while annual income and age were not shown to have a correlation between individuals are for or against marijuana legalization, the data shows that as individuals age and their annual income increases, they are less likely to support marijuana legalization. Overall, it could not be determined whether race/ethnicity plays a role in an individual's stance on marijuana legalization. The data indicates that ethnic minorities (34%) were the least represented groups in this study.

Table 5.1. Key Outcomes

List of Key Outcomes
<ul style="list-style-type: none">• 5.5% - 18.4% response rate.• 89.4% of individuals favor/support marijuana legalization.• Student classification is correlated with their stance of marijuana legalization.• Parental status correlates with their stance of marijuana legalization.• 79% of participants reported either currently using or having used marijuana, with the average age reported as 17 years.• 58.3% of participants reported using for a mental or medical ailment.• 98% of participants support some form of marijuana use.• 82% of participants believe politicians, policymakers, elected or appointed officials, and/or public administrators currently use marijuana.• Millennials and Gen X are represented age groups in this study.• As age and annual income increase, individuals are less likely to support marijuana legalization.• Ethnic minorities (34%) were the least represented.

Limitations of this Research

Due to the time constraints of this research, the study had a limited focus on undergraduate and graduate students of Political Science and Public Administration programs. Additionally, the four-week study time period allowed for a limited number of participants as it was conducted during the Summer semester of which many individuals are not registered for classes or do not periodically check their university student email. A study conducted during the longer Spring or Fall semester would allow for the participation of a larger number of students and with enough time to skim through their email to participate in the study.

Another limitation of this study is the Qualtrics system used for data collection. It was noted that the system would not adequately report results that required fill in answers, such as age. While the data was recorded, the system did not include all responses in its analyses and therefore,

the researcher was limited in the information that it could present and had to verify the responses to ensure the calculated statistics were correct. Additionally, because this survey was responded to anonymously, it was difficult to determine how many individuals completed certain questions (e.g. “check all that apply”) and therefore could not provide certain descriptive statistics that are meaningful to the research.

Lastly, many students participated in this study, a portion did not complete the survey in its entirety. There are many reasons as to why they didn’t but by not completing this information, the results vary between questions. It is with certainty that at least 110 individuals completed the survey in its entirety, which accounts for 13.4% of participants who qualified (820).

It is also important to note that this study predominantly focused on the opinions/perceptions of students and did not address pertinent aspects that are attributed to marijuana legalization that include public safety and the potential insurance risks from legalization.

Prospective Future Research and Recommendations

Because of the limitations to this research, there is a broad scope of future research that could be accomplished at Texas State University and in Texas. First and foremost, the scope of study could be expanded to include the broader Texas State University population. This would allow researchers to identify a difference in opinions/perceptions among the varying degree programs and determine if there is a correlation between programs and student classifications on their stance on marijuana legalization. Additionally, considerations can be made to include faculty which is responsible for developing and shaping the minds of individuals who will go on to shape the future of Texas.

Additionally, this study focuses on Political Science and Public Administration students at one Texas university. This study could be expanded to include various major universities across Texas such as University of Texas, Texas A&M University, Texas Tech University, Baylor University, Rice University, University of Houston, and others. A study of such magnitude would allow an overall view of student's opinions/perceptions across Texas and evaluate whether there is a similar trend throughout the state.

Lastly, the State of Texas can consider a study of such with current political and public leaders to gauge their stance towards marijuana legalization. In addition, a study can be expanded to include all citizens of Texas. This information would be highly valuable and useful to gain insight into what direction Texas is heading towards future marijuana legalization.

Conclusion

Marijuana and its legalization are hot topics today. Year after year, the legislature throughout the United States is presented with an array of bills asking for the decriminalization of marijuana offenses to a variation of marijuana legalization. Since 1937, many laws have been enacted that regulate this plant and today, the climate of Americans seem to be leaning towards national legalization. Therefore, it is important that studies such as this one be conducted throughout the United States to gain insight and understanding as to what is driving Americans to change their views towards marijuana. By doing so, states such as Texas can make informed decisions for the wellbeing and interests of their citizens. While this study was limited to certain Texas State University students, their opinions are of high value as a portion of these students will go on to be the future political and public leaders in Texas, and possibly throughout the United States.

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Appendix A: Documentation of IRB Exempt Status and Approval

In future correspondence please refer to 6500

May 22, 2019

Yvette Mendoza
Texas State University
601 University Dr.
San Marcos, TX
78666

Dear Yvette:

Your application titled, "The Case for Mary Jane: A study of student perceptions on marijuana legalization" was reviewed by the Texas State University IRB and approved. It was determined there are: (1) research procedures consistent with a sound research design and they did not expose the subjects to unnecessary risk. (2) benefits to subjects are considered along with the importance of the topic and that outcomes are reasonable; (3) selection of subjects are equitable; and (4) the purposes of the research and the research setting are amenable to subjects' welfare and produced desired outcomes; indications of coercion or prejudice are absent, and participation is clearly voluntary.

1. In addition, the IRB found you will orient participants as follows: (1) informed consent is required; (2) Provision is made for collecting, using and storing data in a manner that protects the safety and privacy of the subjects and the confidentiality of the data; (3) Appropriate safeguards are included to protect the rights and welfare of the subjects. (4) Compensation will not be provided for participation.

This project was approved at the Expedited Review Level until April 30, 2020

2. Please note that the institution is not responsible for any actions regarding this protocol before approval. If you expand the project at a later date to use other instruments, please re-apply. Copies of your request for human subjects review, your application, and this approval, are maintained in the Office of Research Integrity and Compliance.

Report any changes to this approved protocol to this office. Notify the IRB of any unanticipated events, serious adverse events, and breach of confidentiality within 3 days.

Sincerely,



Monica Gonzales
IRB Regulatory Manager
Office of Research Integrity and Compliance
Texas State University

CC: Nandhini Rangarajan

OFFICE OF THE ASSOCIATE VICE PRESIDENT FOR RESEARCH
601 University Drive | JCK #489 | San Marcos, Texas 78666-4616
Phone: 512.245.2314 | fax: 512.245.3847 | WWW.TXSTATE.EDU

This letter is an electronic communication from Texas State University-San Marcos, a member of The Texas State University System.

Appendix B: Survey

Marijuana Legalization Perception Survey

Start of Block: Informed Consent

Q1 Yvette Mendoza, a graduate student at Texas State University, is conducting a research study to describe the perceptions of Texas State University political science and public administration students regarding their position on marijuana legalization. You are being asked to complete this survey because you are a public administration or political science, undergraduate or graduate student. Participation is voluntary. The survey will take approximately 10 minutes or less to complete. You must be at least 18 years old to take this survey. This study involves no foreseeable serious risks. We ask that you try to answer all questions; however, if there are any items that make you uncomfortable or that you would prefer to skip, please leave the answer blank. Your responses are anonymous. Possible benefits from this study include exploring the perception and attitude of the Texas community to bring awareness towards the consideration of marijuana legalization and to anticipate the climate towards future legislative sessions. Reasonable efforts will be made to keep the personal information in your research record private and confidential. Any identifiable information obtained in connection with this study will remain confidential and will be disclosed only with your permission or as required by law. The members of the research team and the Texas State University Office of Research Compliance (ORC) may access the data. The ORC monitors research studies to protect the rights and welfare of research participants. Data will be kept for three years (per federal regulations) after the study is completed and then destroyed. No compensation will be awarded for participation in this survey research. If you have any questions or concerns, feel free to contact Yvette Mendoza or her faculty advisor, Nandhini Rangarajan:

Yvette Mendoza, graduate student

Nandhini Rangarajan, Professor

Public Administration

Public Administration

956-652-8998

512-245-3285

yvm7@txstate.edu

nr11@txstate.edu

This project, IRB: #6500 The Case for Mary Jane: A study of student perceptions on marijuana legalization, was approved by the Texas State IRB on May 22, 2019. Pertinent questions or concerns about the research, research participants' rights, and/or research-related injuries to participants should be directed to the IRB chair, Dr. Denise Gobert 512-716-2652 –

(dgobert@txstate.edu) or to Monica Gonzales, IRB Regulatory Manager 512-245-2334 - (meg201@txstate.edu).

☐ I consent (1)

☐ I do not consent (2)

Skip To: End of Survey If Yvette Mendoza, a graduate student at Texas State University, is conducting a research study to d... = I do not consent

End of Block: Informed Consent

Start of Block: Position

Q2 Do you think the use of marijuana should be made legal?

☐ Yes (1)

☐ No (2)

☐ No opinion/indifferent (3)

End of Block: Position

Start of Block: Use

Q3 Keeping in mind that all of your answers in this survey are anonymous, how would you characterize your marijuana use?

- ☐ Currently use (1)
- ☐ Have used (2)
- ☐ Never used (3)
- ☐ Prefer not to answer (4)

Skip To: Q8 If Keeping in mind that all of your answers in this survey are anonymous, how would you characterize... = Never used

Q4 At what age did you first use/try marijuana?

Q5 How often do/did you use?

- ☐ Daily (1)
 - ☐ Weekly (2)
 - ☐ Monthly (3)
 - ☐ Rarely (1-3 times per calendar year) (4)
-

Q6 Why do/did you use? (Check all that apply)

☐

For fun (1)

☐

To overcome stress (2)

☐

To overcome depression (3)

☐

To overcome anxiety (4)

☐

Medical reasons (5)

☐

Peer pressure (6)

☐

Other (7)

Q7 I have been under the influence: (Check all that apply)

☐

At school (1)

☐

At work (2)

☐

While driving (3)

☐

While operating heavy machinery (4)

☐

At home (5)

☐

Other (6)

☐

Prefer not to answer (7)

Q8 Have you used or tried any of the following substances? (Check all that apply)

- ☐ Alcohol (1)
 - ☐ Tobacco (2)
 - ☐ Cocaine (3)
 - ☐ Ecstasy (4)
 - ☐ LSD (5)
 - ☐ Heroin (6)
 - ☐ Synthetic marijuana (7)
 - ☐ Other (8)
 - ☐ Prefer not to answer (9)
-

Q9 Do you know someone who currently uses marijuana?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Unsure (3)

End of Block: Use

Start of Block: Opinion/Perception

Q10 Do you think marijuana is a gateway drug?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Unsure (3)
-

Q11 Do you think marijuana is addictive?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Unsure (3)
-

Q12 Do you think marijuana is damaging to the brain?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Unsure (3)
-

Q13 Do you think marijuana is damaging to overall health?

☐ Yes (1)

☐ No (2)

☐ Unsure (3)

Q14 Do you think marijuana is less harmful to health than alcohol use?

☐ Yes (1)

☐ No (2)

☐ Unsure (3)

Q15 Do you think marijuana is less harmful to health than tobacco use?

☐ Yes (1)

☐ No (2)

☐ Unsure (3)

Q16 Do you think consuming edible marijuana is safer than smoking it?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Unsure (3)
-

Q17 Marijuana should be legalized for what use? (Check all that apply)

- ☐ Cannabidiol (CBD) (it is derived directly from the hemp plant, which is a cousin of the marijuana plant) (1)
- ☐ Medicinal (2)
- ☐ Recreational (3)
- ☐ Do not support any (4)
- ☐ No opinion/indifferent (5)
-

Q18 If legalized, do you believe Americans should be allowed to grow their own plant(s) at home?

- ☐ Yes (1)
- ☐ No (2)
- ☐ No opinion/indifferent (3)

Q19 Do you think legalizing marijuana makes its use seem safer?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Unsure (3)
-

Q20 Do you think legalizing marijuana makes it more socially acceptable?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Unsure (3)
-

Q21 If legalized, what should be the legal age for recreational use?

- ☐ 18 (1)
 - ☐ 21 (2)
 - ☐ No opinion/indifferent (3)
-

Q22 Do you think legalizing marijuana for recreational purposes will make it more accessible to those under the legal age?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Unsure (3)
-

Q23 Do you think legalizing marijuana for recreational purposes will cause individuals to start using at a younger age?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Unsure (3)
-

Q24 Do you think legalizing marijuana for recreational purposes will cause more people to try it?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Unsure (3)
-

Q25 If legalized, do you believe robberies, homicides, or other crimes related to marijuana will be reduced?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Unsure (3)
-

Q26 If legalized, do you think America will be safer?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Unsure (3)
-

Q27 If legalized, how should state/city taxes on marijuana and/or licensing revenues be budgeted for?

- ☐ Education (1)
 - ☐ Healthcare (2)
 - ☐ Housing (3)
 - ☐ Transportation (4)
 - ☐ Other (5)
-

Q28 Do you believe government efforts to enforce marijuana laws cost more than they are worth?

- ☐ Agree (1)
 - ☐ Disagree (2)
 - ☐ Unsure (3)
-

Q29 Some states have decided to allow marijuana use, but it is still prohibited under federal law. Do you think the federal government should or should not enforce federal marijuana laws in these states?

- ☐ Should (1)
 - ☐ Should not (2)
 - ☐ No opinion/indifferent (3)
-

Q30 Do you think politicians, policy makers, elected or appointed officials, and/or public administrators currently use marijuana?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Unsure (3)
-

Q31 Overall, do you think the general U.S. population is misinformed concerning marijuana?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Unsure (3)

End of Block: Opinion/Perception

Start of Block: Demographics

Q32 What is your degree program?

- ☐ Political Science (1)
- ☐ Public Administration (2)

Q33 What is your student classification?

- ☐ Undergraduate (1)
- ☐ Graduate (2)
- ☐ Non-degree seeking (3)

Q34 What is your age?

Q35 What is your gender?

- ☐ Male (1)
 - ☐ Female (2)
 - ☐ Other (3)
-

Q36 What is your race/ethnicity?

- ☐ White (1)
 - ☐ Hispanic or Latino (2)
 - ☐ Black or African American (3)
 - ☐ American Indian or Alaska Native (4)
 - ☐ Asian (5)
 - ☐ Native Hawaiian or Pacific Islander (6)
 - ☐ Other (7)
-

Q37 Are you currently employed?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Prefer not to answer (3)
-

Q38 What is your annual income?

- ☐ Less than \$10,000 (1)
- ☐ \$10,000 - \$19,999 (2)
- ☐ \$20,000 - \$29,999 (3)
- ☐ \$30,000 - \$39,999 (4)
- ☐ \$40,000 - \$49,999 (5)
- ☐ \$50,000 - \$59,999 (6)
- ☐ \$60,000 - \$69,999 (7)
- ☐ \$70,000 - \$79,999 (8)
- ☐ \$80,000 - \$89,999 (9)
- ☐ \$90,000 - \$99,999 (10)
- ☐ \$100,000 - \$149,999 (11)
- ☐ More than \$150,000 (12)

Q39 Are you a parent?

☐ Yes (1)

☐ No (2)

Q40 What is your political party affiliation?

☐ Democrat (1)

☐ Republican (2)

☐ Independent (3)

☐ Unsure (4)

End of Block: Demographics
