

Growing the Green Goddess  
Commercial Marijuana Growers on the Edge of Legality

by

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## ABSTRACT

This study is an in-depth examination of thirty-one commercial marijuana growers in four states in the United States. Presently, federal law prohibits marijuana production, but twenty-five states and the District of Columbia allow some provision for marijuana production. Despite massive federal campaigns against marijuana growth, the growers themselves have received comparatively little attention. This study investigates three questions: 1) to what extent do commercial marijuana growers meet life-course criminology's expectations of offenders; 2) how do growers learn the requisite norms, knowledge, and skills to be successful; and 3) to what extent do growers comply with state laws, and why? The results find little support for life-course variables. While social learning theory is supported, the results also indicate that independent learning through trial and error and learning through various media are relevant to knowledge and skill acquisition. Respondents adopted a variety of strategies regarding state laws, with partial-compliance in order to minimize risk being the most common. Implications for both theory and policy are discussed.

## DEDICATION

This work is dedicated to my family. Nobody should go it alone. Thank you for always being there for me.

## ACKNOWLEDGMENTS

It is difficult to know who to thank first, but I'll start with the people who participated in this study. Without you, there is no study. It took bravery to sit down and speak with me, and I have done my utmost to represent you accurately and fairly. Thank you very much.

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## CHAPTER 1

### INTRODUCTION

#### **Problem Statement**

Marijuana is a major industry in the United States that increasingly straddles the legal and illegal. As half of all marijuana used in the U.S. is produced domestically, the industry currently involves all aspects of marijuana growth, processing, sales, and distribution (Weisheit, 2011). It is the nation's biggest cash crop, with economic estimates into the billions annually for the value of domestically grown marijuana (Gettman, 2006; Weisheit, 2011) (but see Caulkins & Hawken, 2012). At present, laws around marijuana are changing, and in many states there is now a conflict between federal law, which is strictly prohibitive, and increasingly permissive state laws surrounding cultivation, distribution, and use of marijuana, especially for medical purposes. This conflict is a problem both for the states and the federal government, but also for the people producing marijuana in this in-between situation, who may be legally participating in the marijuana industry under state regulations, but constantly risking prosecution under federal law. For criminologists, the problem is that there are people growing marijuana in the U.S. who are thereby breaking federal law - but may or may not be breaking state laws. Little is known about who these individuals are, what they do, or how they do it because of their involvement in crime. Research in this area is underdeveloped, and needs further exploration to understand this group of people caught in the middle of disagreements about whether any use of marijuana is acceptable, disputes over potential medical benefits or marijuana, and a host of positions on the

economics and regulation of marijuana production and consumption. This dissertation seeks to fill this void using direct interviews of U.S. commercial marijuana producers in four western states that have legalized marijuana production and consumption to varying extents.

## **Background**

**Cultural climate.** Currently, marijuana is the most widely used illicit drug in the U.S., with 47% of Americans twelve years and older reporting that they have used it at least once, and 18.9% reporting that they had used marijuana in the past month (Substance Abuse and Mental Health Services Administration, 2013). Support for legalization of marijuana reached over 50% in national polls for the first time in 2013 (Swift, 2013) (Pew Research Center, 2014). When respondents were asked more specifically about medical and personal use, the Pew Research Center (2014) found that 39% of a national sample supported marijuana legalization for personal use, 44% for medical use, and 16% said marijuana should not be legal at all. The issue of marijuana legalization thus appears to be highly controversial at first glance, with more support for more nuanced policies.

American mass media has a long history of covering marijuana issues. Newspapers like the *New York Times* have been running stories on marijuana for over a hundred years, often with grandiose statements and rampant hyperbole (Griffin, Fritsch, Woodward, & Mohn, 2013). Newspapers frequently make a “save the children” brand of appeal against marijuana (Boyd & Carter, 2012). On the other hand, there is evidence that some media outlets are normalizing marijuana use, and increasingly coming out in

support of marijuana legalization (Haines-Saah, et al., 2014). Regarding medical marijuana specifically, while most newspaper articles are supportive, attitudes towards legalization vary by U.S. region and presidential administration (Vickovic, 2010).

The current fairly broad acceptance of marijuana stands in marked contrast to opinions in the early- to- middle 20<sup>th</sup> century. Although hemp was cultivated for rope and other industrial uses in the American colonies and marijuana was used for an assortment of medical treatments in the mid-1800s, by the 1900s it had fallen out of favor (Grinspoon, 1971). The first instances of recreational marijuana use in the U.S. were recorded in the early 1900s, and while scholars disagree about which segments of the population were more prone to using marijuana at the time, by the 1920s marijuana use had come to be associated with Mexican immigrants and Black jazz musicians (Grinspoon, 1971). Newspaper stories associating marijuana with crime and apathy became rampant, and by 1937 the United States had passed its first federal law restricting marijuana (Musto, 2002). Among the most prominent reasons scholars have given for the prohibition of marijuana are its association with minorities and its use solely for pleasure, which goes against the Protestant work ethic on which the nation was founded (Grinspoon, 1971; Musto, 2002).

In the 1960s, marijuana use by college students surged as part of several social movements, including the anti-war movement, although national use was not as high as current levels (Grinspoon, 1971). By 1978, public support for marijuana legalization reached a peak of 30% in national polls (Pew Research Center, 2014). National tolerance towards marijuana declined for several years thereafter, and in 1989 only 16% of national

poll respondents thought marijuana should be legal. Since then, however, the percentage of Americans who support marijuana legalization has been on the rise (Pew Research Center, 2014). Increase in use is one reason for increased support. Another is the American experience with cocaine in the 1980s, which resulted in such widespread through addiction and violence that marijuana looked like a much lesser evil in comparison (Bender, 2013). Today, a majority of Americans view marijuana as less harmful than other illicit drugs, and even less harmful than alcohol, the use of which is legal by adults and widely socially acceptable (Pew Research Center, 2014).

**Medical marijuana.** Although using marijuana for medical purposes is popularly supported at present (Pew Research Center, 2014), government and medical sources are less enthusiastic. Professional medical organizations vary in their acceptance of marijuana as medicinal, but there has not been a general outcry for legalization from this quarter. The American Medical Association, for example, endorses research on medical uses of marijuana, but does not endorse state laws permitting medical use (Certa, 2013). It called for a review of marijuana's status as a Schedule I drug (the most restrictive classification) in 2009, but reversed itself in 2013, reaffirming its commitment to general prohibition and enumerating potential hazards of marijuana use. The American Glaucoma Society acknowledges that smoking or ingesting marijuana can lower intraocular pressure, a primary method of treating glaucoma, but it does not recommend marijuana use because of the short duration of effect and presence of side effects (Jampel, 2009). Additionally, the federal government funds limited research into effects and uses of marijuana, and operated its own marijuana dispensary program for cancer patients between 1978 and 1992 (Drug Enforcement Agency, 2014; PDQ Cancer Complementary

and Alternative Medicine Editorial Board, 2014).

Despite a lack of enthusiasm for general legalization, medical professionals continue to research the potential of chemicals found in marijuana for treating a variety of ailments, with some success. The federal government does not acknowledge any medical benefits of marijuana. It does, however, allow for scientific research into possible medical uses, currently permitting one laboratory at the University of Mississippi to produce marijuana for research purposes (Nave, 2015). Various state laws allow medical use of marijuana for a variety of conditions, including Alzheimer's disease, anorexia, AIDS, arthritis, cachexia, cancer, Crohn's disease, epilepsy, glaucoma, HIV, migraine, multiple sclerosis, nausea, pain, spasticity, and wasting syndrome (United States General Accounting Office, 2002). To date, two FDA-approved medications used to treat nausea caused by chemotherapy and wasting disease caused by AIDS have been derived from chemicals found in the marijuana plant (DEA, 2014).

While medical uses for marijuana appear viable, ingestion of the drug, especially via smoking, is not without its dangers. Although quality research on the effects of smoking marijuana can be hard to come by, some negative effects are fairly well established (PDQ Cancer Complementary and Alternative Medicine Editorial Board, 2014). Smoking marijuana may carry many of the same risks as smoking tobacco, such as damage to both the pulmonary and circulatory systems. Additionally, some adverse, mild withdrawal side effects may occur upon cessation of smoking marijuana (PDQ Cancer Complementary and Alternative Medicine Editorial Board, 2014).



**State and federal policies.** Marijuana production and/or use is currently legal to some extent in 25 states and the District of Columbia (National Conference of State Legislatures, 2016). Primarily, states allow legal production and use for medical purposes, but marijuana is also legal for recreational use to some extent in Alaska, Colorado, Oregon, and Washington. California passed the nation's first law allowing medical use of marijuana in 1996, but wider state-level acceptance has been slow in developing until very recently, with eleven states passing their first law permitting any cultivation or use of marijuana in the last six years. Among other things, critics of medical marijuana laws claim that they are merely loopholes for recreational use and that state medical laws increase illicit marijuana use (Eddy, 2009).

At the federal level, marijuana is utterly prohibited. It is holds the most restrictive classification, Schedule 1, with no federally acknowledged medical use (DEA, n.d.). Federal sentencing guidelines for production of marijuana as part of one's livelihood range from eight to fourteen months for a first offense for amounts under 2.5 kilograms to almost twenty years for a first offense for the largest amounts considered (United States Sentencing Commission, 2014). Average federal sentences for all marijuana-related offenses between 2006 and 2012 ranged from 39 months in 2006 to 33 months in 2011 and 2012 (United States Sentencing Commission, 2012).

Despite the strict federal legislative prohibition of marijuana which began in the 1930s and continues today, the policies of federal enforcement and judicial bodies have varied to some extent (Bender, 2013; Bonnie & Whitebread, 1970). The Drug Enforcement Agency (DEA) has conducted a marijuana eradication program since 1979

(United States Drug Enforcement Administration). The last several years, however, have seen varied success in this endeavor, with eradication of approximately 10.3 million plants each in 2009 and 2010, but less than 4.4 million in 2013 despite the participation of 137 state and local agencies (DEA, n.d.). In 2004, the Supreme Court upheld the federal prosecution of cancer patients growing six plants in compliance with California's medical marijuana law (but in defiance of federal law), indicating willingness on the part of the federal government uphold its stance on marijuana in opposition to state laws (Barkacs & Barkacs, 2010). Memoranda from the office of the U.S. Attorney General in 2009 and 2013, however, seem to suggest a possible softening of the federal stance on marijuana cultivation, at least in the arena of prosecution. The 2009 Ogden Memorandum directs federal prosecutors to focus on cases of marijuana cultivation in which growers are not in compliance with state laws. The 2013 Cole Memorandum provides more specific detail on this policy, noting that state regulations may not be sufficient to stop hazards like the distribution of marijuana to minors or diversion of marijuana to states in which it is not legal, and that the federal government may challenge the state systems themselves "if state enforcement efforts are not sufficiently robust..." (Cole, 2013). The Cole Memorandum also explicitly notes the duty of federal prosecutors to uphold federal laws against marijuana regardless of state policies. The picture presented by these two memoranda, overall, is one in which the federal government acknowledges its limitations in enforcing marijuana prohibition and appears willing to work with the states somewhat, but reserves rights and responsibilities to uphold marijuana prohibition under federal law.

It is against this backdrop, then, that commercial marijuana growers go about their business. Caught between state and federal laws, little is known about them, their process, or their compliance with state laws. This study seeks to begin to fill this void.

### **Purpose and Nature of the Study**

The purpose of the dissertation is to begin to fill gaps in knowledge about people who are actively growing marijuana for sale in the United States. As one of the best ways to learn about any group of people is to speak to the people themselves, this study is composed of qualitative interviews of a sample of active marijuana growers in four U.S. states, identified through key informants. In addition to standard demographic, criminal history, and drug use questions, respondents were asked in detail about their most recent and first experiences growing marijuana for sale, their motivations, and compliance with state laws. Specific methods are addressed in more detail in Chapter 3.

This dissertation seeks to answer research questions in three areas. First, who are commercial marijuana producers? Primary characteristics of the respondents including age, marital and employment status, and criminal career, were examined to determine the extent to which the sample meets life-course criminology's expectations of typical offenders. Second, how are norms, knowledge, and skills transmitted among commercial marijuana growers, and how did the members of the sample learn to produce marijuana successfully? Third, how have commercial marijuana growers adapted to changes in state laws, and the conflict between state and federal laws? This includes an examination of respondents' specific strategies around compliance with state laws when growing marijuana for sale, as well as their perceptions of risk and risk management.

## **Scope and Limitations**

This investigation was authorized for up to forty participants, and concluded with thirty-one. The greatest limitation of this study is the non-random nature of sampling methods required to access active criminal populations. The absence of a sampling frame and the difficulty of accessing hidden populations make random sampling impossible, and thereby violate statistical assumptions that would enable inferential statistical analysis. In short, the study will not be highly generalizable due to small sample size and non-random sampling. That said, existing U.S. work in this area, discussed in Chapter 2, relies on samples that are similar to or smaller than that of the current study, so the proposed dissertation is not out of place. Additionally, the need for contemporary work on active marijuana growers is such that the study will be able to contribute to academic knowledge. Furthermore, the depth of information available through the proposed qualitative method may enable a better understanding of U.S. marijuana growers than may be possible using quantitative methods.

## **Significance of the Study**

This study is unique in its contribution to knowledge of the criminal population of U.S. commercial marijuana growers. Specifically, it is the only study to date that includes information about the extent to which U.S. commercial marijuana growers are in compliance with state laws permitting marijuana cultivation. It is also the only U.S. study to have direct access to commercial marijuana growers in multiple states. This access comes at an unprecedented moment in the U.S. history of marijuana legislation, during which twenty-five states and the District of Columbia have laws in conflict with those of the federal government addressing marijuana (National Conference of State Legislatures,

2016). Additionally, the inclusion of questions about participants' first and most recent experiences growing marijuana for sale provides insight into whether the sample population has been motivated by changes in state laws to enter the industry or to alter their practices to abide by state laws. The proposed dissertation thus contributes unique data on a hidden population at a particularly timely moment.

### **Outline of the Remainder of the Dissertation**

The remainder of the dissertation proceeds as follows. Chapter 2 includes a brief history of marijuana in the U.S. and a review of relevant literature. The literature review includes an overview of sources of knowledge about marijuana producers, as well as what is known about personal characteristics of growers, the process of marijuana production, co-offending among marijuana growers, motivations, and typologies of marijuana growers. It concludes with a brief discussion of how the current study fits in with and expands on the existing literature.

Chapter 3 describes the methods and data used in the dissertation. It begins with a chapter overview, then describes the basic methodological choices for the study, including a justification of qualitative methods and the active offender sample. It describes the study settings, including the local laws regarding marijuana cultivation and use, as well as general population characteristics. Next, the chapter describes approval of the project by the Arizona State University Institutional Review Board. It then details the snowball sampling strategy and key informants, as well as the participant recruitment plan and information about conducting interviews for the project. The chapter also

includes a section about the interview schedule itself, and concludes with the plan for data analysis.

Chapters four, five, and six provide the results for the analysis of the three research questions. Chapter four examines the sample in view of the life-course criminology paradigm. Chapter five describes the social learning process for marijuana producers, including reinforcement of values as well as transmission of knowledge and skills. Chapter six uses rational choice and techniques of neutralization theories to describe how and why respondents adhere to or break the various state laws surrounding marijuana production. The dissertation concludes with a discussion and conclusions chapter, highlighting overall findings and implications.

## CHAPTER 2

### EXISTING KNOWLEDGE

#### **Introduction and Chapter Overview**

Marijuana production has been of interest to researchers in the United States since the late 1960s, when calls for the legalization of marijuana began to gain some footing and marijuana use became increasingly widespread (Abel, 1980; Bonnie & Whitebread, 1970). Early research on commercial marijuana growing tended to examine it in terms of legal policies, politics, and potential harms (Bonnie & Whitebread, 1974; Grinspoon, 1971). Growers themselves were not considered in early research, possibly because the bulk of marijuana used in the U.S. was grown in other countries (Library of Congress, 2003). In the late '80s and early '90s, however, domestically grown marijuana came to

occupy approximately half of the marijuana market, making domestic commercial growers more accessible to researchers (Gettman, 2006; Library of Congress, 2003). Around the same time, researchers began to consider marijuana growers around the world, and to examine the social and legal contexts in which they operate (Decorte, Potter, & Bouchard, 2011). Criminological research into and attention to commercial marijuana growers is on the rise, particularly in light of changing state legalities surrounding marijuana in the U.S. Despite this, growers themselves remain a fairly hidden population and are understudied in the U.S.

This chapter first examines the ways in which researchers interested in marijuana growers have obtained data. Generally, research on marijuana production thus far has been qualitative, although in recent years more studies have used a variety of quantitative methods. Next, the chapter describes what we know about those who produce marijuana and how they do so. The chapter closes with a summary of the state of the literature about commercial marijuana and its growers, and a description of where the current study fits in with existing literature.

## **Sources of Knowledge**

**Qualitative methods.** Research on marijuana production has been primarily qualitative, owing in large part to the requirements for secrecy in the industry. As there is no nation on Earth in which marijuana is completely legal, those who produce it epitomize the idea of hidden populations. Their inaccessibility has made it impossible to conduct the kind of random sampling required to meet the assumptions of quantitative, statistically oriented methods. While ruling out most statistical modeling, the qualitative

methods employed in studies of marijuana growers have allowed for a depth of description the absence of which is much lamented in quantitative studies (Miller & Tewksbury, 2006). The existing qualitative work has led to insight on motives, moralities, and construction of meaning for those who grow marijuana.

Sample sizes in qualitative work on marijuana production range from one person (Ford, 2004) to about 50 (Hammersvik, Sandberg, & Pedersen, 2012). Growers are sometimes identified through official data, such as incarceration records (Weisheit, 1992), but the majority of studies have located growers through advertisements, students, and researchers' social networks, with the last being the most common (Athey, Bouchard, Decorte, Frank, & Hakkarainen, 2013; Riggs Hafley & Tewksbury, 1996; Wiecko & Thompson, 2014) .

In the United States, studies dealing directly with marijuana growers are rare. There were, in fact, only two research projects resulting in multiple publications with samples of marijuana growers conducted between 1980 and 2000 (Riggs Hafley & Tewksbury, 1996; Weisheit, 1991). Recent years have seen a handful of dissertations, one with a resulting publication (August, 2013); one study from Florida (Boylstein & Maggard, 2013), and one from Texas (Wiecko & Thompson, 2014). Popular media appears to have been much more successful at identifying and interviewing growers than academics, with documentaries like *Jorge Cervantes, Ultimate Grow* (2008), and television shows like *American Weed* (2012) proliferating.

The overall body of literature on marijuana growers is derived from a variety of nations, possibly because of its globally illegal nature and ubiquitous presence (Decorte



et al., 2011). The prevalence of international work has led to attempts to put marijuana growers into global perspective (Decorte et al., 2011). It has also given rise to attempts to make research from diverse nations more widely accessible, such as a compilation of Dutch language studies analyzed in English (Decorte, 2010). These efforts have made it possible to compare findings across countries, to see the similarities and differences between marijuana growers, their techniques, and their social worlds in different countries. In light of these attempts to make knowledge more accessible, it is somewhat surprising that the bulk of literature dealing with marijuana growers themselves is found in printed books. Given the increasing prominence and internet accessibility of academic journals, it can therefore be difficult at times to actually lay hands on some of the most applicable research on commercial marijuana growers.

**Quantitative methods.** At present, however, researchers interested in marijuana growers have expanded into additional areas and methods, including internet surveys, official arrest and incarceration data, and marijuana crop eradication reports. Some of the most recent work takes advantage of the internet in order to reach marijuana growers as anonymously as possible. The resulting research has sample sizes that can reach into the thousands for multi-national studies, a previously unthinkable scale due to cost and inaccessibility of participants (Bouchard, Alain, & Nguyen, 2009; McElwee, 2009). While anonymity and large sample sizes are undoubtedly bonuses to such methods, there are several drawbacks inherent to internet sampling, both in terms of validity and type of data that can be collected. Although sample sizes may be large, internet sampling of the type conducted thus far is not random; it is vulnerable to repeat survey takers; and minimal validity checks are possible (Barratt et al., 2014; Decorte, 2010) . Additionally,

in order to reduce respondent fatigue and ensure similarity of responses, internet surveys limit the responses participants are able to give and are typically fairly short, reducing potential depth of data and possibly missing important respondent differences or misunderstandings (Decorte, 2010). Despite these shortcomings, internet surveys provide unprecedented access to a wide array of marijuana growers in multiple locations, and studies using this method have provided valuable insight into the current activities of illicit marijuana growers (Athey et al., 2013). Quantitative methods have also been applied to attempts to determine the overall number of marijuana growers in various countries. These typically rely on official data, including arrests or plant eradication counts, for instance, Bouchard's (2007) capture-recapture method for estimating the size of the industry.

### **Areas of Knowledge**

While scholarly research on marijuana growers is still relatively thin, researchers have been able to provide useful insight into this area. This section describes what is known regarding some of the most basic questions surrounding commercial marijuana growers: who, how, and why. First, the section discusses who grows marijuana for sale in terms of demographics, drug use, and criminal careers. Second, it covers how growers accomplish their endeavors, focusing first on the process of their work and then on the ways in which they organize themselves in order to accomplish it, as well as learning and mentoring among marijuana growers. Third, it elaborates on the motivations and justifications of the population under study. Finally, it describes the typologies that scholars have applied to marijuana growers.

**Characteristics of growers.** Estimating the size of the worldwide population of commercial marijuana growers has been challenging for a number of reasons. Obviously, the criminal nature of the enterprise provides its own incentive for participants to remain hidden. Additionally, the specialized nature of the crime is such that it does not come up on instruments for general population surveys. Nonetheless, researchers and governments have attempted to uncover the approximate size of the marijuana growing population in multiple countries. These efforts generally rely on arrest data to infer grower population size, but may use advanced imaging (i.e. thermal) or other methods (Bouchard 2007, 2008; Legget & Pietschmann, 2008; Wilson, 1994). In the U.S., the Substance Abuse and Mental Health Services Administration's most recent national survey improved upon previous work by asking marijuana users where they had gotten their marijuana rather than limit questions to amount and frequency of use, and 1.4% reported that they had grown it themselves (Substance Abuse and Mental Health Services Administration, 2013). It is impossible to make sound generalizations about marijuana growers from the existing literature because of the limits of sampling methods and small sample sizes. With that in mind, it is still useful to review the findings that are available for their insight into the demographic and other characteristics of growers.

Available research indicates that, as with other illegal drug markets, marijuana production is primarily male-dominated. Female participation has been documented, but in smaller numbers, and typically in conjunction with males who take on most of the operational and planning duties (August, 2013; Maher & Hudson, 2007). There is also some evidence of sexually exploitative practices by men hiring women to work as

marijuana trimmers, including job postings specifically looking for trimmers that are “DTF” (willing to have sex) or will work topless (August, 2013).

Age is particularly problematic to discuss in the confines of the existing literature. There is no handy age-crime curve for marijuana growers, but extant research suggests that it would not match neatly with that for crime in general. In the aggregate age-crime curve, onset of criminal behavior begins during adolescence and peaks in the late teens, declining thereafter (Farrington, 1986). While previous research has found that many marijuana growers do start in their early teens, there is increasing evidence of growers who start well after age 30, when most other crime is negligibly prevalent (Decorte, 2010). Longitudinal research on marijuana growers is nonexistent at this time, so information on when growers began their endeavors necessarily relies on retrospective questioning. Additionally, ethical protection of minors tends to limit eligible research participants to those over eighteen years of age, which may artificially shift population estimates of grower age to the right. Limited research suggests that teenagers in some locations participate in the marijuana cultivation industry, particularly as trimmers (Bouchard et al., 2009). The industry may also be segregated by age due to both material and experience costs that restrict youth participation to roles that can be paid hourly, are smaller in scale, or entail little responsibility (Nguyen & Bouchard, 2013). At present, research is lacking on how and when people stop growing marijuana.

Race is rarely considered in the literature on marijuana growers beyond a brief mention, possibly because most studies of marijuana growers deal almost exclusively with white people. A miniscule portion of research has considered race more extensively.

For example, there is a single study on the impact of ethnicity for Vietnamese growers (Luong, 2014). Perhaps more relevant to the U.S. context, Moran (2011) extends theories from critical criminology to problematize the relative absence of people of color as yet another area of life in which minorities have been excluded from important (and lucrative) areas of business.

As marijuana growers are producing a drug, it follows that researchers would be interested in their drug use habits. Weisheit (1991) addressed this directly in his work with U.S. commercial marijuana growers. He found that marijuana use was very common, but not ubiquitous. Marijuana use among growers was particularly seen as an alternative to alcohol and other illegal drugs, or used for what growers perceived as medical purposes. At the time of Weisheit's study, medical marijuana licenses were not available, and doctors were not writing referrals for it, so while growers perceived their marijuana use as medical, it was not authorized by the medical establishment. According to Weisheit (1991), whether or not growers used marijuana was, to some extent, dependent upon their motivations for growing. Specifically, those who grew marijuana due to economic hardship or other purely economic motives were less likely to use marijuana than those who grew for other reasons. Additionally, experimentation with other drugs was common, but regular use was not (Weisheit, 1991).

**Process: How commercial marijuana growers accomplish their work.**

Commercial marijuana production involves several distinct activities, which can be broken down into *production* and *commerce*. Production involves growing the plants, harvesting them, and preparing them for sale. Commerce involves arranging sales,

contact with customers, and getting the final product to buyers, either brokers or individual users. Commerce also arguably involves spending money for new seeds or plants, as well as providing capital for other aspects of setting up a marijuana growing operation and employing labor. Commercial marijuana production can be separated into several phases: site selection and preparation, plant growth, harvest, trim, storage, and distribution.

*Site selection and preparation.* Although varieties of the marijuana plant have been grown worldwide and can be said to flourish almost anywhere, growing the plant for its chemical content requires attention and care (Potter, 2006). With that in mind, as well as the illegal nature of the enterprise, choosing a place to grow marijuana may involve serious consideration. Marijuana growers must balance ease of access and amenities with security considerations (Bouchard, Beauregard, & Kalacska, 2013). A common starting point for growers is to choose between indoor and outdoor marijuana grow sites.

The single available study focusing on site selection used police aerial detection data in Canada to compare number of plants grown in outdoor sites to a number of distance measures. Not all sites were created equal, and growers exploited “prime” sites (desirable elevation, near roads and water), growing more marijuana plants in these types of areas (Bouchard, Beauregard, & Kalacska, 2013). Worldwide, more general data from marijuana growers indicates that they increasingly prefer indoor cultivation. These findings may not hold, however, for nations like Mexico, in which grower data is not available but outdoor cultivation is known via law enforcement efforts to be widespread

(Legget & Pietschmann, 2008). Additionally, Weisheit (2011) suggests that outdoor cultivation is on the rise in the United States due to increasingly permissive state legislation. Marijuana grown in U.S. national forests has also increased in recent years (Chavez & Tynon, 2000). Research has yet to fully explore why marijuana growers choose one method over the other, but space and climate have come up as considerations (Potter, 2006).

Outdoor and indoor marijuana grow sites have differing vulnerabilities to detection by law enforcement. Specifically, outdoor sites are more vulnerable to aerial detection, as well as other visible, casual inspection. Aerial surveillance in particular is a common method of detecting outdoor marijuana, as it allows law enforcement to cover large areas and evaluate targets for eradication before deploying additional resources for the eradication itself (Bouchard et al., 2013). In contrast, indoor sites require significantly more electricity to power lights to grow the plants than buildings used for residential or other non-industrial purposes, and so are vulnerable to infrared heat detection methods as well as reporting by electricity providers (Carter, 2009; Garis, 2005; Kalacska & Bouchard, 2011). Reporting by utility companies is also somewhat controversial, and operates under different voluntary or legally required guidelines in varying locations, with some areas regularly providing law enforcement with usage information on all accounts, and others providing individual account information upon request without warrants (Carter, 2009; Garis, 2005).

Site selection is also undertaken with an eye towards the final product desired. It is possible to make oils, hash, or edible products from marijuana, and to smoke the

leaves, but the most commonly reported final product is dried buds from female marijuana plants, known as sensemilla (Legget & Pietschmann, 2008). Accordingly, most marijuana cultivation efforts are set up in order to produce sensemilla, often with an eye towards producing buds that will have a high THC (the chemical in marijuana that causes intoxication) content or produce other, strain-specific effects (Bouchard & Dion, 2010). One consideration in marijuana cultivation is which specific strain of plant will be grown. Growers may consider the desires of their customers or anticipated effects from different strains when selecting what will be planted. Marijuana growers must also make an initial choice between growing from seed, growing from “cloned” plants cut from known female “mother” plants, or some combination of the two (Clarke, 1981). Set-up requirements vary by method of growing, number and size of plants grown, and motivation of growers. At minimum, indoor marijuana growing requires an indoor space with electricity and access to water, special lights to mimic sunlight, pots or trays in which to grow the plants, and a growing medium like soil or clay pebbles. More sophisticated set-ups involve timers, fans, charcoal filters to reduce the smell of the plants, complicated irrigation systems, hoists for lights or tables of plants, and various soils, clay pellets, or other growth mediums (Clarke, 1981; Wiecko & Thompson, 2014). Minimum requirements for outdoor growing include land with access to sunshine and water. Some marijuana growers, activists for example, will spread seeds in any available dirt, including traffic medians and lawns of government buildings, then leave the plants to fare as they will (Potter, 2006). More complicated outdoor set-ups can involve various irrigation schemes, construction of plastic greenhouses, barriers to deter animals, and moving copious amounts of dirt and nutrients (Clarke, 1981). Set-up requirements also



include preparing a place to process the plants when they are mature, which includes space for drying. Both indoor and outdoor marijuana growing sites may include various theft deterrence measures, including locks, surveillance cameras, and “No Trespassing” signs (Colorado Department of Revenue, 2013). The cost of setting up a site to grow commercial marijuana is one factor that commonly prevents juveniles from launching large growing endeavors, and keeps smaller operations small (Hammersvik et al., 2012; Nguyen & Bouchard, 2013) . There is also a burgeoning market of “facilitators” to growing marijuana, that is, legal stores that cater to marijuana growers by providing supplies for indoor gardening, nutrients, pesticides, and other products for setting up and maintaining marijuana gardens (Bouchard & Dion, 2010).

***Cultivation and processing.*** While growing marijuana can be as simple as tossing some seeds into a median, growers typically provide their plants with care well beyond the minimum (Potter, 2006; Potter et al., 2011; Weisheit, 1991). In quest of the best product, growers may weed out male plants to avoid seeds in the final product, remove branches from the middle of the plant to direct growth to the upper and outer buds, remove yellow leaves, and adhere to highly specific fertilizer and watering regimens (Clarke, 1981). There are extensive printed and internet sources on marijuana plant care (Wax, 2002), although an academic analysis of the extent and credibility of these sources has yet to be conducted. As the plants mature, marijuana growers may keep an eye out for problems like pests, infection, or other plant damage, and treat each accordingly. They must also determine whether or not the plants are ready for harvesting, methods of which range from simply noting a color change in the bud to using microscopes to closely examine marijuana trichomes (Clarke, 1981). Once growers have determined that the

plants are mature, activity switches from plant care to harvesting and processing the final products. Buds from the plants must be removed, trimmed of external leaves, and dried to a desirable texture. Once ready, the buds can be packaged for sale, and other parts of the plant may be rendered into other products, like oil or hash.

*Commerce.* Hundreds of thousands of pounds of marijuana produced each year end up in the hands of their final consumers in the U.S. How it gets from growers to end users not entirely clear and researchers have lamented growers' understandable reluctance to talk about the commerce portion of their activities (Decorte, 2010). Research on drug smuggling has documented the ways and means by which marijuana and other drugs enter the United States from other countries and are distributed (Adler, 1993; Decker & Townsend Chapman, 2008), but little is understood about the specifics of the movement of domestically grown marijuana. Studies of marijuana users typically find that they received marijuana from friends and family, but the lack of further detail is unsatisfying given that sale is arguably the most risky part of the endeavor since it necessarily involves more people (Caulkins & Pacula, 2006). Regardless, no matter how small scale their operations, commercial marijuana growers must arrange for storage of the final product while awaiting sale, arrange for buyers to come pick it up or for transportation of the final product to buyers, negotiate sale price, and dispose of the money.

While the process of marijuana leaving growers and getting to customers is understudied, the amount of marijuana grown and the money earned from it has received more thorough examination. More work exists on small scale marijuana growers than

large scale, but what researchers worldwide have considered large and small scale is inconsistent. Weisheit (1992) considered growers in his study “large scale” at twenty marijuana plants (Clarke, 1981); other work has considered upwards of a hundred plants as “large scale” (Hammersvik et al., 2012). However, using plants as the determining factor for scale can be misleading, as marijuana plants may grow up to about twenty feet tall and may produce several pounds of dried bud per plant (Clarke, 1981). One ongoing, multi-national study has advocated for measuring scale by weight of dried buds produced by growers, and has implemented this measurement in data collection (Global Cannabis Cultivation Research Consortium, 2014). By any measurement, small scale growers appear to be much more prevalent than large scale, but this may be a function of the target respondents for research.

Similar to legal produce, marijuana is less expensive when purchased in larger amounts, that is, there appears to be a bulk discount (Clements, 2006). Unlike legal produce, however, demand for marijuana appears to be stable in the face of price increases (Desimone & Farrelly, 2003). While eradication and enforcement efforts do not appear to affect price (Boyd, 2009), laws permitting state-legal use of marijuana for medical purposes drive down the price of marijuana in the surrounding, entirely illegal, market (Malivert & Hall, 2013). On the other hand, there is also evidence that small-scale growers may reject the conventional market economy altogether, favoring a barter economy in which they exchange their own marijuana for that of friends or other goods and services (Hakkarainen & Perala, 2011).

**Organization of marijuana growers/Co-offending.** Research findings regarding the size and organization of groups of people that grow marijuana together vary by research method and country. Studies using law enforcement data or incarcerated samples tend to find larger groups of growers, with more hierarchical organization (Malm, Nash, & Vickovic, 2011); Weisheit, 1990). Some marijuana growing in Kentucky appears to have reached levels of scale and organization equal to traditional organized crime (Riggs Hafley & Tewksbury, 1995), while research in New Zealand has failed to uncover large networks of marijuana growers (Wilkins & Casswell, 2003). Growers in several nations have organized into clubs, similar to medical marijuana co-ops in the United States (Arana & Sanchez, 2011; Decorte, 2014). There are both practical and ideological reasons why massive criminal organizations of marijuana growers rarely occur in industrialized nations.

First, marijuana requires a comparatively large amount of space, and the larger a crop, the more vulnerable it is to detection by law enforcement (Hammersvik et al., 2012; Wilkins & Casswell, 2003). Second, high quality marijuana production requires some expertise, which makes it more likely that growers would start small and then scale up their endeavors up, as opposed to an inexperienced leader starting right away with a large organization. Most small-scale growers, however, do not command the necessary capital to scale up their organizations. Similarly, large-scale distribution endeavors require social knowledge (like an understanding of how to behave in the black market); access to large distribution networks; and capital that may be beyond the typical grower. Finally, many growers are involved in what Hammersvik and colleagues (2012) term “cannabis

culture,” which includes a set of values that would be difficult to maintain in large-scale business, particularly anti-commercialism.

While there are compelling reasons for networks of marijuana growers to remain relatively small, it is important to note that growers do often work together (Malm et al., 2011). In part, this is because portions of the process of producing marijuana for sale are easier to accomplish with multiple people. For example, while it is possible for a single person to care for a substantial number of plants alone, harvesting and trimming involve considerably more, and potentially more detailed, work that may be better suited to a group of people than a single person. Additionally, working with others helps growers attain the skills and knowledge necessary to produce marijuana for sale. The existing literature often includes lists of various ways that growers can learn about techniques, but does not often explore them in detail (Potter, 2006). Marijuana production is somewhat unique from other crimes in that legitimate industries have arisen to facilitate grower success. Novice growers can easily access information about marijuana cultivation on the internet, via websites like YouTube or online versions of magazines like *High Times*. There is also an extensive array of books aimed at educating marijuana growers, including titles like *Marijuana Horticulture: The Indoor/Outdoor Medical Grower's Bible* (Cervantes, 2006), and *Marijuana Business: How to Open and Successfully Run a Marijuana Dispensary and Grow Facility* (Grissler, 2014), both of which are also available as e-books. Additionally, specialty gardening stores providing nutrients, lighting, and other products to help grow marijuana have been flourishing in recent years (Bouchard & Dion, 2010).

The importance of direct learning and mentoring from others in the marijuana industry should not be underestimated, despite the availability of alternative avenues for learning. Limited investigation in this area has highlighted the importance of both technical and social mentors for marijuana growers entering the industry (Bouchard & Nguyen, 2011). Technical mentors provide skills and knowledge about how to grow and process marijuana plants successfully, and social mentors provide access to social capital, contacts, customers, and others necessary to make commercial marijuana growing ventures successful. Without both, it can be quite difficult for marijuana growers to make a profit on their endeavors (Bouchard & Nguyen, 2011).

**Motivations of marijuana growers.** Why people grow marijuana is often separated into monetary and non-monetary reasons, although both can coexist within the same person. Of particular relevance to commercial marijuana growers are monetary motivations. Researchers generally divide monetary motivations for growing marijuana into greed and economic hardship (Potter, 2006; Weisheit, 1990). Greed is fairly obvious; there is certainly money to be made in the marijuana trade, although evidence from other drug trades suggests that the majority of it may be made in brokerage, rather than production (Adler, 1993; Chin, 2009; Desroches, 2007). However, in available U.S. studies, economic hardship commonly arises as the primary motivation for marijuana production, especially in research in economically stricken areas like Kentucky (Riggs Hafley & Tewksbury, 1995). In these areas, an exploitative economy and absence of other employment, combined with residents' lack of education and skills, make marijuana growing especially attractive (Katz & Whitaker, 2001).

Non-monetary reasons for growing marijuana for sale are more varied. The most ostensible reason in the United States is the one that aligns most neatly with existing legalities – growing marijuana for medical use (Dahl & Frank, 2011). Little U.S. research has looked at this motivation directly, but it has come up repeatedly as a primary motivation (August, 2012; Boyd, 2003; Wiecko & Thompson, 2014). Related to “cannabis culture,” a minority of marijuana growers are so passionate about legalization that they grow marijuana in public places as an activist statement (Potter, 2006). Many small-scale growers also provide marijuana for themselves and friends as a measure of self-sufficiency (Boyd, 2003; Decorte, 2010; Potter et al., 2014). Some commercial marijuana growers enjoy the challenge of growing without getting caught (Weisheit, 1990). Finally, some marijuana users are motivated to grow their own because they feel it reduces risk of detection by law enforcement, or reduces risk of exposure to harmful chemicals from imported marijuana (Wiecko & Thompson, 2014).

Two theories have been applied to explaining marijuana growers’ motivations. The first is Sykes and Matza’s (1957) theory of delinquency and drift, in which criminals must participate in both criminal and legitimate worlds, and so create techniques of neutralization to assuage their guilty feelings and justify their behavior. Sykes and Matza (1957) listed a series of potential techniques of justification, and qualitative work with marijuana growers include quotes that read as though they were drawn directly from the list. Weisheit (1990) and Potter (2006) provided particularly vivid examples of growers who argue that no one is getting hurt, that condemn the authorities, and literally every other technique of neutralization that Sykes and Matza suggested may legitimate their behavior in their own eyes. The second theory that researchers have applied to marijuana

growers is social worlds theory, which posits that there are six different shared worlds for moral justification that can be used for people in disagreement to reach a shared conclusion (Boltanski & Thevenot, 2006). These six worlds include the inspired world, the domestic world, the world of fame, the civic world, the industrial world, and the market world. As yet, Hakkarainen and Perala (2011) are the only researchers who have applied this theory to marijuana growers, but they find that small-scale marijuana growers in Finland apply concepts from each of these social worlds in order to justify their participation in illegal activity. These concepts overlap in some instances with techniques of neutralization. For example, Finnish growers use the idea that growing cannabis is not a “real” crime, and so the policies against it result in civic exclusion, but this might also be applied as a denial of harm under techniques of neutralization. Both theories have the advantage of allowing for depth and complexity of motivation and justification for illegal behavior, and thus far have generally been used to explain marijuana growing generally more than specific choices that growers make as they go about their activities.

**Typologies of growers.** Seven different studies have developed typologies of marijuana growers. Typologies have their limitations, particularly the danger that ideal types will become reified and future research will ignore important developments in order to stick with existing typologies (Driver, 1968). In this case, however, they provide a good starting point for examining differences among marijuana growers as well as similarities and differences in how researchers think about them. The earliest two typologies of marijuana growers were developed in the United States. The first was based off of a study of people incarcerated for marijuana production, by Ralph Weisheit (1992).



Weisheit differentiated marijuana growers by motivation and size of operation, a pattern which has continued in more recent studies. His categories of growers include hustlers, who usually grew marijuana over large spaces and who were driven by the challenge and lure of monetary success; pragmatists, who grew a variety of crop sizes and were motivated by economic necessity; and communal growers, motivated not only by economic necessity, but also by more intangible rewards like love of the plant (Weisheit, 1992). In the mid-1990s, Riggs Hafley and Tewksbury (1995) added to Weisheit's typology based off of their work with active marijuana growers in rural Kentucky. They included young punks, who were young men holding low-level roles in larger organizations; and entrepreneurs, who specifically developed new techniques for growing marijuana.

Since the turn of the century, research on marijuana growers has increasingly included smaller-scale growers, and this inclusion is reflected in more recent typologies with the inclusion of those who only grow for their own use or to sell to friends and family (Bovenkerk & Hogewind, 2002; Hough et al., 2003; Potter, 2006). The most recent Canadian typology, developed exclusively for young marijuana growers in Canada, also differentiates between amount of marijuana consumed, organizational roles, and other criminal involvement (Nguyen & Bouchard, 2010). In the U.S., research on eighteen small-scale marijuana growers resulted in a motivational typology including the categories of health-conscious herbalists, risk reducers, and grass gurus (Wiecko & Thompson, 2014). Health is an increasingly common theme in typologies as laws in multiple countries become more tolerant of marijuana used for medical purposes (Hakkarainen, et al., 2014). This proliferation of typologies is somewhat troubling,

however, because researchers seem to be finding something different about marijuana growers with each new study. While commonalities can be found, for instance, by the common practice of grouping marijuana growers by amount produced and economic issues, motivations seem so varied at this point that it is difficult to draw conclusions about what we know.

### **Place of the Dissertation in Existing Literature**

Existing literature about marijuana growers provides a basis from which to begin the current investigation. The United States is unique in its internal division over the regulation of marijuana. Furthermore, limited findings show that between-country differences affect outcomes for marijuana growers; this suggests that existing work in other countries cannot shed enough light on the circumstances of growers in the U.S. The current legal upheaval in the U.S. also has the potential to render older work outdated in terms of social context, and perhaps even for law enforcement applicability. While current knowledge sources are valuable, additional research in the U.S. context is clearly needed. This study aims to fill gaps in the literature by providing timely knowledge of commercial marijuana growers in the context of changing legalities using an interstate sample.

## CHAPTER 3

### METHODS AND DATA

#### **Chapter Overview**

This chapter describes the methods and data used to examine the experiences of people involved in producing marijuana for sale in the United States. The dissertation uses qualitative interview data from a sample of 31 people, living in four different states, who work in the marijuana industry. Approval for the study was granted by the Arizona State University Institutional Review Board, and data collection began in 2012. The chapter begins with a discussion of the basic methodological choices for the project, including qualitative versus quantitative methods and researching active offenders. It then describes the study settings and the IRB approval process. Next, it elaborates on the sampling strategy, and describes the key informants and recruitment process. I then describe the interview process and interview design and, finally, discuss the plan for data analysis.

#### **Basic Methodological Choices**

**Qualitative vs. quantitative.** This study was conducted using qualitative methodology. Qualitative was determined to be preferable to quantitative because it allows for in-depth exploration of the experiences of the participants in the sample. It enables the researcher to ask for explanations, provides participants the opportunity to use their own words, and permits analysis of a depth of experience generally unavailable via quantitative methods (Charmaz, 2006). Additionally, the relatively small sample size

makes the data statistically non-generalizable and so not suited for most quantitative analyses (Bartlett, Kotrlik & Higgins, 2001). Although full triangulation for purposes of reliability and validity is not available for this sample, several of the participants worked together or knew each other directly. Asking each of the participants about the same things enables a comparison of answers and revealed a level of agreement about the process that would otherwise not have been possible.

**Sample choice: Active vs. incarcerated offenders.** This is a study of active offenders, which was determined to be preferable in this instance for a variety of reasons. First, interviewing active offenders avoids the “funnel” selection effect that takes place with incarceration (Carrington & Moyer, 1994). With active offenders, it is possible to have access to a variety of people who would be missed by incarcerated samples due to size/type of offense, or limited interaction with the criminal justice system. For instance, marijuana growers who have never been prosecuted, either due to the small size of their operation or having never been caught, would be missed by using an incarcerated sample. Second, working with active offenders avoids the ethical complications of interviewing a vulnerable population (Brewer-Smyth, 2008). Incarcerated offenders are vulnerable to exploitation through incentives, for instance. Third, active offenders are closer to their offense. A large portion of the interview schedule asked participants about their most recent or current growing season. For incarcerated offenders, the most recent season may have been six months to a number of years in the past, creating the possibility of memory decay. It is easier for participants to recall the details of something they are in the midst of than something from which they are separated by time and distance (Krosnick, 1999).

Finally, the offer of access to a sample of active marijuana growers was a strong draw. In fact, the origin of the project was suggested by one of the key informants.

## **Study Settings**

Data for this study was collected in Arizona, Oregon, Colorado, and Washington. States were chosen for their permission of marijuana production, as well as the availability of key informants to refer participants. This section includes information about the legalities of marijuana for each state. Information on legalities described below includes who is permitted to use, cultivate, and sell marijuana; how much they may have in their possession or cultivate at one time; whether businesses or other groups of cultivators are allowed; and what restrictions exist in terms of limitations or registration. Several states maintain some sort of records of marijuana cultivators, and these are presented when available. This section also describes the size and population demographics for the more specific data collection locations as well as other points relating to the study, such as law enforcement presence or generally observable marijuana business practices.

**Arizona.** Arizona permits marijuana use and cultivation under sections 36-2801 to 36-2817 of state law. Under this statute, marijuana use is legal for medical use by patients registered with the state for qualifying conditions. Medical marijuana patients may grow their own marijuana if they live further than 25 miles from a dispensary, or they may authorize a registered caregiver to grow marijuana for them. Patients may grow up to twelve plants and possess up to two and a half ounces of usable marijuana. Registered caregivers may grow marijuana for up to five patients, at a maximum of

twelve plants apiece, and may provide each patient with two and a half ounces of marijuana. There are no restrictions on the size or variety of the plants, but they must be grown in an “enclosed, locked facility,” and outdoor growing is only permitted behind “solid 10-foot walls constructed of metal, concrete, or stone that prevent any viewing of the marijuana plants, with a one-inch thick metal gate” (Arizona Department of Health Services, 2015). State law also allows for non-profit medical marijuana dispensaries, which may cultivate their own marijuana in similarly restrictive conditions. Dispensaries may accept marijuana from registered patients or caregivers with licenses to cultivate, but may not provide compensation for these donations. Patients are permitted to have up to two and a half ounces of marijuana at any given time, and dispensaries are prohibited from giving patients more than that amount in any two-week period.

Arizona’s Department of Health Services is responsible for setting rules within the state guidelines, as well as handling license and inspection duties. Patients, caregivers, and dispensary agents must register with the department and meet several requirements in order to cultivate marijuana. These include age, criminal conviction, and location restrictions; qualifying medical conditions for patients; and fees. Patients pay \$150 annually for initial or renewal registration cards, and caregivers pay \$200 per patient for which they will provide marijuana. The state provides up to a \$75 registration/renewal discount for patients who currently participate in the federal Supplemental Nutrition Assistance Program (SNAP, or food stamps). Dispensary agents pay \$500 annually. Dispensary fees run up to \$5000 for an initial dispensary registration certificate. Additionally, all cardholders must pledge not to distribute marijuana to those not permitted to use it under state law (Arizona Department of Health Services, 2015).

The Department of Health Services provides an annual medical marijuana report that includes information on applications for registration, qualifying patients, registered caregivers, registered dispensary agents, and dispensaries. In 2012, there were 34,699 patients registered to use medical marijuana in Arizona, 806 designated caregivers, and 136 dispensary agents. The vast majority (81% of patients and 90% of caregivers) were authorized to cultivate marijuana at the time (Arizona Department of Health Services, 2012). There were three licensed marijuana dispensaries. By 2014, there were 61,272 registered qualifying patients, 639 registered caregivers, and 1,506 dispensary agents. Eighty-five dispensaries were operational statewide during 2014. The percentages of patients and caregivers authorized to cultivate marijuana had shrunk to 2.5% and 58%, respectively, largely due to residency restrictions preventing cultivation within 25 miles of a dispensary - over 97% of Arizona residences were located within 25 miles of a medical marijuana dispensary (Arizona Department of Health Services, 2014).

Oregon. Oregon passed its medical marijuana law (the Oregon Medical Marijuana Act) in 1998. As in Arizona, Oregon's law allows marijuana use for medical purposes by patients registered with the state for qualifying conditions. It is administered by the Oregon Health Authority, which is comparable to Arizona's Department of Health Services. In 2014, Oregon passed a bill which allows for personal recreational use of marijuana; but this law did not go into effect until July of 2015, after data collection in the area was complete. Oregon medical marijuana patients may grow their own marijuana, or they may authorize a caregiver to grow for them; but unlike Arizona, there were no operating medical marijuana dispensaries at the time of data collection. Patients may grow up to six mature plants, with up to eighteen immature plants (no flowers, 12"

in diameter, 12” tall) at one time, and caregivers may grow for up to four patients. The Oregon statute is more specific than the Arizona law when it comes to caregiver recompense. It states that a patient may reimburse a caregiver for the cost of supplies and utilities required to grow their marijuana, but not for labor. There are no restrictions on the size or variety of mature marijuana plants, and the state does not impose restrictions on grow sites in terms of security or facilities except to require grower registration cards be displayed at grow sites. The first applications for medical marijuana dispensaries in Oregon were received in March, 2014. Unlike in Arizona, Oregon dispensaries may not grow their own marijuana, and may only receive transfers of marijuana or immature plants from registered Oregon patients or caregivers. Also unlike Arizona, Oregon medical marijuana dispensaries are not required to be non-profit entities. Patients are allowed to have up to 24 ounces of usable marijuana at a time.

Patients, caregivers, and dispensaries must register with the Oregon Health Authority. They are subject to multiple restrictions for eligibility including age, criminal convictions, qualifying medical conditions for patients, location restrictions for dispensaries, and fees. Patients pay \$200 annually for initial or renewal registration cards, which may be reduced by \$50 if they can demonstrate that they are currently eligible for or receiving SNAP, food stamps, and Social Security Insurance (SSI). Registered growers pay \$50 to register grow sites. Dispensaries pay a \$3,500 registration fee annually, along with other lesser fees. The Oregon medical marijuana law specifically prohibits selling marijuana. In 2014, however, the state passed a recreational marijuana law, which went into effect in July of 2015 and permits personal recreational use of marijuana, as well as authorized sales facilities beginning in 2016 (Oregon Liquor Control Commission, 2014).



The Oregon Health Authority maintains statistics on the state's medical marijuana program and reports them quarterly. At the end of 2013, there were 60,297 patients and 30,657 caregivers registered with the Oregon Medical Marijuana Program (Oregon Health Authority, 2014). The department does not maintain separate statistics on how many patients and caregivers are licensed to grow marijuana, but since there were no marijuana dispensaries in Oregon at the time, it is likely that most patients and caregivers were authorized to cultivate marijuana. By the end of 2014, the Oregon Medical Marijuana Program had 69,865 registered patients and 34,914 registered caregivers (Oregon Health Authority, 2015).

**Colorado.** Colorado passed its first state constitutional amendment affirming medical use of marijuana as a defense from criminal prosecution in 2000, followed in 2010 by one permitting and regulating medical use of marijuana (Colorado Department of Revenue, 2013). Additionally, in 2012 voters passed a state constitutional amendment allowing for retail sales of marijuana, and in July of 2014 regulations for retail cultivation and sales of marijuana to adults over 21 in Colorado went into effect (Colorado Department of Revenue, 2013). Under Colorado's medical provisions, licensed patients may grow up to six marijuana plants at a time, with only three flowering plants permitted at a time. Patients may have up to two ounces of usable marijuana at once. As with Arizona and Oregon, medical marijuana patients may authorize a caregiver to grow for them. Caregivers are limited to the same amounts per patient that patients can grow at home, but they may grow for up to five patients or obtain a separate license for additional patients. Medical marijuana dispensaries are permitted; however, unlike Arizona and Oregon, patients must designate a dispensary to grow marijuana for them, as they would

a caregiver. Medical marijuana dispensaries may grow up to 500 plants on-site under fairly detailed conditions, with waivers available for more plants. Under the recreational marijuana laws, Colorado residents may grow up to six marijuana plants per adult at home, with up to three flowering at any time. Marijuana plants grown residentially must be cultivated in an “enclosed, locked space,” and must not be made available for sale (Colorado State Constitution, Article XVIII, Section 16). Adults in Colorado may possess up to one ounce of usable marijuana for personal use. Retail businesses selling recreational marijuana are permitted, with restrictions on cultivation similar to those for medical marijuana dispensaries.

Responsibility for administering Colorado’s marijuana programs is split between several agencies. The Board of Health and Human Services handles medical marijuana rules and administration through the Department of Public Health and Environment; the Department of Revenue is responsible for managing retail marijuana rules and licensing; and the Marijuana Enforcement Division is responsible for enforcing state standards for cultivation and dispensing of marijuana. For medical marijuana, patients, caregivers, and dispensary owners/employees must obtain state licenses with various requirements including medical records for patients, proof of residency, and background checks for all licensees. The law prohibits anyone with a felony drug offense in the past five years from obtaining a license (Colorado House Bill 11-1043) Patients pay a \$15 fee when obtaining a license. Medical and retail dispensaries pay as much as \$14,000 in licensing renewal and fees annually (Colorado Department of Revenue, 2013; State of Colorado, 2013).

Colorado's Department of Public Health and Environment publishes monthly statistics about the state's medical marijuana registry, so year-end information is available for all years of data collection for this study. In 2012, there were 108,526 people registered as medical marijuana patients in Colorado. Just over half of these had authorized a caregiver or dispensary to grow marijuana for them (Colorado Department of Public Health and Environment, 2015). By the end of 2013, there were 110,979 registered patients, 57% of whom had authorized a caregiver or medical marijuana center to grow marijuana for them. At the end of 2014, 115,467 Colorado residents held valid medical marijuana registration cards, but the percentage of those designating a caregiver or dispensary to grow marijuana for them had decreased to 43% (Colorado Department of Public Health and Environment, 2015). The Colorado Department of Revenue keeps monthly information on licensed retail and medicinal marijuana dispensaries. At the beginning of February of 2015, there were 505 licensed medical marijuana centers and 747 licensed medical marijuana cultivation sites (Colorado Department of Revenue, 2015). For retail marijuana at the same time, there were 334 marijuana stores, 419 cultivation sites, and 17 fully licensed marijuana testing centers (Colorado Department of Revenue, 2015). A market analysis prepared for the department estimated that the demand for medical and retail marijuana combined in 2014 was 130.3 metric tons (Light, Orens, Lewandowski, & Pickton, 2014).

**Washington.** In 1998, Washington State enacted its first law easing restrictions on use of marijuana for medical purposes with the Washington State Medical Use of Cannabis Act (MUCA) (RCW 69.51A.900). The state's marijuana legislation is quite different from that of the other study sites in several regards. First, there is no registry of

users or caregivers under the law. Registry and licensing requirements were included in a proposed 2011 amendment to the MUCA, but these sections were vetoed by the governor following communication from the federal government about potential conflicting legalities. Second, use and production of marijuana for medical purposes is not actually legal under state law. Instead, the MUCA provides an “affirmative defense” for medical marijuana production and use, within certain guidelines (*Cannabis Action Coalition v. City of Kent*, 2014). Patients with qualifying conditions can grow marijuana or designate a provider to do so for them after obtaining a physician’s referral for a qualifying condition (Washington State Department of Health). These patients or their providers may then grow up to 15 plants each and hold a maximum of 24 ounces of usable marijuana (RCW 69.51A.040), and usable amounts of marijuana in excess of this limit may be an affirmative defense at trial if the patient can prove legitimate medical need (RCW 69.51A.045).

Medical marijuana dispensaries per se are not permitted under Washington law, and marijuana growing must be “noncommercial” (RCW 69.51A.025). Businesses have been getting around the noncommercial requirement, however, by operating collective gardens and collecting “donations” rather than payments for medical marijuana. The state does not license these businesses or collect taxes from them, but cities and counties are authorized to do so (RCW 69.51A.140). State law prohibits display or use of marijuana in public, so it is not shown in storefront windows (RCW 69.51A.060), but a green cross symbol in signage indicates that marijuana is available. By state law, collective gardens are limited to ten participating qualified patients, growing up to forty-five plants and holding up to seventy-two ounces of usable marijuana (RCW 69.51A.085), and are

prohibited from selling, delivering, or giving marijuana to people outside of the collective. From personal experience in Washington, most dispensaries had a front room with a receptionist who was responsible for checking physician referrals before letting patients into another room where they could peruse the available marijuana. Additionally, many collective gardens offer delivery service to patients, which they may advertise online or through a storefront. Because of the lack of a registration system, the state does not collect official statistics on medical marijuana users in Washington.

The most recent developments in Washington State, as in Colorado, involve recreational marijuana. In 2012, voters passed initiative 502 (I-502), which legalized marijuana for recreational production and use in the state. Under this law, growing marijuana at home for personal use is not allowed. Only those with one of three types of state licenses may be involved in non-medical marijuana production and sale, and retail marijuana stores may only sell marijuana and related products (314-55 WAC). Retail marijuana is licensed and monitored by the Washington State Liquor Control Board. Under this system, retail marijuana is taxed from producers to processors, from processors to retailers, and from retailers to customers, at 25% each step (Washington State Liquor Control Board, 2015). Retail marijuana producers are licensed by the size of the space they plan to use for growing marijuana, up to two million square feet. They pay an initial \$250 application fee, plus a \$1,000 annual renewal fee, in addition to taxes. Limits on how much marijuana may be on the premises are set by portion of annual harvest, not number of plants or weight of usable product. Retail marijuana may be grown indoors or outdoors, within set location and security restrictions as well as age and criminal history restrictions on growers (314-55 WAC).

## **Project Approval by Institutional Review Board**

Due to the potential vulnerability of participants actively engaged in criminal behavior, as well the potential vulnerability of a researcher in this setting, there were some concerns about approval for this project. Beginning in the spring of 2012, I had multiple meetings with my dissertation chair to discuss the feasibility of completing a research project with marijuana growers. In addition to vulnerability concerns, there were also concerns about whether it would be possible to recruit a sample large enough to provide meaningful information in this area due to anticipated feelings of suspicion of potential participants. Despite these issues, it took just over a month to gain approval from the Arizona State University Institutional Review Board (IRB). The approval process included a meeting of the research team with the IRB liaison, a full board review, and minor revisions to the proposed study procedures and interview schedule. The primary concern was participant confidentiality. Accordingly, words like “who” were removed from the interview schedule in order to avoid, as much as possible, acquisition of identifying information. Additional measures employed to ensure confidentiality included use of pseudonyms; a pre-paid “disposable” project cell phone and immediate deletion of call records; and maintenance of all data in password-protected computers or under lock and key in an ASU office. In July of 2012, the IRB granted official approval to commence with data collection for the full study.

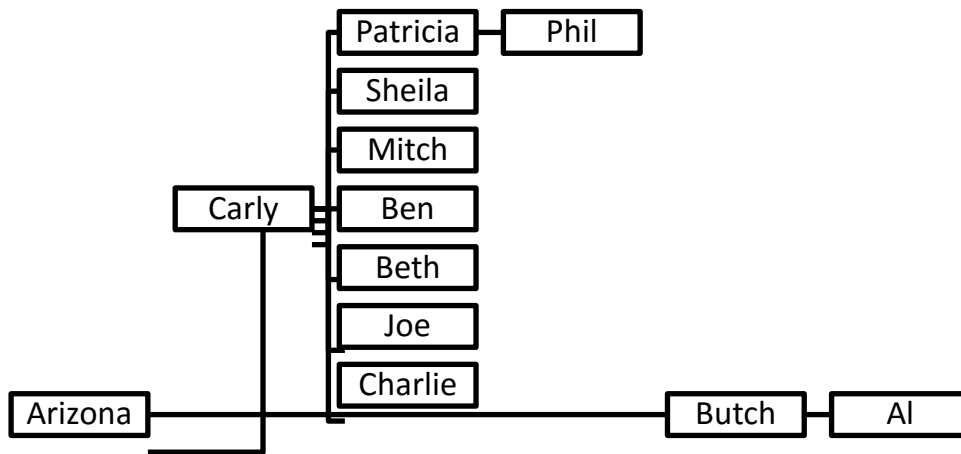
## **Sampling and Recruitment**

**Introductory statements.** The final sample includes interviews in four states: Arizona, Oregon, Colorado, and Washington. Data collection was delayed on multiple

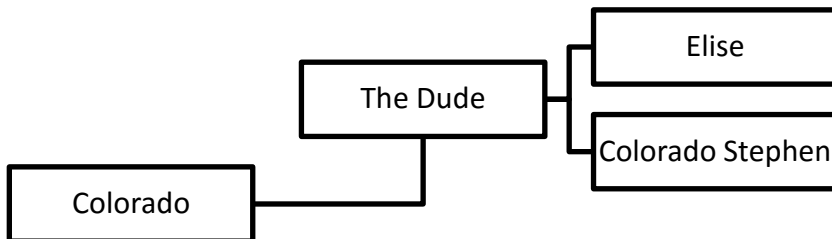
occasions due to active growers' heightened suspiciousness in the wake of federal law enforcement actions immediately preceding data collection attempts, but was ultimately successful. The current sample includes thirteen participants working in Arizona, fourteen working in Oregon, three in Colorado, and three in Washington. Two additional respondents were excluded from the final sample because they had not actively grown marijuana for sale for more than ten years. All members of the final sample had grown marijuana commercially no longer than one year before their interviews, and all planned on continuing to do so.

**Sampling strategy: Snowball sampling.** The hidden nature of the marijuana-growing population makes many preferred sampling practices, particularly those used in quantitative research, impossible. For example, there is no sufficient sampling frame from which to draw. Instead, this study relied on snowball sampling, which has been used effectively in previous studies of active offenders (Wright, Decker, Redfern, & Smith, 1992). Snowball sampling begins with one or more key informants, people active in the target community, who are willing to recruit members of the target population for the study. Each new participant is, in turn, asked to refer people to participate in the research. As previous participants refer new participants, the sample gathers new people in a “snowball” effect. This sampling strategy has limited generalizability because of its non-random and purposive nature, but can be exceptionally useful for accessing hard to reach populations, as it was in this case. Figures 1-3 illustrate the referral chains for the final sample by state. Carly is included twice, as she referred participants in both Arizona and Oregon.

**Figure 1: Arizona referral chain**

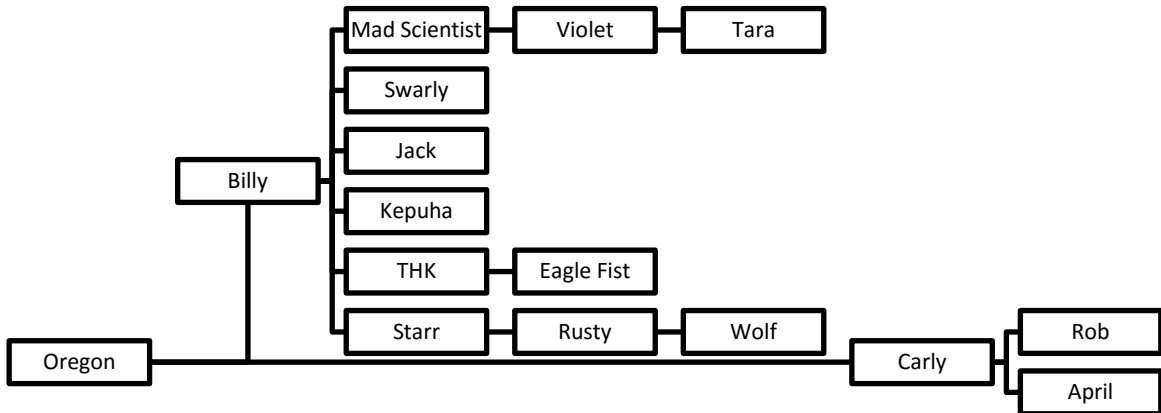


**Figure 2: Colorado referral chain**

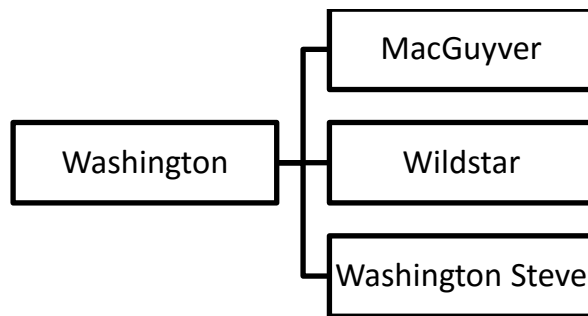




**Figure 3: Oregon referral chain**



**Figure 4: Washington referral chain**



**Key informants: Getting the snowball rolling.** The Arizona and Oregon key informants were very helpful. Both were the kind of people who know many people and who are friendly and outgoing. The Oregon key informant actually suggested this study during a personal visit. He had recently moved to Oregon full-time to grow marijuana,

after traveling back and forth for several months. We got to talking about his plans for his marijuana business, the legalities, and how marijuana growers and users are sometimes portrayed or perceived. He said I should come talk to people in Oregon about it, and assured me that if I could get approval for the project he could introduce me around. “Billy” has an entrepreneurial attitude about growing and selling marijuana. Growing marijuana is definitely more of a business proposition for him than a labor of love, although he takes pride in growing a quality product.

The Arizona key informant is the Oregon key informant’s mother-in-law. Once she heard about the project, she was excited about it and offered to introduce me to marijuana growers in Arizona. She is a long-time grower herself, and was my first respondent. Increased law enforcement presence in Arizona prompted her to move her operation to Oregon, and being a very outgoing person, she was able to make a couple of referrals there as well. “Carly” laughs when she describes herself as a criminal. Her overall attitude towards growing and selling marijuana is that her family “just couldn’t make it” without doing so, and that, “My God, somebody had to do it!” She and her husband have been growing marijuana since the mid-1970s, breaking only to serve probation after being arrested for a growing upwards of 100 plants outdoors in the 1980’s. Carly says that she loves the marijuana plant, and that love is essential to growing good weed.

The original Washington informant was not as helpful. Although he had done some growing, it was very small scale, based in his apartment as a teenager; he is currently in his 50s and law-abiding. He therefore did not have extensive contacts in the

Washington marijuana growing community, and between that and recent law enforcement activity I was only able to collect one interview there on an initial data collection trip. Community members reported that several dispensaries had been raided by federal agents the week prior to my arrival, and this heightened suspicions and made access difficult. The assistance of an academic community member later, however, enabled the collection of two additional interviews in Washington. In Colorado, the key informant was initially optimistic, but after being interviewed herself, she thought that the questions were so in-depth that other marijuana growers of her acquaintance would be unwilling to participate. She was still able to refer me to one other, who referred me to the third participant in Colorado.

**Recruitment.** The recruitment plan called for key informants to refer participants, who would then receive numbered referral coupons with the project phone number to contact me to arrange interviews. All participants were asked to refer others to be interviewed, but were assured that this was not a requirement. Participant compensation was limited to \$30 per interview, with a \$10 referral payment for each referred person who completed an interview. Even though referred potential participants were informed that I would be using a disposable cell phone, participants were generally unwilling to contact me directly. Instead, they typically contacted the key informants, who then contacted me and arranged the interviews. No participant actually used a referral coupon.

At other times, I had no prior knowledge of an interview opportunity and had to conduct interviews on the spot. For example, one participant drove out to where I was staying in Arizona, said that a friend had referred him, and asked, was I looking to talk to

people who grow marijuana? I was still in my pajamas, but I did not want to miss the opportunity; so I threw on some clothes and conducted the interview right then. Another time, I was interviewing one respondent when a grower friend of his dropped by, then waited for my respondent's interview to finish and offered to be interviewed.

As mentioned, recruitment was also hampered in some cases by law enforcement activity. Data collection in Oregon was delayed for a year because the landlord of a key informant was arrested on marijuana charges, which scared the key informant and his associates so much that no one was comfortable being interviewed. In Washington, a federal raid on multiple dispensaries took place days before my arrival for data collection, similarly frightening the community and impeding data collection efforts.

The (relatively) public nature of the interviews (discussed below) meant that other growers would sometimes drop in on parts of the interviews. Often, this worked to my advantage in recruitment, because after hearing a few of the questions and seeing people they knew answering, they felt more certain that I was not a law enforcement officer. Occasionally, however, other growers' presence at interviews led to uncomfortable situations. For example, one interviewee made sure to let his friend know that I had a recorder out as we were conducting his interview. This was a typical courtesy, and people generally did not mind; but in this instance the man threatened to break the recorder, flipped the bird, and made several lewd gestures at me. Another time, the son of one of the participants came by during an interview to check up on his father. As the son was also a grower, and known to my key informant, I later asked my informant if the son would be interested. She told me that after he had left the interview he had spoken to her,

and told her that he was not going to talk to “a fucking FBI agent.” While recruitment for this project has had its hitches, ultimately I have been able to recruit suitable respondents within the parameters of IRB approval.

### **Conducting Interviews**

The research plan called for interviews to be conducted in public places, with the IRB preferring places like coffee shops and fast food restaurants. This preference proved difficult to implement in practice. In part, this was because of the research settings. In Arizona, the town in which I primarily conducted interviews was so small that there were no fast food restaurants. There was one coffee shop, in which I conducted two interviews, but it was so small that participants were often not comfortable being interviewed there. I ended up conducting interviews in the only local bar, at an outdoor farmers’ market, and by the side of the road. When participants arrived at the place where I was staying without making prior arrangements, I interviewed them on the porch in an attempt to keep the interviews in public places. In Oregon, I conducted interviews in parks, on streets, or on the porch of my key informant’s home, because businesses in the area were quite spread out and participants preferred that I travel to places where they were comfortable rather than come to a place that I chose. A similar pattern held for Colorado. In Washington, one interview was conducted in a dispensary, and the other two in restaurants.

Potential participants became aware of the study when a key informant or previous participant presented potential participants with an information letter or explained the interview during interpersonal contacts. If the potential participant was

interested in participating, he or she would arrange to meet through various methods. As discussed, the research plan called for them to arrange interviews via the project cell phone, but this happened only rarely. Instead, potential participants arranged meetings directly through key informants (who would call me), backtracked through previous participants to find the key informants to arrange a meeting, or sought me out in person. Data collection trips each took at least three days. By the end of each trip, due to the small nature of the communities in which I conducted research, it seemed that everyone in town knew who I was and where to find me (especially in Arizona). Upon first meeting a potential participant, I explained the project in detail and provided an information letter.

I requested audio recording for each interview, but assured each participant that recording was not mandatory and that they could choose to stop recording at any time. Several participants chose to not have their interviews recorded, and several more chose to have recording stopped for parts of the interview. I took hand-written notes during each interview, and was especially thorough when not recording. At the close of each interview, I thanked each participant, offered their compensation, and reminded them about referral opportunities. A few of the participants declined compensation once they learned that the study was self-funded.

### **Interview Design**

The interview schedule for this project was heavily influenced by *Drug Smugglers on Drug Smuggling* (Decker & Townsend Chapman, 2008). Basing the interview schedule on one that had already been used successfully lends validity to the

measures, and helps a starting researcher phrase questions and organize them meaningfully. That said, the original interview schedule had to be adapted significantly to fit the population under study. The full form is provided in Appendix 1. Each interview opened with a set of basic demographic questions, intended to be “easy answer” questions that the participants did not have to think too hard about. Following those, respondents were asked to talk about their growing/work process generally. This question was tweaked a bit over time. The first version asked respondents to draw out their typical process, which made respondents laugh. The second version asked them to describe their typical process, which elicited confusion in some respondents and generated joking comments about sun and rain growing plants in others. I ended up asking participants to tell me about their typical process and help me draw a quick dot sketch of their organizational hierarchy so that I could better tailor later questions. For example, if a person worked exclusively alone, I would know to not ask them later about how work was distributed among people that they worked with. This got the participants up close to the interview form, which often seemed to help them relax and get more involved. The next section asks many detailed questions about their most recent growing season, followed by a section about their first growing season. The final section covers changes in their experiences over time and specifically includes a question on why they choose to participate in this industry knowing that it is federally illegal and that state regulations vary.

Following expectations from the drug smugglers study (Decker & Townsend Chapman, 2008); participants were told in advance to expect that the interview would take between one and three hours. This time range was adequate in practice, with

interviews ranging from one hour to three and a half, with a typical length of about an hour and a half.

### **Data Analysis**

Data analysis began with transcription of the interviews and proceeded through a process of coding transcriptions, finding themes, and selecting quotes. Transcriptions were primarily completed personally, although two were sent out to a professional transcriptionist. Professional transcription proved to be cost prohibitive, and personal transcription allowed for greater intimacy with the data. Interview coding was accomplished using MaxQda qualitative coding software, which allows fast searching through many documents simultaneously for specified words. The interviews were initially coded for answers to the questions in the interview schedule. As themes emerged, the coding scheme evolved to include them, requiring multiple rounds of coding for most interviews. Coded quotes were then examined as a group in order to determine which were representative of the group and which stood out as atypical for the sample. Finally, relevant quotes were selected to illustrate the results in Chapters 4-6. The next three chapters present the results to the research questions presented in Chapter I.



## CHAPTER 4

### WHO ARE THE GROWERS? COMMERCIAL MARIJUANA GROWERS IN THE LIFE-COURSE CRIMINOLOGY CONTEXT

#### **Introduction**

In order to understand the phenomenon of commercial marijuana growing in the United States, it is important to understand something about the people who grow marijuana. While motives and methods are also crucial, an understanding of who is participating and of their criminal careers is critical to policy making and enforcement decisions. This chapter examines the characteristics of commercial marijuana growers, situating them in the context of life course theory. Life course theory attempts to explain continuity and change in offending behavior through examination of life events and how they contribute to trajectories and turning points in criminal behavior. As previously described, marijuana production is not a “typical” crime for several reasons. Primary amongst these are the time it takes to grow and process the marijuana, as well as the expertise required to do this well. In light of these differences, this chapter examines how well life course criminology’s expectations of offenders hold up for marijuana production for sale. The remainder of this chapter will be organized as follows. First, there is a brief overview of life-course criminology. Second, the results open with descriptions of the sample on the main variables of interest for life-course criminology separately. Third are the results for how the participants met the expectations of life-course criminology overall, as opposed to single variables separately. The chapter concludes with a discussion of the results and their implications for life-course criminology.

## **Life-course Criminology**

The life-course criminology paradigm focuses on how criminal behavior patterns change over the course of human development. It includes explanations of the age-crime curve, age-graded informal social control theory, the pathways perspective, and transmission of intergenerational offending, among others (Sampson & Laub, 1995). In the present study, life-course criminology offers a platform from which to examine marijuana growers in terms of age, gender, marital status, and employment, as well as how their criminal careers have developed.

A primary starting point for life-course criminology is the age-crime curve, a graph representing frequency of offending by age (Blumstein, Cohen, & Farrington, 1988; Farrington, 1986). The age-crime curve represents a fairly stable set of findings indicating that, across all offenses, crime peaks in the late teens and declines thereafter, reaching very low frequency by age thirty-five. Since the age-crime curve is an overall measure of crime frequency, patterns of offending by age may be somewhat different for specific crime types (Steffensmeier, Allan, Harer, & Streifel, 1989). Age is important for life-course criminology both for its use in the age-crime curve and as it relates to informal social control (Sampson & Laub, 1995). As people age, they tend to have more connections to pro-social others, and more to lose in general, resulting in a tapering off of offending behavior (Sampson & Laub, 1995). The few offenders who defy the age-crime curve are considered to have failed to establish the requisite social connections that inhibit crime. In practical applications, an accurate understanding of criminals' ages should enable policy-makers to achieve maximum effectiveness and efficiency at reducing crime through the incapacitation effect (Farrington, 1986). While the present

sample is relatively small and its representativeness of all U.S. marijuana growers is unknown, the rarity of offending by those over thirty in the age-crime curve suggests that if commercial marijuana growers follow the same pattern they should be similarly rare in this sample.

One of the most stable findings in criminology is that, overall, men are more likely to offend than women (Heidensohn, 1989). Studies of drug industry participation indicate that women are less likely to participate than men, and when they do participate, they are less likely to take leadership positions (Adler, 1993; August, 2013; Weisheit, 1991). The current study can examine both the presence of women in the sample as well as their positions in organizational structure to determine how well this sample compares to previous research. The gender distribution of offending matters on several fronts. First, any interventions should be able to target offenders appropriately. Interventions aimed at men in a female-dominated domain are likely doomed to failure, or at least have minimal impact on the overall area of interest. Second, gender differences in offending that are attributable to informal social control, are of interest since reductions in offending may be achieved eventually through altering expectations of behavior for either gender.

Additionally, studies of drug use have found that marijuana use, along with that of other drugs, is a gendered phenomenon both in terms of behavior and social meanings (Haines, Johnson, Carter & Arora, 2009; Measham, 2002). In studies of drug trades, risk management strategies, work opportunities, and meanings are similarly gendered (Denton & O'Malley, 1999; Fleetwood, 2013, 2014).

In addition to age and gender, marital and employment statuses are vital to explanations of offending in life-course criminology. Pro-social marriages and

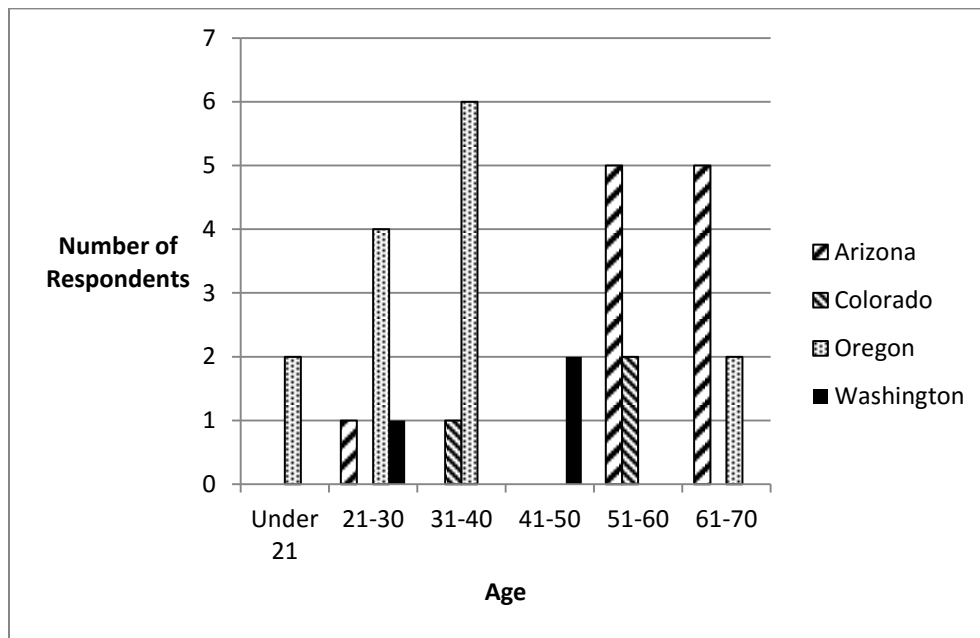
employment represent social ties that act as agents of informal social control, pulling people away from crime and toward pro-social behavior. The combination of marriage and full-time, legitimate employment together have been found to be especially powerful and form what Giordano (2010) has dubbed the “complete respectability package.” Achievement of this package represents the acquisition of “hooks for change” that are likely to create turning points in trajectories of behavior from criminal to law-abiding (Giordano, Cernkovich & Holland, 2003; Laub and Sampson, 2003). In addition to acting as pro-social influences directly, marriage and employment create demands on time that take away from time previously spent engaged in criminal activity, and provide individuals with valued relationships, social statuses, and material goods that they are loathe to relinquish in pursuit of crime (Laub and Sampson, 2003). This chapter provides analysis of the age, gender, marital status, employment, and criminal careers of the current sample. It examines each of the aforementioned separately, before discussing how the respondents fit the life-course criminology paradigm overall.

## **Results**

**Age and gender.** Life-course criminology, and specifically the age-crime curve which it attempts to explain, expects that most offenders will be in their late teens and early twenties during their crime-committing years. In this sample, however, that is not the case. Figure 5 shows the overall age distribution of the sample by state. The mean age of respondents was approximately 44, with a standard deviation of more than sixteen years. Just under half of the sample was over age fifty at the time of the interviews. Only 25.8% of participants were under thirty-one at the time of the interviews.

Organized by state, the participants' ages display some notable differences. First, the majority of the younger participants are in Oregon. Second, the majority of the oldest participants are in Arizona. This is likely an artifact of the sampling method, as the key informant in Arizona was in the oldest age group, and the key informant in Oregon was under forty-one. When the participants' ages are broken down by gender a similar pattern holds, with few women under forty or younger, and over half of the women over age fifty.

**Figure 5: Age by State**

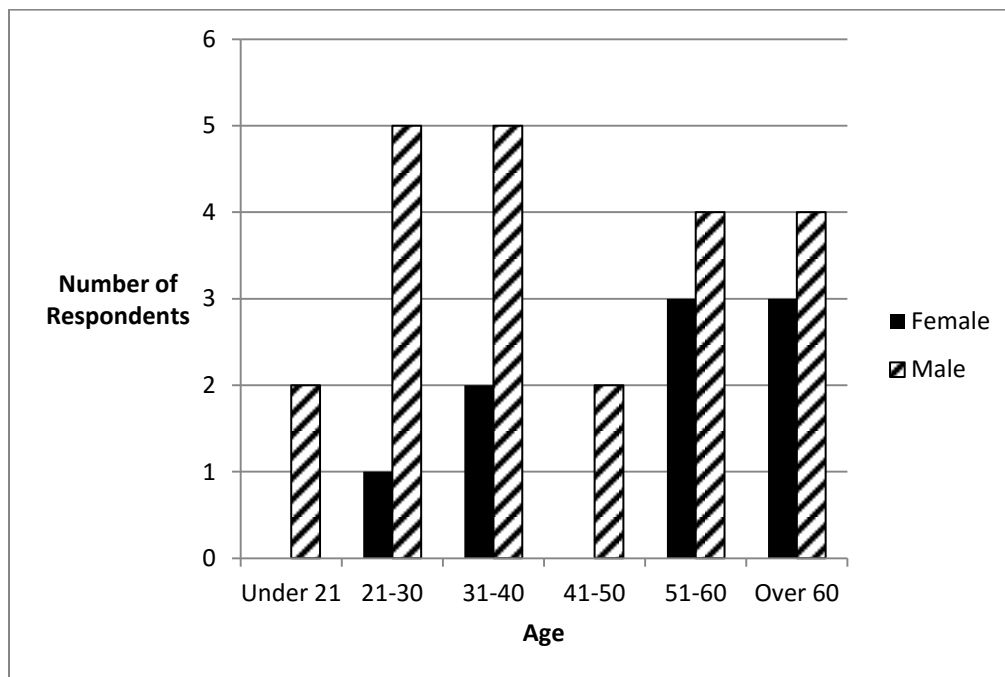


As discussed, previous research has found that women's participation in illicit drug production and sales is relatively rare and typically subordinate to men, tying to life-course criminology along the lines of gender and criminal careers both (August, 2013; Fleetwood, 2014). In marijuana production, women are more likely to be trimmers or site

sitters who do not care for plants than to have leadership roles (August, 2013; Bouchard & Nguyen, 2011). The gender distribution of the present study can be determined from Figure 6.

There are nine female and twenty-two male respondents in the sample. In accordance with previous research men outnumber women, but the percentage of women is higher than might be expected at almost a third of the sample. Limited information on the distribution of age by gender for participants in the U.S. marijuana industry suggests that women tend to be younger than men (August, 2013). The age distribution by gender for the current sample is presented in Figure 6 below.

**Figure 6: Age by Gender**



In contrast to other research including age and gender in the U.S. marijuana industry, the age distribution for females in this sample is shifted toward older adults (August, 2012, 2013; Maggard & Boylstein, 2014). Six of the female respondents were

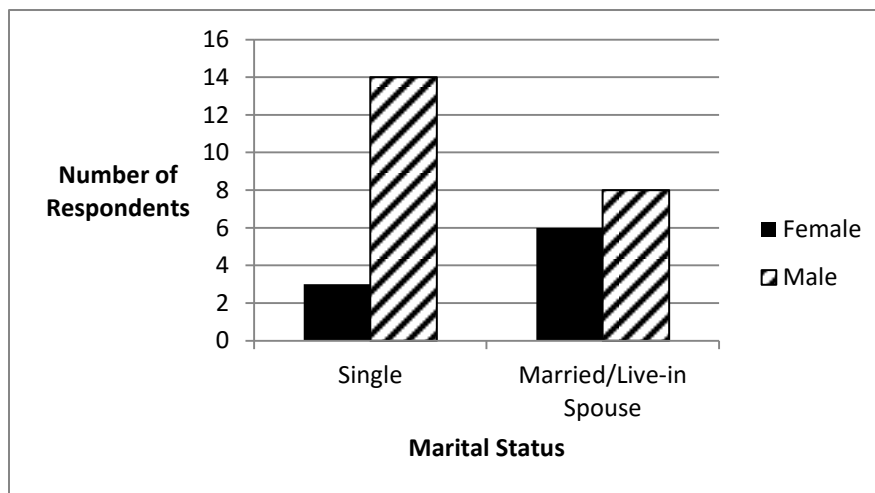
over age fifty at the time of their interviews. The distributions for males and females in the sample are dissimilar, with only about a third of male respondents over age fifty. While only a third of females were forty or younger, over three quarters of the men fell into the youngest three age categories. Some of these differences are likely due to sampling in the August (2012, 2013) and Maggart & Boylstein (2014) studies and the present study, but they are meaningful because they suggest that diversity in age is potentially prevalent in the larger population. High incidence of age diversity is important in the life-course context because it suggests that normal age-graded social control processes are not taking place for this group, leading to a different age-crime curve than that for offenders in general.

**Marital status.** As discussed, life-course criminology expects that marriage will decrease the likelihood of crime, particularly for “high quality” marriages. In this sample, seventeen of the participants were not married and not living with a romantic partner, and fourteen were married or living with a romantic partner. A cross-tabulation of relationship status by gender in Figure 7 shows that men were more likely to be single than married, but women were more likely to be married than single. The relationship between marriage and participation in the commercial marijuana industry was not wholly uncomplicated. It might be expected that married respondents, especially women, worked with their spouses in the marijuana industry, but that was not entirely the case here. The sample did contain a married couple who produced marijuana together (Rob and Carly), as well as other respondents who worked with their spouses but whose spouses were not interviewed. However, it also contained several members, both male and female, who were married but produced commercial marijuana independently of their partners.

Perhaps more surprising were the three members of the sample who were actively producing commercial marijuana with ex-spouses, even, in two instances, while married to new partners. April credited her ex-husband for helping her with financial issues in her current marijuana production endeavor:

Yeah. He's really integral. He has his own six plants too. He just, yeah. He's really, he's part of it. I probably never would've done it without him. – April

**Figure 7: Marital Status by Gender**

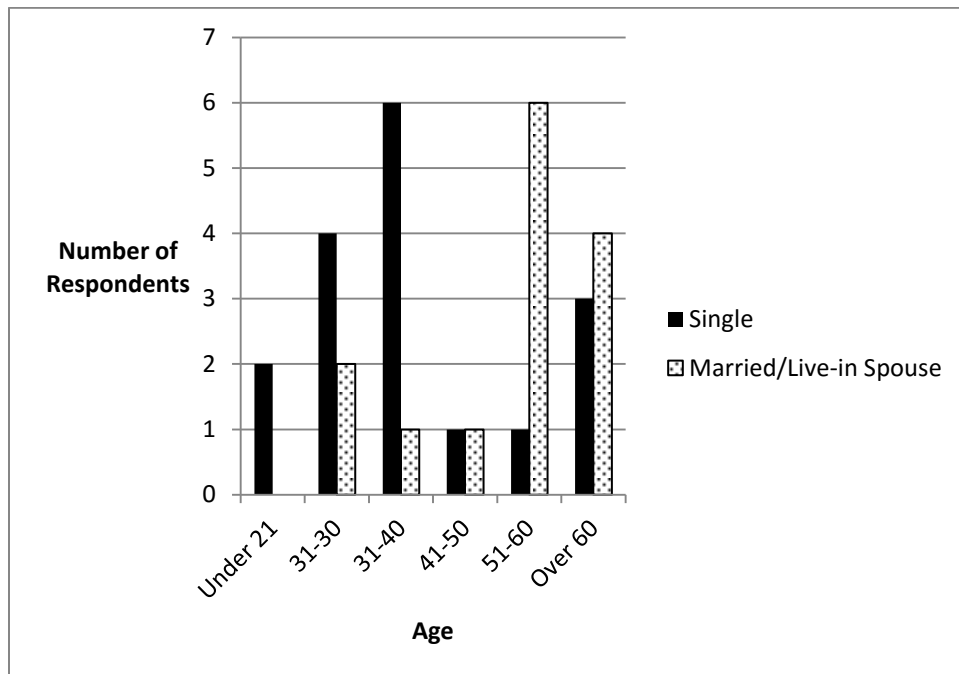


In such instances, marital quality can no longer be considered as an instrument of informal social control, but ex-spouses clearly had an impact on respondents' continuing to produce marijuana. The dissolution of criminogenic marriages did not result in a cessation of criminal activity, or even in the removal of the spouse as a co-offender. For these respondents, marital relations may not have been as important for their continuance in a criminal endeavor as the money and other benefits resulting from producing marijuana.



Figure 8 shows the cross-tabulation of marital status by age. Unmarried participants tended to be younger. Married participants only outnumbered unmarried participants in the two highest age groups, which, given that Americans are marrying at increasingly later ages, was not completely unexpected (U.S. Census Bureau, 2016). What was unexpected was that, as a whole, there were more partnered respondents than anticipated by life-course criminology – almost half of the sample.

**Figure 8: Marital Status by Age**

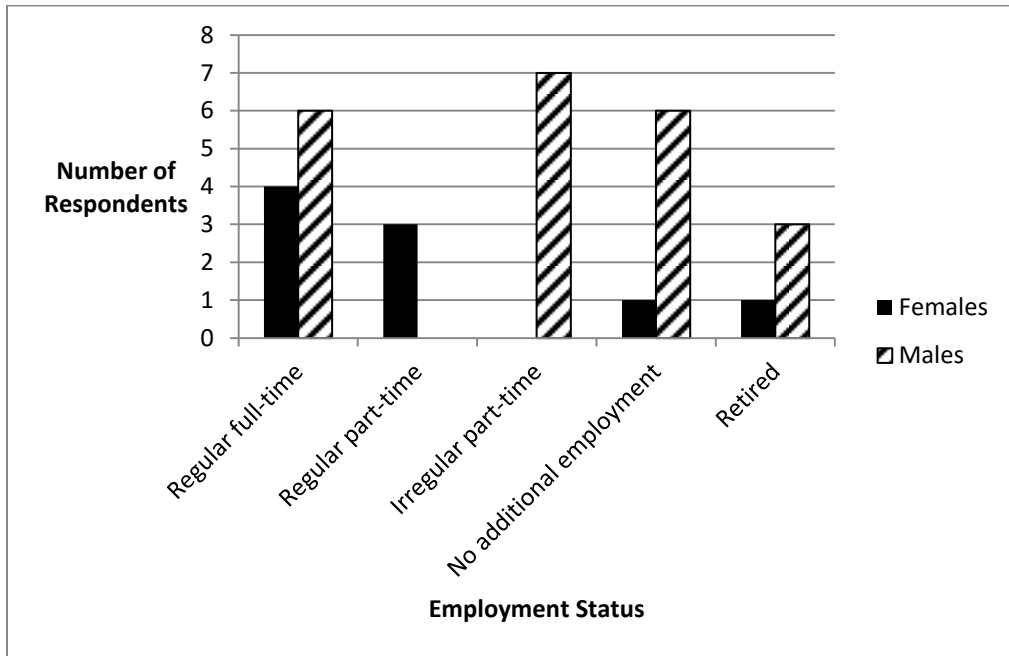


The results for marriage are more complicated than life-course criminology typically accounts for. Not only was a large portion of the sample married, but some formerly married participants continued to produce marijuana commercially with their exes. Marriage, thus, was not necessarily a turning point toward desistance for this sample, and neither was divorce from an actively criminal partner the end of a criminal

partnership.

**Employment.** Full-time, legitimate employment is considered important to criminal desistance in life-course criminology for several reasons. These include the presence of pro-social relationships, reduction of time available for offender, positive social status, ability to build social capital, and positive perceptions of self (Paternoster & Bushway, 2009; Warr, 1998). Full-time employment is associated empirically with desistance from crime, and unemployment with continuation in criminal behavior (Laub & Sampson, 1993; Warr, 1998; Paternoster & Bushway, 2009). Although marijuana production is a relatively slow process with bursts of labor intensive work toward the end, it does not necessarily preclude the possibility of additional employment. Both the process itself and organizational structures can leave time for growers to hold other jobs. Respondents in this sample are split into the following categories of legitimate employment for analysis: regular full-time employment, regular part-time employment, irregular part-time employment, no additional employment, and retired (see Figure 9).

**Figure 9: Employment Status**



Those with regular full-time employment described themselves as having full-time jobs or as being owners of fully legitimate businesses. Those with regular part-time employment described themselves as working part-time at a fully legitimate business. Respondents with irregular part-time employment described themselves as picking up additional work seasonally or as it came up. Retired respondents are over age sixty and described themselves as retired from legitimate employment or receiving Social Security benefits or other aid for older adults.

***Full-time employment.*** Given that all respondents were actively involved in commercial marijuana production, full-time employment was expected to be uncommon. Yet, full-time employment was the modal category for the sample, with ten respondents reporting that they either had an additional full-time job or owned non-marijuana-based businesses. Respondents reported a variety of legitimate full-time jobs, including college

instructor, lawyer, bar manager, and construction company owner. Contrary to the expectations of life-course criminology, rather than promote desistance from offending, full-time employment in this sample enabled respondents to succeed in commercial marijuana production. Those with legitimate employment used their legal jobs to assist their marijuana businesses. Legitimate employment aided respondents' marijuana production efforts in four ways, two social and two financial. First, using social capital derived from their legitimate employment, respondents were able to recruit new members to their organizations. For example, the college instructor recruited a new driver for the marijuana business from among students. The relationships developed from a position of power in the classroom setting aided in locating and recruiting like-minded people.

Second, full-time employment enabled the exchange of resources and information with other growers. Violet provided a good example of using her job to exchange information and resources with other marijuana growers when she described trying to find buyers for her product:

Oh, I call around. And I work at, you know, the place where I work is all growers goin' there, so I have a lot of connections, and um, I'll just, you know, I usually ask the, um, somebody I trust, they'll, either they'll be willing to buy or they'll know somebody. - Violet

Violet's job as a bar manager put her in a location in which marijuana growers interacted socially. It also enabled her to capitalize on their presence to build relationships through which to locate buyers. Respondents also described connecting with legitimate customers at work to find trimmers for seasonal labor, or to exchange knowledge on growing techniques. The social capital built in these jobs was not entirely

devoted to illegal enterprise. For instance, the college instructor did not recruit every student, but the social capital she acquired through her job was also quite clearly not entirely pro-social. A key point here is that full-time employment is supposed change the nature of social interactions away from criminal influences. Over time, social processes should shift people with regular employment away from crime, but that is not the case with this sample. Instead, full-time employment maintained and even expanded existing criminal influences by putting respondents into regular social interactions with other people involved in the marijuana industry, or with whom they could convince to become involved.

Legitimate employment also aided respondents in their marijuana production endeavors financially, either serving as tax shelters or as obfuscation of income from marijuana, or providing financial capital to start new production sites or expand existing sites. As an example of the former, Billy kept his construction company in order to have a place to report income on his tax returns. As an example of the latter, Wildstar put up more than half a million dollars from his income as a lawyer to start his first marijuana production site. This level of capital was rare in this sample. However, it is indicative of the possibilities for wealthier individuals or groups to become involved in the industry as state regulations change. In both cases, the financial gains from legitimate employment were directed into facilitating federally illegal enterprises, something that is not anticipated in life-course criminology.

***Irregular part-time employment.*** Seven members of the sample, all males, had at least some additional, if irregular, legal employment. These seasonal or pick-up part time jobs are not what life-course criminologists have in mind for employment that encourages

desistance from crime. For example, Butch related that he had always worked in addition to growing marijuana:

Oh, no. I've always done, you know, carpentry, and landscaping-type stuff. –  
Butch

While Butch has always worked, his work was not full-time for a legitimate company, or even regular part-time. His work, while providing some legitimate income, was more sporadic and thus not the type that generates attachment or provides the social or financial capital that are more likely to encourage desistance (Giordano, 2010).

Eagle Fist and his brother did pick-up work for various people in the community. While some of it was assistance starting or maintaining other marijuana grow sites, some of it was more legitimate odd jobs. He described himself and his brother, with some amount of pride, as “the grease.”

We're disgusting, we're gross, but we get shit done. - Eagle Fist

Although a bit extreme in his self-deprecation, his willingness to do whatever kind of work was available to make ends meet was common among many members of the sample, particularly those with less education. As with Butch, however, this type of sporadic pick-up work is not work of the type that life-course criminology expects to encourage desistance, because it is unlikely to forge strong connections with pro-social employers and customers (Laub & Sampson, 2003). Two members of this group talked about the role of art in their pick-up work. Perhaps surprisingly, this type of work, though sporadic, took these growers away from marijuana somewhat:

And then, so I'd be like fire performing. In the summertime there's a lot of festivals, so I'd be out doing shows and traveling with friends. And, and then I was like, well I'd probably like to expand my art, so I'd try to not be around the garden so much. Like, I'd focus on my little things, and drawings, and things like that. – Wolf

Both respondents who talked about art or crafts as part of their supplemental income participated in festivals. While these are limited by definition, they are, as Wolf mentioned, held in the summer - the primary outdoor marijuana growing season. To the extent that festival participation required growers to be away from marijuana grow sites, but their marijuana industry employers required their presence, the conflict of interests moved these respondents away from the marijuana industry somewhat.

***Regular part-time employment.*** Only three members of the sample, all women, described themselves as having regular part-time employment outside of commercial marijuana production. Two of these were for businesses that allowed part-time employment, and the third was an independent art instructor. While two of the women seemed content to keep their additional jobs, Starr was looking forward to committing to producing marijuana exclusively:

Um, I work at a discount grocery store. But I'm not gonna' really work there much longer.

[BDL] No? Why not?

Well, 'cause I make minimum wage, and the gas money, and the money that it costs for kids, childcare, is just not worth it. – Starr

Starr's view of her job reinforces the idea that most of the respondents in the sample used their fully legal jobs to support their marijuana business. She was certainly not the only respondent with a low-paying job, but she was the only one who said that she

was ready to leave it. Marijuana production was much more profitable than any of the legitimate part-time jobs and several of the full-time jobs, but additional employment held utility beyond just the money for other growers. For Starr, that utility was not evident, and so she was ready to leave her part-time job.

***Retired.*** Four of the respondents described themselves as retired from legitimate employment or were over sixty, not otherwise employed, and receiving government supplemental income for older adults. Al was single, and grew a relatively small number of marijuana plants at the time of his interview:

I'm on Social Security, I'm retired. [...] I'm also, uh, disabled. I do have the disabled card. – Al

His Social Security income enabled him to maintain himself as he tried to transition his marijuana growing to fit state laws. Two of the other retirees had similarly small operations at the time of their interviews, although they were married at the time. A third, however, was growing over forty plants at the time of the interview, but still included Social Security as part of his household income:

[BDL] Is this your only source of household income?  
We have Social Security. – Rob

Although Rob had been on Social Security for some time, his wife had continued to work to supplement their income from marijuana and meet new contacts for their marijuana business until shortly before his interview. Their income from marijuana



production outpaced their Social Security income substantially, but they continued to receive their benefits as well.

*No other employment.* Seven members of the sample, one female and six males, reported that they had no additional income besides what they made from commercial marijuana production at the time of their interviews. Four of these were young men who worked as garden tenders, responsible for staying at marijuana growing sites to care for and protect the plants. The structures of the organizations that they worked for and the trajectory of their criminal careers made them relatively unable to hold additional employment. They had less than five years growing experience, and held subordinate positions. Their employers sometimes had strict instructions about remaining on the property. For example, Jack was surprised by his boss's insistence that he move to the grow site as soon as the plants were in:

So, before the Winnebago was down there in that garden, I was living [at another grower's house]. So then I made the transition to there the day we planted. And it was like, kind of like, boom! Like, [the boss], just basically told me, like, 'Okay, dude, you've gotta' stay down there tonight.' And I was like, 'What? Like, I thought you were gonna' give me like, a week, like to get everything all ready.' Like, no one's gonna' steal them now, they don't have anything on 'em. But he, he was pretty adamant about it. And so, that was hard. Just the transition from living in a place with like, music, and t.v. and, you know, everything. And going down there and having to do everything off a generator. It was kind of like a, just boom! Just all of a sudden change. But now that I'm down there, it's been a couple weeks now, I love it. – Jack

The insistence that garden tenders remain on the site more or less all the time put these young men into a rather isolated position, where frequently the only personal contact they had was with other marijuana growers. Even if they had wanted fully legal employment, it would have been difficult for them to obtain it without completely re-

establishing themselves. At the time of their interviews, however, all four were happily fully committed to the marijuana industry.

The other three respondents who had no additional employment were a more mixed group. One had extensive experience in the industry, while a second had only started the previous year, and the third was supported by his fiancé in addition to his income from marijuana. Although they are isolates in this sample, they help to showcase the diversity of participants in the industry. While the garden tender organizational model may contribute to the ranks of young men seeking sole employment in marijuana, it is not the only way that this circumstance arises.

*Summary: Employment.* As discussed, life-course criminology predicts that individuals involved in crime will be unemployed or irregularly employed, as employment reduces criminal involvement. The present sample, not including retired participants, was split almost evenly between those with regular full or part time employment and those with irregular or no additional employment outside of the commercial marijuana industry. The differences between the groups are primarily the result of both utility and organizational structure. Those with regular employment frequently used their positions to benefit their marijuana production businesses through recruitment, obfuscation, or resource and information exchange. Those without regular employment tended to hold positions that made it difficult for them to acquire regular employment. This suggests both that legitimate employment can have utility for some participants in this industry, thus maintaining trajectories of offending rather than creating turning points, and that some industry roles may prohibit additional employment acquisition, continuing to trajectory stability as well. On the one hand, the utility of

employment for continuation of a criminal trajectory stands in contrast to life-course criminology's expectations. On the other, the prevention of participants from accessing additional employment and thus maintaining offending trajectories fits these expectations neatly. Additional legitimate employment, then, presents as a mixed bag when it comes to life-course criminology and commercial marijuana production.

**Criminal careers.** The marijuana growers in this sample had criminal careers growing marijuana ranging from one to approximately thirty years. Some participated in the industry every year since their first, and others took decades off and conducted only legal business until later in life. Some started in their teens, but others did not start growing marijuana until their thirties, forties, or fifties. This section includes descriptions of multiple aspects of respondents' criminal careers, including self-reported measures of arrests, organizations and co-offending, introduction to the marijuana industry, frequency and continuity of participation in marijuana production, and plans for participation.

***Self-report measures.*** Participants in this study provided brief information about their arrest and conviction histories, and some volunteered incarceration information as well, although arrest information on two members was unavailable. Figure 10 shows the distribution of arrests for any offense among the participants. Ten members of the sample had no arrests. Seven had a single arrest, two participants had two arrests, four had three arrests. Three members of the sample had five arrests, and three participants had more than five.

**Figure 10: Number of Arrests**

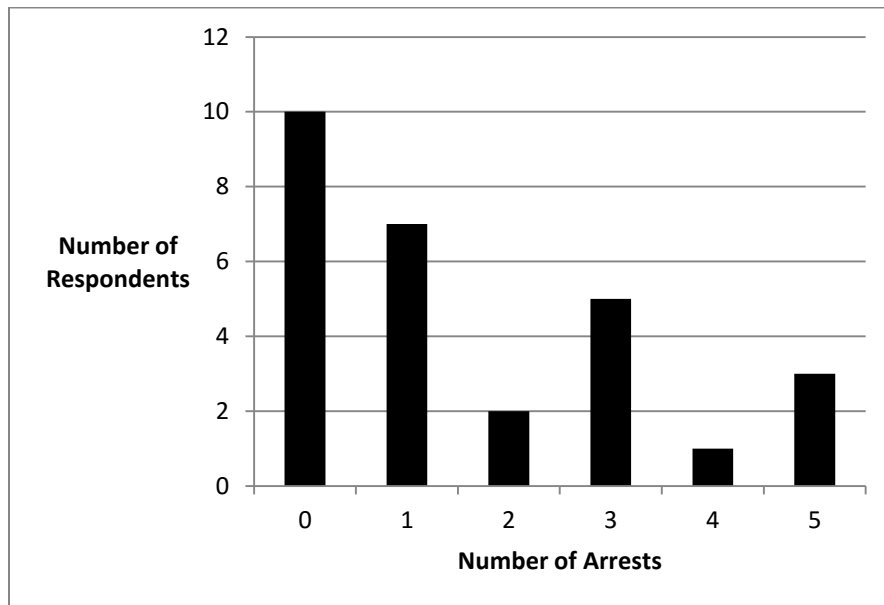
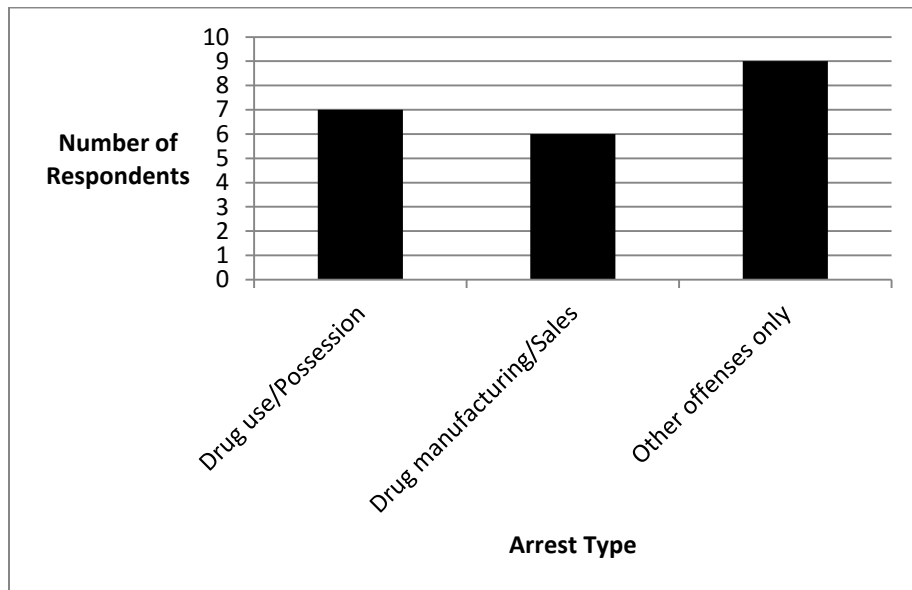


Figure 11 shows how many times those participants with any arrests were arrested for drug use, manufacturing, or sales. Seven participants had arrests for drug use or possession. Six participants were arrested for drug manufacturing or sales. Nine participants were arrested for non-drug related offenses only. The respondents were not questioned about each of their arrests separately, making it impossible to know whether all of the other offenses were of any given type. Among those who did disclose the nature of their other offenses, however, were two domestic violence charges, a shoplifting charge, and a purse-snatching incident. Among those arrested for any criminal offense, three had never been convicted. Next, the sample is examined in terms of their position in their marijuana producing organizations.

**Figure 11: Type of Arrests**



Note: some participants had both drug use/possession and drug manufacturing or sales arrests

***Organizations and co-offending.***

*Types of organizations and co-offending.* Broader studies on drug distribution have described drug production and distribution organizations on an international scale (Benson & Decker, 2010; Decker & Townsend Chapman, 2008; Griffith, 1997). At such a large scale, drug production occurred in isolation from the brokering, smuggling, and sales parts of the overall process, typically without an overall formal leadership structure conducting full operational oversight. Research on marijuana production specifically has found an assortment of organizational styles and co-offending patterns, from small-scale solo marijuana production and sales operations to those producing hundreds of plants and incorporating multiple people across state and national borders (Bouchard, 2007; Boylstein & Maggard, 2013; Malm et al., 2011). The present study encountered six organizational types among commercial marijuana producers, differentiated by

membership characteristics and decision-making power. Within these types, different groups varied between selling the final product in larger amounts to brokers, in smaller amounts to end users, or both. *Solo growers* worked alone in producing marijuana, subsequently either selling to brokers or directly to users. There were two types of cooperative arrangements: *family cooperatives* and *non-family cooperatives*. Both cooperative types had at least two members, and all members had a relatively equal say in decisions regarding marijuana production and sales. There were also three types of structured organizations: *family-only* structured groups, *non-family only* structured groups (in which none of the group members were related to each other) and *family plus non-family* structured groups (which included both family members and non-family members). The inclusion of family in drug distribution organizations is not prominent in the existing literature but has been previously documented, particularly in relation to women drug dealers (Denton & O'Malley, 1999). The structured groups included two or more people, at least one of whom had more decision-making power than at least one other group member. Within structured groups, members of the sample are categorized as having leadership positions or subordinate positions. Those with leadership positions held positions of power over others in the group, such as deciding how much pay they would receive, how much marijuana the group would produce, or power over hiring and firing. The following subsections examine respondents' organizational positions and the relationship of co-offending to age.

*Organizations and gender.* Table 1 shows the respondents in relationship to their position in their organizational structures. The most common role of women in this sample was as cooperative members of their family in addition to subordinate positions

for one or more additional commercial marijuana producers. Three of the nine women fell into this category. Only one woman in the sample held subordinate organizational positions only at the time of the interview. Two of the women worked with their family members exclusively as a leader in their family-only, structured marijuana production organization. One woman worked alone exclusively, one worked independently and also with others cooperatively, and one held a leadership position in an organization that included hired subordinates as well as family.

These results are much more diverse than would have been expected from previous work in this area. While some of the women did hold subordinate roles, it was most common for them to primarily work cooperatively with family members in addition to those roles. In the family context, women worked both cooperatively and in leadership roles, but none of the women described themselves as subordinate in family-only marijuana production operations. One possible exception would be a woman who produced marijuana cooperatively with her husband, but also worked separately (but not exclusively) as paid labor for her mother. Interviews with others in the same organizations, including family members and employers, support women's perceptions of their places in organizational structures, including leadership positions.

Table 1 also shows the number of men in the sample in relationship to their positions in their organizational structures. Five of the men were solo growers. Only one held a strictly cooperative position, and one worked cooperatively with family in addition to a subordinate position in at least one non-family structured group. Leadership was more common than subordinate positions among the men in this sample. Six of the

twenty-one men held only subordinate positions, while seven held only leadership positions. Only men held leadership positions in structured, non-family marijuana production organizations. Where working cooperatively with family and as a subordinate for at least one non-family structured group was relatively common among women, only one man in the sample held similar positions.

The presence of more male leaders in the sample than female leaders was not unexpected given previous work in this area. The overall predominance of male leaders relative to subordinates in the sample was, however, slightly unexpected, as leadership positions are necessarily less common than subordinate positions in structured organizations. On the other hand, some of the men who held leadership positions seemed to desire control of the message about their organization, and did not refer other members of their groups to be interviewed. Another point of note is the presence of respondents who worked with multiple marijuana production organizations. Malm and colleagues (2011), documented the prevalence of these kinds of co-offending networks, but were not able to identify the role of family as co-offenders in various networks, which is quite common in the present sample.



**Table 1: Organizational Positions**

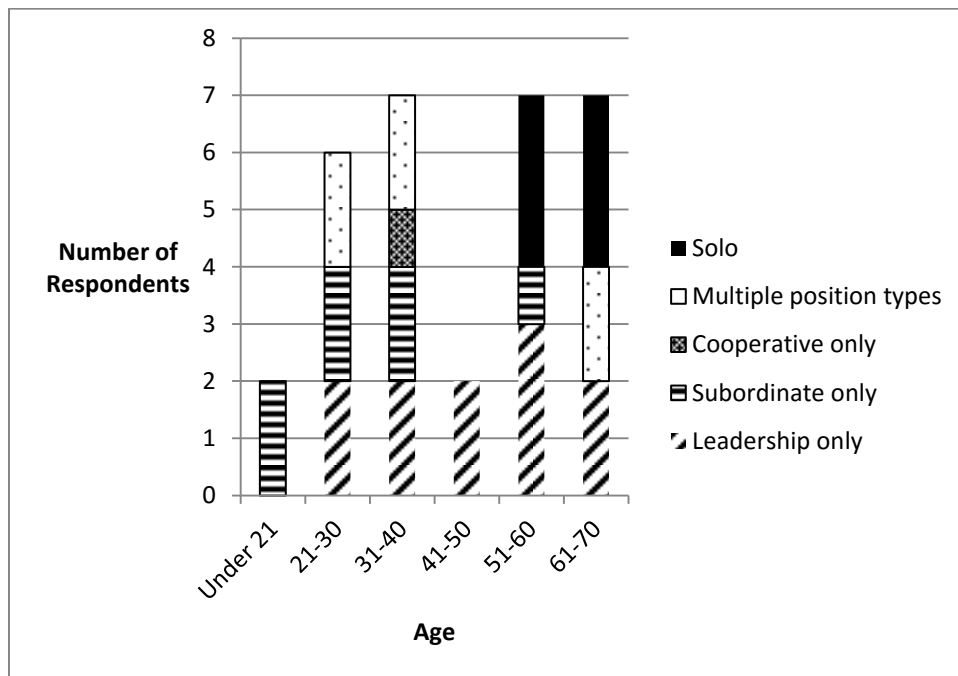
<b>Organizational Positions</b>	<b>Number of Female Respondents</b>	<b>Number of Male Respondents</b>
Subordinate: multiple non-family groups	0	1
Subordinate: single non-family group	1	4
Subordinate: single group including family and non-family	0	2
Leadership: single non-family group	0	5
Leadership: family group; Subordinate: single non-family group	0	1
Leadership: single group including family and non-family	1	2
Leadership: family group	2	0
Solo	1	5
Cooperative: family group; Subordinate: multiple non-family groups	3	1
Cooperative: single non-family group; Solo	1	1

*Co-offending and age.* Another important aspect of co-offending is the age of respondents. Previous work on co-offending and age in general has found that co-offending decreases with age (van Mastrigt & Farrington, 2009), but that some offenders only have solo careers (Reiss, Farrington, 1991). Furthermore, co-offending is associated with an increased likelihood of getting caught (van Mastrigt & Farrington, 2009), but some older high-frequency offenders are likely to recruit younger and less experienced co-offenders (van Mastrigt & Farrington, 2011). Social needs may therefore interact with strategies for apprehension avoidance. In research specific to marijuana production, youthful industry participants were highly likely to work with others, most commonly in subordinate roles (Bouchard, Alain, Nguyen, 2009). The age distribution of co-offending speaks to life-course processes. As people grow older, the population overall ages out of crime in accordance with the age-crime curve (Hirschi & Gottfredson, 1983). The people available to socialize with, therefore, are more likely to be non-offenders. By default then, the people available to act as co-offenders become increasingly limited with age.

In the current sample, as described above, most of the respondents worked with at least one other person. Figure 12 shows the relationship of respondents' age to types of position held. The two respondents under age twenty-one both worked with others, and held subordinate positions only. They had only ever worked with others. Of the six respondents between ages twenty-one and thirty, two held only leadership positions at the time of their interviews, two held only subordinate positions, and two held some combination of leadership and subordinate positions. None worked alone at the time, and only one had worked alone previously. Similarly, of the seven thirty-one to forty-year olds, two held leadership positions, two held subordinate positions, and two held a

combination, with only working exclusively cooperatively. Of these, six had only worked with others, one had worked alone previously. Both members of the forty-one to fifty-year old group held leadership positions; one had worked alone previously while the other had not. Subordinate positions were less common among the oldest two groups of respondents, with only one respondent over fifty working exclusively in a subordinate position. The six solo growers were all in their fifties and sixties. Of those, two had only produced marijuana for sale on their own. Among the remaining four, three had worked with non-family members in the past, and the fourth had worked with family once previously. Among those holding leadership positions in the top two age brackets, co-offending histories were incomplete, largely because there was not time to cover all aspects of their lengthy careers in marijuana production during the interview.

**Figure 12: Position Type by Age**



There are several findings that should be highlighted regarding age and co-offending. First, only older respondents worked solo at the time of their interviews, though a few more respondents had attempted to grow marijuana for sale on their own in the past. Overall, however, even the oldest respondents were more likely to work with others than to work alone. Second, and correspondingly, the youngest members of the sample had never worked alone. Third, there was a trend away from subordinate positions as age increased. While leadership positions were fairly evenly distributed among all but the youngest age group, holding only subordinate positions became less common after age forty.

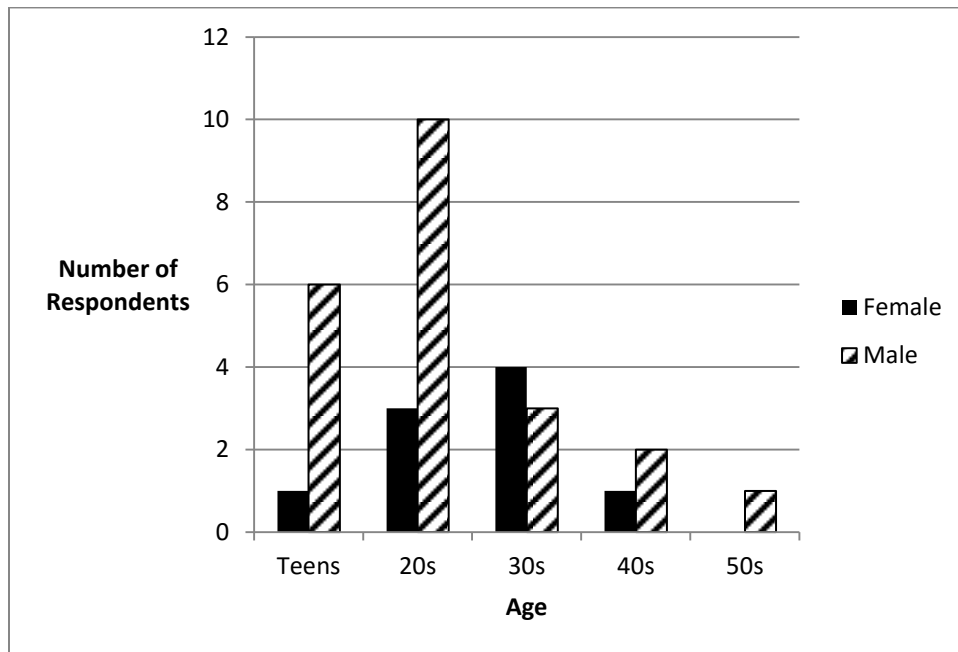
***Summary: organizations and co-offending.*** The commercial marijuana producers in this sample had a variety of organizational structures, ranging from solo to cooperative to hierarchically structured. Within these organizations, respondents held positions with varying degrees of power, sometimes working at different levels for multiple groups simultaneously. In contrast to previous work, women were not limited to subordinate positions. Additionally, organizational structures were somewhat stratified by age, with solo growing becoming more common with increased age as holding exclusively subordinate positions decreased. Working with others was much more common than working alone. The next section examines respondents' introductions to the marijuana industry.

### **Introduction to marijuana industry.**

***Age at entry.*** When and how respondents entered the marijuana industry is also relevant to the life-course paradigm. As would be expected, there are several respondents

in the sample who first participated in growing marijuana for sale as teens. More surprising are those who started in their thirties or even fifties. Figure 13 reports the age distribution for respondents' reports of their ages the first time they participated in producing marijuana for sale, by gender.

**Figure 13: Age at Entry**



For the combined genders, most participants had their first experience in the marijuana industry in their twenties, with thirteen out of thirty-one participants reporting industry entry at that time. The modal categories for females and males separately are distinct, however, with thirties as the modal category for females, and twenties for males. One female and six males had their first experience in commercial marijuana production in their teens. Three females and ten males started in their twenties, and four females and three males started in their thirties. One female and two males entered the industry in

their forties, and one male started in his fifties. The standard age-crime curve displays crime peaking in the late teens or early twenties, but less than a third of the sample had entered the industry before their twenties. Half of the women in the sample did not enter until their thirties or later, and approximately twenty percent of the men started later as well. The overall pattern in this sample shows that females tended to enter the industry later than males, whose entry begins in the teens, was most likely in the twenties, and decreased but continued into the fifties. Compared to the standard age-crime curve, the curve for this sample peaks further to the right, and does not drop off as steeply.

*Methods of entry into marijuana cultivation.* Age alone, of course, gives an incomplete picture of entry into commercial marijuana growing. Members of the sample reported a variety of introductions to the industry, shown in Table 2.

**Table 2: Method of Entry**

<b>Method of entry</b>	<b>Female</b>	<b>Male</b>
With family (not spouse)	2	3
Friend/acquaintance initiated	2	0
Joint w/ spouse	3	2
Solo, while married	2	2
Solo, while single	0	4
Recruited to non-family structured org	0	7
Structured org w/ partner(s)	0	1
Cooperative w/ partner(s)/friends	0	3

Five respondents, for example, reported that they first participated in growing marijuana for sale as part of a family endeavor with their parents or other family members when they themselves were teenagers. Here is how Tara described her first experience:

[BDL] How'd you come to be involved that year?

Um, well my parents grew. And I would just trim for them.

[BDL] Why'd you decide to get involved?

Um, I don't really know, I just kind of did. It's just the way it happened, really. Um, you know, I wanted the money. – Tara

Exposure to the criminal offenses by parents is not unheard of, and indeed is the province of studies on intergenerational offending. While most offenders generally do not want their children involved in crime, they sometimes directly or indirectly influence their children to participate (Giordano, 2010). Tara's explanation of "it just happened" and "I wanted the money" is typical in this sample. Growers introduced to the industry by their family tended to accept the practice uncritically, and appreciate the opportunity to earn money.

Four male respondents reported that their first experience growing marijuana for sale was alone, while single. Three of them fit the life-course criminology paradigm well in this area, starting as unemployed teenagers or young adults. Both Wolf and MacGuyver fit this description:

Oh, dude, it was horrible!

[BDL] Okay, how old were you when you first started?

Oh, I don't know, maybe nineteen. [...]

[BDL] Okay. All right, was your growing site indoors or outdoors?

Outdoors.

[BDL] All right, why outdoors?

It's the only thing that was available at that time. My mom did not want us to grow weed in the house.

[BDL] Okay. So was it at your house, did you grow it in your yard?

Oh yeah, yes, in the yard. – MacGuyver

But there was a few years that I wasn't able to grow, 'cause I was still living with my parents, and my dad eventually found 'em, and just like, pulled 'em up and like, rode his bike across town to like, dump 'em in a dumpster at some business. He just wanted 'em so far away from the house. It was understandable. – Wolf

Their experience of growing marijuana in the backyard, hiding it from disapproving parents, is consistent with life-course criminology. Perhaps ironically, by the time of his interview, Wolf's once-disapproving parents were involved in the industry themselves, following Wolf's lead. The fourth grower with a solo start while single, however, started in his thirties, while holding down a full-time job. Despite this, he too got his start growing small amounts and selling the surplus.

Four of the growers, two females and two males, began solo growing for sale while married. Butch described his spouse's involvement at the time:

[BDL] Was it just you then?

And my wife, but she wasn't really participating. She was...my wife, and she was there, but I did it all. – Butch

Joe was the most typical of these in terms of existing marijuana literature. He grew small amounts of marijuana to use himself then sold the surplus, eventually expanding his business but never involving his spouse or an additional grower (Hammersvik, Sandberg, Pedersen, 2012). This experience, of a present but uninvolved spouse, does not fit well with life-course criminology's expectation that desistance will



follow from the “love of a good woman (or man)” (Giordano, 2010). In these cases, a presumably good man or woman was already present when the growers first entered the industry. None of the growers in this situation cited their participation in producing marijuana as reason for a break-up, although Butch, at least, was single at the time of his interview.

In contrast, five of the respondents, three females and two males, first started in joint ventures with their spouses. In some cases, as with Rob and Carly, it was the first time for both the husband and wife, and they were still working together many years later. In other instances, the couple had divorced and each had remarried someone else, but they continued to work together. The initial marijuana industry experience of respondents who were married is a testament to the variety of spousal cooperation and prior marijuana growing experience possible. However, none of the participants married an active marijuana grower prior to becoming involved in the industry themselves. Although some spouses began producing marijuana together after they were married, and others accepted their spouses’ introduction into the marijuana businesses without participating, marijuana growing was not something that members of this sample seemed to be looking for in a potential spouse prior to their own first experience.

Three of the male respondents entered the commercial marijuana production industry in loose cooperative groups with friends. These growers primarily worked independently, but would help each other in ways that eased the workload or promoted grower safety. For instance, Ben and his friends would water each other’s’ plants, and Al talked about the importance of having a buddy:

Everybody just kind of tried it. Sure, you'd have a buddy. You'd pick a friend. Sometimes you'd have three or four friends. But, it was long ago, so everybody would plant with everybody. [...] No we usually had a buddy. [...] In case you broke your leg, fell and broke, you'd get out alive. – Al

Still others, mostly younger growers, were hired by other growers to participate, either as trimmers or as garden tenders. These were the modal category for males, but no female participants reported entering the industry in this manner. THK described one of his early experiences this way:

Yep, uh, I started trimmin' weed because I needed to make some money while I was here. And so I did that, and my girlfriend and her mom thought I was on drugs. And it turns out they were on drugs. So, they kicked me out of the house and took everything. All I had was a bag of moldy clothes. In Oregon. I was the only [name] in Oregon. I didn't have any of my family. And the weed farmers took me in. They were like, come trim. And I trimmed hours. Fuckin' hours and hours. As soon as the sun was up I was trimmin', and I was the last person trimming, too. I always was trimming for like, two extra hours or three extra hours. After everyone went to bed. –THK

Five out of seven of these growers were recruited into the marijuana industry under state statutes authorizing some marijuana production. The remaining two took subordinate positions in the organizations of friends or acquaintances. Only one grower started his career in the marijuana industry by creating a structured organization with partners. Up until that point, he had never smoked marijuana:

Uh, I have started using marijuana, yeah. Before the harvest I had never used it. Um. That's true. I have never had, I still never had alcohol. I grew up in a family of drug addicts and alcoholics. Was kind of turned off by the whole thing. But, um, I never really had an emotional objection to marijuana, just 'cause it never seemed to hurt anybody. Um. And that's part of the reason why I was okay with it. Um. I think alcohol is more dangerous than marijuana, in my opinion. Um. But I had never had it, but, um, I really did have a spiritual connection with these plants, and I was immensely curious. Um. And wanted to try it. Um. And I did, and it was fun. – Wildstar

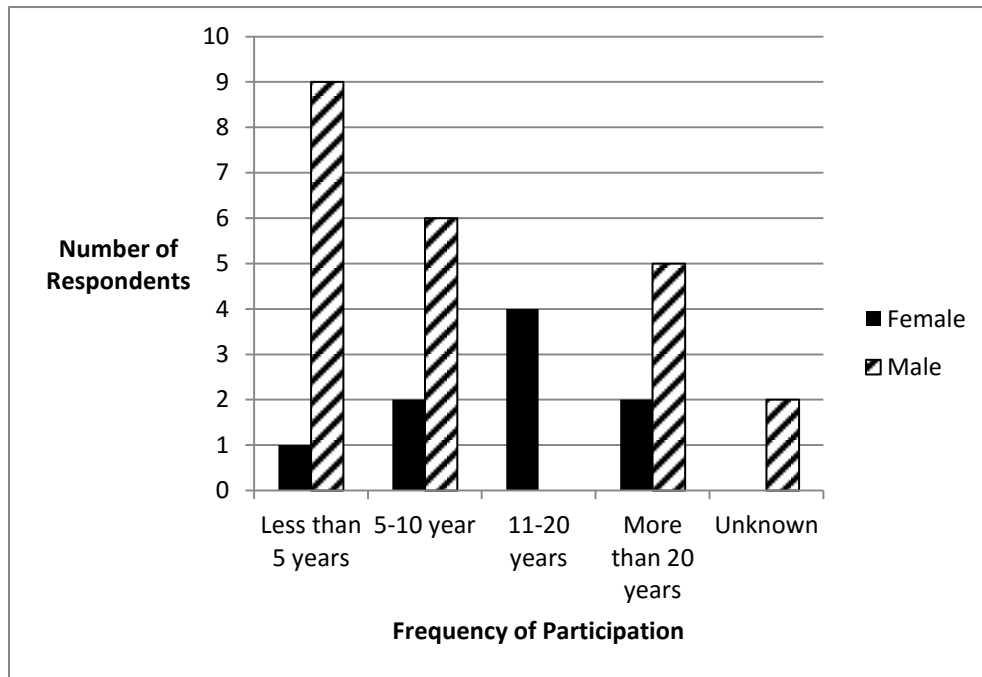
*Summary: Introduction to marijuana industry.* The bulk of the sample meets life-course criminology's expectations for age of entry into criminal behavior, with respondents becoming involved in their late teens or early twenties. A third, however, were thirty or older when they first started growing marijuana for sale. Those respondents who were older when they entered the marijuana industry also had fewer arrests, and were less likely to be arrested prior to their entry to marijuana growing. Almost all members of the sample had smoked marijuana prior to growing it, though, so general offending that did not result in arrests may still follow the teenage onset pattern typical in life-course criminology.

**Frequency and continuity of participation.** One aspect of life-course criminology is trajectories of offending, that is, how often people commit crime over time. For this study, frequency of offending is measured by the number of years or growing seasons respondents reported participating in the commercial marijuana industry. Figure 14 reports these frequencies by gender. About a third of the sample had participated in drug cultivation for less than five years; most of these were male. Eight respondents reported participating for five to ten years, four for eleven to twenty years and seven for more than twenty years. Two-thirds of the women and about a quarter of the men in the sample had participated in the commercial marijuana industry for more than ten years.

Frequency of participation is important, but it is not a full measure of trajectories in offending. Respondents in this sample did not provide an annual breakdown of whether or not they participated for each year since they started in the commercial marijuana industry, but comparing the frequency of participation with their ages at onset,

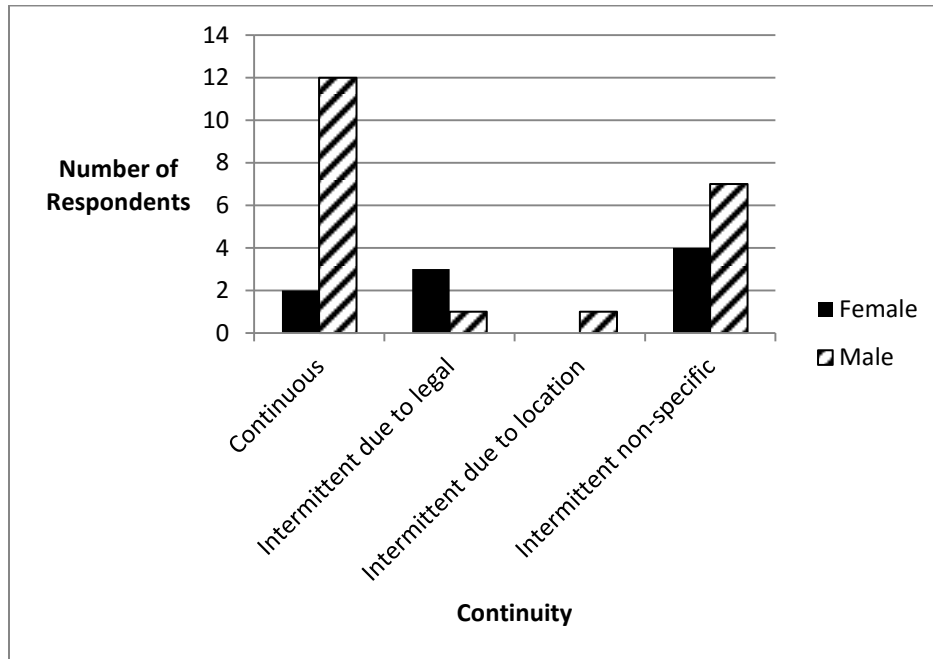
as well as additional details from the interviews, allows analysis of whether participation was continuous or intermittent. Figure 15 displays these results by gender as continuous or intermittent, with reasoning for hiatus from growing where possible.

**Figure 14: Frequency of Participation by Gender**



Twelve of the men and two of the women in the sample had participated in growing marijuana commercially since their introduction to the industry. Three members of the sample reported that they took a break from participating due to incarceration, probation, or other legal issues before returning to growing. One respondent held off on growing marijuana for a time while he did not have a suitable place to grow it, and eleven other members had unexplained breaks in their commercial marijuana growing careers.

**Figure 15: Continuity of Offending by Gender**



The frequency and continuity of drug cultivation in this sample suggest that commercial marijuana production can be a life-long illegal occupation, but also that it does not have to be. Shorter, continuous careers were most likely in younger men, while extensive but intermittent careers were found among the oldest respondents. Both male and female respondents fell into the continuous and intermittent career categories, and both had instances of long experience in the industry. It is worth keeping in mind that even though several of the careers described here are short, they are also not over. As discussed in the next section, the vast majority of the sample had plans to continue in commercial marijuana growing.

**Plans for participation.** This section examines respondents' plans for their futures. Given the diversity in age, marital status, legitimate employment, and commercial marijuana career history it would be reasonable to expect that a good portion

of the current sample would be headed toward desistance. While active offenders are notoriously impulsive in their thinking (Gottfredson & Hirschi, 1990), the planning and preparation involved in marijuana production for sale makes it more likely that participants will think about their plans for their future in the industry. Growers in this sample were asked how long they planned to be involved in the industry when they first started growing, and how long they planned to continue to be involved. Their responses provide insight into the stability of offending patterns.

*Early expectations.* There was some variation in responses when participants talked about how long they planned to participate in the industry when they first started, even bearing in mind that some members of the sample were new to the industry. One theme that emerged among growers who started at early ages was that they did not have a plan to start with. Billy, for example, started in his twenties:

[BDL] And how long did you plan on being involved then?  
Didn't know. I didn't have a plan. Didn't have an idea how long. Just until it would, not feel right or quit. – Billy

This is the typical short-term thinking of teenagers and young adults that would be expected from life-course criminology. Even lacking a plan, and occasionally in the face of some spectacular early failures, some of the growers who started young still continued to participate in the industry for many years. For example, one of Beth's early indoor efforts ended with nothing suitable for harvest:

... the next time I tried it I lost all my plants to gnats. Every one of them, fungus gnats. [...] The fungus gnats bite the roots off, and by the time I noticed that there was

gnats in there it was too late, the larvae had already eaten all the roots of my plants. – Beth

Yet she continued to grow for several years intermittently, and anticipated continuing into the future. Similarly, out of more than a hundred seeds, April managed to bring only ten plants to maturity on her first attempt, but looked at continuing as part of a lifestyle. Other growers, however, anticipated staying in the industry for a long time, even without a specific plan:

[BDL] When you first started, how long did you plan on being involved?  
Uh, I didn't really think about it like that. I knew it would probably be, you know, I'd always be involved in it somehow. My family grows. Almost everyone I know grows.  
– Tara

[BDL] When you first started, how long did you think you would keep doing it?  
Forever. I mean, it's not somethin' you really think about. You either do it, or you don't. I mean, if you have time you do it, and if you don't have time it's available. But, but you do it 'cause you like to do it. That's really the only reason to do it is 'cause you love the plant. And of course, you use it, but I know people that don't use it and still grow 'cause they really love the plant. – Elise

One of the most common responses among both younger and older growers though, was that respondents planned on being in the industry for life as soon as they got started:

Since I learned that I could start makin' money off of it? Fuck yeah, I was down.  
– THK

THK was a young grower who had been producing commercial marijuana for five years, and his sentiment was echoed among younger growers who looked forward to the

opportunities available under state legalization. In contrast, Butch started growing in the early eighties, when no states permitted marijuana production:

I planned to do it forever, and it's a lot, but, yeah, thought that it would've been totally legal by now, you know, I mean, way back then I really thought that it was, you know, a viable...uh...viable way to make a, a legitimate living. – Butch

Even when there were no quasi-legal options available, some commercial marijuana producers anticipated growing as a profitable occupation for the rest of their lives. Even with the breaks in continuity previously discussed, it seems that they were not entirely wrong. In rare cases, respondents had a timeline planned for their participation when they entered the industry. Eagle Fist, for example, planned to participate for five or six years before moving on to strictly legal employment. Overall, however, the respondents tended to be split between knowing that they wanted to continue but having no plan when they started, and planning on commercially producing marijuana “forever.”

***Future plans.*** No members of the current sample reported that this was the last time they planned to grow marijuana for sale. The study's participants overwhelmingly planned to continue to grow marijuana for sale in the future, often for the rest of their lives.

Two members indicated that they were reducing the size of their operations over time, planning to get down to growing only what they wanted for themselves or members of their household. Joe was dialing his operation back in retirement, and Sheila was scaling back after having met her financial goal. Joe's plan in particular rang true as he had moved across the country to retire, losing the majority of his customers in the



process. On the other hand, it was more challenging to fully accept Sheila's plan as realistic considering that she provided marijuana to multiple people who arrived and requested some during her interview. A third planned on quitting the industry, but did not have a time frame in mind for doing so:

Okay. Yes I plan on continuing to do this, and I plan on continuing to do this...um...as little as possible really.

[BDL] Okay. Why as little as possible?

Because... this isn't the life... I want, I want to have, like, I want to be able to smoke. I really do see high benefits in uh, like a lot of benefits in it, and um, I don't know for right now, in my life, I want to, like smoke and have it around me. [...] No, I want to be a botanist. I would love, just... the only time I'll ever get into this is if I can do this on a legal, where everybody is cool with what I'm doin'. – Swarly

The vast majority of the sample, however, planned on continuity for an extended period of time. The most common sentiment was similar to Phil's:

As long as humanly possible. – Phil

Probably until I either can't grow anymore because of my physical condition or when I die. – Patricia

Their claims might seem to be exaggerations except that Patricia, for example, had been growing marijuana for over thirty years. In that light, it seems entirely plausible that she, and the other growers who professed lifelong intentions to participate, will make good on their ambitions.

***Summary: plans for participation.*** Life-course criminology does not often view criminal behavior as something that people really want to do or plan to continue doing. Rather, it usually takes it as a given that people either respond to their social

environments, as in age-graded informal social control, or that they believe that their criminal behavior is wrong and would like to end it (Laub & Sampson, 1993; Sykes & Matza, 1957). The participants in this study do not fit well with these ideas. Very few indicated any sort of social difficulties should they choose to quit, suggesting that informal social control either operates subtly in this instance or is not a big factor in marijuana growers' decisions to participate and future plans to participate. This is surprising considering the extent to which they describe their social circles as full of other people involved with marijuana. Similarly, the fact that plans to continue to produce marijuana for sale were universal in this sample regardless of age, relationship status, or other employment suggests that something atypical to the life-course criminology paradigm is happening. Longitudinal data commonly find that offenders do not want to continue in their behavior, they desire a life in which they are successful as law-abiding citizens (Giordano, 2010; Laub & Sampson, 2003; Maruna, 2001). The willingness of this sample to persist in criminal behavior long-term suggests that marijuana growers may be unique as a type of offender.

**Respondents as life-course consistent offenders.** Taken individually, the separate domains are interesting, but when examined collectively they form a bigger picture that is even more important. Life-course criminology theorizes an overall picture of a typical offender: a male who is young, unmarried, and unemployed. This life-course consistent offender is likely to have started his criminal career in his teen years or earlier. This life-course consistent offender is likely to change his offending trajectory and even desist from crime altogether when presented with hooks for change in the form of marriage and employment (Laub & Sampson, 2003; Giordano, 2010). Therefore, an

offender who begins a criminal career in their mid-twenties or later, while in a good marriage and with stable employment, would be the opposite of life-course criminology's expectations, a life-course antithetical offender. The sample in the present study does indeed include life-course consistent offenders. There are single men, under thirty, with no other employment outside of marijuana production. But it also contains their opposites. The following sections discuss the sample in terms of life-course consistent, life-course divergent, and life-course antithetical types in regard to life-course criminology's expectations that most criminals are young, unmarried, and unemployed. While life-course consistent offenders are male, the female participants of this sample are categorized in the same manner for simplicity (see Table 3). Each section provides a brief overview, then describes one or more growers in detail to highlight how they fit (or don't fit) into the life-course criminology paradigm.

*Life-course consistent offenders.* There are two members of the sample who would be considered consistent with the strictest interpretation of life-course criminology's standards, with three additional members who fit a slightly looser standard. That is, two members of the sample are single males, in the youngest age groups, whose only income comes from marijuana production. There are three additional young, single males who do not have regular, full-time employment, but who earn extra income through legal short-term work. Less than twenty percent of the sample resembles what life-course criminology expects in offenders. Given the smaller sample size and non-random nature of sampling for this study, this percentage is primarily important not because of its smallness, but because it shows the potential for atypical offenders. The presence of life-course consistent offenders in the sample supports life-course

criminology's expectations, but the remainder of the sample stands out as anomalous.

**Table 3: Life-course Consistent, Life-course Divergent, and Life-course Antithetical by Gender**

Type	Females	Males
Life-course consistent (young, single, unemployed)		Eagle Fist, Kepuha, THK, W. Stephen, Wolf
Life-course divergent (older, unemployed/retired, single)		Mad Scientist, Jack, Al, Charlie, Rusty
Life-course divergent (older, employed, single)	Starr, Violet, April, Patricia	C. Stephen, Wildstar, Butch, Ben
Life-course divergent (older, unemployed/retired, married)	Beth	Rob, Joe, MacGuyver
Life-course divergent (younger, unemployed, married)		Swarly
Life-course divergent (young, employed, single)		Phil
Life-course divergent (young, employed, married)	Tara	
Life-course antithetical (older, married, employed)	Carly, Elise, Sheila	Billy, Mitch, the Dude

The two sample members most consistent with the life-course paradigm are Kepuha and Washington Steve. Superficially, they have more in common than not. They are both unmarried males under thirty, who made their living exclusively in the marijuana industry and worked for structured, non-family organizations. They both planned to continue to grow marijuana for sale for the foreseeable future. Their biggest differences were that Kepuha had a high-school GED and had been arrested five times, while Washington Steve held a master's degree and had never been arrested. A more in-depth

comparison, however, reveals some dramatic differences in their experiences of the industry and of day to day life.

*Kepuha.* Kepuha held a subordinate position as a garden tender at a rural outdoor marijuana grow site. At the time of his interview, he was growing forty-eight plants for his boss, plus twelve for himself, for a total of sixty plants on the site. He lived at the site as its primary security feature, with security otherwise consisting of his dog and some locked fences. At the time, the site was without electricity or indoor plumbing, so he lived in conditions he compared to camping:

[BDL] Is it hard to live out there with no power and no plumbing?

Uh, I'm used to it. It's hard for my girlfriend 'cause uh, she was always really raised with money and kind of not camping outmuch. And, I was raised in Guam and dirt poor, and once I moved out here I camped like every weekend with the Boy Scouts and I just love bein' outdoors. So it's, I don't know, I love it. (laughter) – Kepuha

The girlfriend he mentioned is his boss's daughter, who frequently stays with him but does not participate in the marijuana industry. He had known her family since eighth grade, and described her as a "good girl." Living on an isolated site, and without much contact with the rest of his organization, Kepuha was not positive who all was actually involved. Although he expected to have additional paid help with harvesting and processing, he was not sure of exactly how many people or who they would be, and he had no influence on hiring or payment decisions. This was Kepuha's first year growing marijuana, although he had worked as a trimmer in one previous year. He planned to sell the final product from his twelve plants to friends:

Because I have a couple buddies that grow as well, and uh, the way they get rid of their weed, they can pay me high dollar than what G can pay me. And, I also have some friends that need weed, that I can sell to them at a good price. – Kepuha

He would receive a portion of the profit from the remaining forty-eight plants, but his boss preferred not to sell the marijuana immediately after harvest, hoping to get a higher price. Kepuha had no involvement in the sale of the product from those plants, and no records were kept. He had no way to know if his boss was dealing with him fairly and had to take it on faith that he would be compensated in a timely manner at his agreed-upon percentage. Kepuha's experience was fairly typical of young garden tenders on outdoor grow sites, although living conditions for this sample tended to be somewhat better than his. He was recruited by someone he knew and trusted, lived on the site in poor conditions, worked for low pay (around 10% of the proceeds), did not know the full extent of the organization he worked for or have details on how the final product would be distributed, and had little power within the organization.

*Washington Steve.* Washington Steve's experience was quite different. He held a leadership position at an urban, indoor grow site. Although the grow site had an extensive security system, no one lived at the property. As a leader in the organization, Washington Steve knew the full extent of the operation and had power regarding where the final product was to be sold and for how much. At the time of his interview, his organization was growing upwards of a hundred and fifty plants. While he did not consider himself a specialist at growing and had a partner who oversaw the majority of plant care, he still spent time caring for the plants daily. He had gone into business with three friends from college, whom he had known for more than five years. His company employed two additional trimmers who they recruited through a temporary employment agency. They kept extensive records, and Washington Steve was also responsible for marketing. With full access to company records, he was assured of receiving his share of the profits and

could keep close track of the company's performance. He had grown marijuana for sale for five years prior to his interview. Unlike Kepuha, Washington Steve started his organization as a partnership with friends. He lived off site, had extensive control over his organization, and while he was unwilling to talk specifically about money, he clearly expected a sizable income.

The similarities and differences between these two life-course consistent growers highlight the need for researchers to look beyond surface characteristics and simple involvement in the industry and to compare organizational roles and lived experiences. Kepuha's experience is about what life-course criminology expects to the letter. The professionalism of Washington Steve's existence, on the other hand, is not what generally comes to mind. Even offenders who are technically consistent with life-course criminology's expectations can have differences that might affect their future trajectories, as well as implications for policy-makers and law enforcement agencies looking to intervene in their activities.

***Life-course divergent offenders.*** Twenty members of the sample exhibited one or more, but not all, characteristics of the typical offender. One of the more notable distinctions between life-course divergent offenders in this sample is age. Most of the life-course divergent offenders are over thirty years old, while only three are thirty or younger. The older respondents fall into three categories: (1) those who were older than expected but otherwise unemployed and single; (2) those who were older, employed, and single; (3) those who were older, unemployed, and married. The younger respondents also fall into three categories: (1) those who were younger, unemployed, and married, (2) those who were younger, employed, and single, and; (3) those who were younger,

employed, and married. These categories and their frequencies by gender are displayed in Table 3 (above). For purposes of this section, unemployed and retired participants are grouped together, and regular full or part time legitimate employment indicates that the respondent is employed. The groups of older offenders are examined separately below, but younger offenders are discussed jointly because of their low frequency.

*Older, single, unemployed/retired.* The first group of life-course divergent participants, those who were over age thirty, otherwise unemployed, and single, are the closest fit with life-course criminology. There are four members of the sample who fit this pattern, all of whom are males. These growers exemplify what life-course theories may expect if active offenders either do not encounter any hooks for change over their life-course or lose incentives to desistance. Two of the four respondents in this group were garden tenders who lived at marijuana grow sites and cared for plants that were later sold by someone else who had financed the garden. A third was a retiree, and the fourth had recently been recruited into the processing aspect of marijuana production for sale. Aside from the retiree, who had over twenty years of experience in the industry, none of the rest of this group had participated for more than five years.

*Older, employed, single.* The second group of life-course divergent participants includes those who are over thirty years old, employed, and single. There were eight members of the sample, four females and four males, who fit this pattern. This was the most frequent category of life-course divergent offenders in this sample. Three out of four of the women and one of the men in this category held part-time jobs, the remaining female was retired, and the remaining two men were employed full-time. Six out of the



eight had no arrests, one was arrested once but charges were dropped, and one was arrested and convicted of production of marijuana charges.

*April.* April was a female, over sixty years old, single, and worked part-time as an art instructor. She held a bachelor's degree and had never been arrested. At the time of her interview, April had been involved in commercial marijuana production for more than ten years. She and her spouse at the time started together on a farm when she was in her mid-twenties. When asked why she got involved, April responded:

I think the adventure. And we were really into drugs, and drug culture. We were hippies, in the country, and [...] we had rented a piece of land for fifty bucks a month. We had chickens and a cornfield. You know, we looked like regular farmers. We also grew pot. So it worked out really well. - April

On their first attempt, they started more than a hundred seeds but only grew ten to maturity. Although they worked at that site for some time, it did not end well.

He just got really paranoid, and became kind of insane. And scared, and, kind of like a watchdog, like, it was his scene, you know? I was afraid for him. [...] [He was afraid of] Getting caught. And what happened was, I came home one day with my friend, we'd been out shopping, and we went to [town]. And, I came home and the FBI was in our other van. And they were coming – we drove up, we drove in, in our little Volkswagon, and we drove in, and there were all these cars parked in the way. And my friend said, “oh my God, take a look at that. Some guys in suits going through the house!” And I said, “going through the greenhouse.” So we just kept going straight up to the top of the road, there's another house up there, and we just sat up there. “I don't know what to do!” So we just sat up there for a really long time, and then we decided to, just drive back down. And we drove all the way back down the road, and turned, and went back to town. And never went back. And they busted him. And so, he got busted, but I didn't. I never went back there. And I lived with friends, and I stayed in the orchard. When I couldn't find a place to stay, I'd just go back and, like stay in the orchard. [...]

[BDL]What about your baby?

Well, I had a baby, like, maybe four months later. And I was fine, I had a whole new life. I was done with drugs, actually. It was really, just, a lesson for me. So that was just such a huge scene, and then it was gone, in a moment, just taken. Just completely gone. And all the things that he was worried about, was what happened. - April

After her near miss, April took a hiatus from the industry for many years. At the time of her interview, however, she was involved in a cooperative group in which people helped each other grow their plants together at one site, and then individually provided the product to patients or sold it. Although she had divorced her husband, they were still in contact and he was also part of the cooperative. April was forthcoming about one of the ways in which she sold marijuana, using her license to deliver marijuana to patients:

And I carry a pound with me almost everywhere I go. And it usually sells. Because I can carry a pound legally. Um, but I don't cut it up into little bags and sell it. I just have a pound with me here and there, wherever I am. But I have the things with me, that I can cut it down into a little bit for someone. I just don't, look like I'm selling. I look like I'm delivering. - April

Two of the other growers in this group were solo growers who also had to arrange for their product to be sold themselves. April's strategy was unique in this study, but it shows the myriad of ways that commercial marijuana gets distributed. Unlike most of the sample, April was reflecting on the social value of her involvement in commercial marijuana production during her interview. Although she planned to continue and generally felt that she was helping people, she was beginning to have some doubts:

Well, I don't know. Like, I'm evolving, and I realize that, the one thing that you have that is really important is a clear, thinking mind. And I don't think fogging it up with a substance is necessarily going to be healthful in the long run. And I really, I really like the idea of being drug free, so. - April

*Older, unemployed/retired, married.* Members of the third group of life-course divergent participants were over thirty, unemployed or retired, and married. One female and three males in this sample fit this pattern. All three were at least fifty years old, many

years past the drop in criminal participation anticipated by life-course criminology. Additionally, three out of four were employed and married at the time that they started producing marijuana for sale. If they had still been working legitimate jobs at the time of their interviews, they would have been considered to be super-atypical.

*Rob.* Rob was a male, retired, in his sixties, and married. He had two years of college and a single arrest for production of marijuana. Rob first grew marijuana for sale in his thirties while married with young children at home. He was working full-time then as a truck driver at, and his family had a craft business on the side as well. By the time of the interview, he had almost more than twenty years of experience producing marijuana commercially. He was encouraged to start growing marijuana by a friend:

[Friend] was living in [place name] at the time, and he was growing on his back porch of his apartment. And he gave me some seeds, and said, “why don’t you try and grow some.” And I thought, “well great! If that can happen, I’ll do it!” So I sprouted the seeds, got really great results from that, and then just progressed planting in the greenhouse, and the plants grew and produced, and the money came, and that was that. - Rob

Rob used his job at the mine to help find customers for the marijuana business:

Um, they were primarily my friends, um, people that I worked with. – Rob

He and his wife continued to grow annually for ten years, until they were arrested by federal law enforcement for a large, outdoor marijuana grow site – the largest that they ever had. Following his conviction and probation, he and his wife restarted their business and continued to produce marijuana annually. At the time of his interview, they were growing over forty plants at an outdoor grow site. Rob worked with his wife, but also

with one of his adult sons as well as people that his wife hired to help with the processing. He described his situation working with his family this way:

Well, um, Carly and I and [son's name] now, are pretty much equal partners in this situation. It takes the efforts of each of us to make the thing work. So, um, we just primarily, we don't, the money that comes in is just, we spend it on whatever we want to spend it on. There's plenty of it, so you don't really worry about what somebody's spending money on unless you, you know, sometimes you, of course, things get out of hand. But primarily we um, we're just, um, taking care of business, and our lives, and whatever that requires financially. – Rob

While a few other growers in the sample insisted that money was not important, and others were not entirely sure of their income or expenses, Rob was the only one who went so far as to say that there was plenty of money so he did not worry about it. Like many of the other members of the sample, he planned to continue to participate in the industry for the rest of his life. After such a long career in marijuana, coming back from a bust, and making enough money that he no longer really thought about it, his commitment is highly believable. Rob and other respondents like him appeared to have come to maturity as marijuana producers. They had long-term, ongoing, stable marital relationships, in which three out of four spouses were participating. None of them held subordinate positions in their organizations. Rather than struggling to get a foothold in the industry, they had achieved relatively comfortable positions and had no incentive to change what they were doing.

*Younger atypical offenders.* There are three life-course divergent offenders in this sample who are age thirty or younger. In this group, one participant was married and otherwise unemployed, one was married and employed, and the third was single and

employed. Although none of them held leadership positions, all three had experiences that make them stand out in the sample. For brevity, only one is described below.

*Tara.* Tara was the only member of the sample who was under thirty, employed part time outside of the commercial marijuana production, and married. She and her spouse had two children, and Tara's part-time work on weekends allowed her to be their primary caregiver the rest of the time while her spouse maintained a full-time job as a construction worker. Aside from her participation in this industry despite obtaining the "complete respectability package" (Giordano, 2010), Tara's career trajectory stands out. As described in the "methods of entry" section, Tara first started to work in commercial marijuana production with her parents as a teenager. After leaving home, however, she had ceased to participate for a time. At the time of her interview, she and her spouse were producing commercial marijuana together, with occasional help from friends for heavy work. She also processed marijuana for other groups, including her mother, throughout the year. Tara had never grown marijuana independently. Rather, all of her experience was facilitated by family – either her family of origin, or her current household.

Tara also stands out because her experiences include the only instances in the sample in which law enforcement personnel facilitated commercial marijuana production. First, in her initial experiences, her stepfather was a prison guard in addition to a marijuana producer. Second, also when Tara was a teenager, a neighbor called the police to complain about her family's marijuana. The officer who arrived was a friend of her stepfather's, and as a result no legal action was taken.

*Summary: Life-course divergent offenders.* Showcasing life-course divergent offenders highlights the variety of ways in which participants in this sample of commercial marijuana growers buck the expectations described in life-course criminology, while at the same time showing how life-course criminology is still applicable, even when offenders are not exactly who the paradigm predicts them to be. Life-course divergent offenders are the modal type in this sample and among them the second most common group is that of older, unemployed/retired, single adults – that is, those who life-course criminology expects to be older offenders, even though they do not line up neatly with the age-crime curve.

*Life-course antithetical offenders.* There are six members of the present sample who were over thirty, employed, and married at the time of their interviews. These participants embodied the complete opposite of life-course criminology's expectations of who criminals are likely to be. Three of these life-course antithetical participants are female, and three of them are male. One of each gender is described in more detail here.

*Elise.* Elise was a female, in her fifties, married, and was an independent clinical herbalist and teacher. She had some college and some trade school training, and had never been arrested. She first started producing marijuana commercially in her thirties, while married and employed, and had more than ten years of experience by the time of her interview. Like a few other members of the sample, a friend offered to help Elise get started growing marijuana commercially.

[BDL] How'd you come to be involved that year?  
I just met somebody that offered to show me how to grow, and furnished the

lights, and plants to do it, and, uh I said hell yeah!

[BDL] But how does that happen?

You wouldn't believe it if I told 'ya. I mean, this guy rented a house from me. I knocked on his door to get my lease agreement signed. [...] He takes me down the hallway, opens up the extra bedroom, and he has about thirty boxes of psilocybin mushrooms growin'. [...] Well, um, he and I became very good friends, and that's what he did. [...] [I]t was just, that's how I got introduced to it, was through this friend that rented a trailer in the trailer park I was managing. [...] And I'd always grown a couple plants, but never had much luck. But he showed me how to grow 'em in lights. And then the first year I grew 75 plants, and gave him half of the bud [...] – Elise

Over the years, Elise grew marijuana for herself, grew marijuana commercially with her family, and worked in dispensaries as they became available. While she grew at least one plant every year, she did not always participate in the commercial aspect:

[BDL] Since that first experience, how often have you participated in either growing, or trimming, or anything?

Wow. A lot.

[BDL] Like, every year?

Okay, so that's been twenty-five years. [...] Yeah. In fact it is thirty years this year. Thirty years this year. Um, since that time...I would say that I've either grown something or taken part in growing something...mmm...maybe half of that time. I wanna' say almost every year, but you know, it just, one plant isn't growing, you know. So I'd have to say, maybe half of that time I was either involved in somebody else's grow or had some others growing. More so the last five years. Constant. Since the laws have changed. - Elise

Elise's re-escalation of her involvement in commercial marijuana following easing of legal restrictions was echoed by a few other sample members. It stands in contrast to growers like Al (above), whose support of new state laws had resulted in a reduction of his crop size. In addition to selling marijuana for money, Elise described using marijuana for barter:

[BDL]What kind of things do you trade for?

Well, services, products, anything you know. Plumbing job you need done? Well, will you do it for an ounce? You know. Uh, I had my vehicle worked on for two years by a guy, and we didn't pay a cent. It was always pot. So. You know. – Elise

Other members of the sample also discussed trading marijuana for goods and services, particularly those respondents who felt that marijuana and money were potentially problematic together. It was not the dominant view in the sample, but it does illuminate an additional way in which value is conveyed in illicit markets. At the time of her interview, Elise lived in a multi-generational family household in which all adult members participated in producing marijuana for sale to some extent. Elise described herself as the primary grower, however:

[BDL] How much time does everybody else spend workin' on this?

Very little. They, they usually just fill in for me, if I need, like to water or somethin'.

[BDL] So would you say you're the person that decided who does what? In the household?

[BDL] No, just for your plants.

Um, between me and my son-in-law. The two of us. My daughter tries to be the power, but she's not. [laughs] - Elise

Although she laughed it off, power dynamics in family commercial marijuana organizations can be intense, and had led to splits among multiple growers in the sample. Like the majority of the sample, Elise planned to continue her involvement in the industry for the remainder of her life.

*Billy.* Billy was male, in his thirties, and lived with his wife and children. He had two juvenile arrests for loitering, and had completed high school. At the time of his interview, Billy had approximately ten years of experience in the commercial marijuana industry. He had started in a cooperative venture with family members in his early



twenties. Billy, who had received seeds from a friend, planted the most his first year out of any grower in the sample:

[BDL] And how many [seeds] did you get?

Wh-, uh, probably a few thousand. [...] Yeah. 'Cause it was like, a one gallon zip-lock bag, that was filled maybe, three inches worth. If you can visualize that. My guess would be a few thousand. [...]

[BDL] How did you plant the seeds?

Like Johnny Appleseed. [...] Yeah. 'Cause there were so many of 'em.

[BDL] So you just sort of threw 'em on the ground?

Totally threw 'em, didn't even know. Threw 'em and kind of covered, raked 'em in.

[BDL] Wow.

Yeah, totally. Weird. Lightly watered the area, gently, so that they would germinate.

[BDL] And how many did you plant?

A few thousand.

[BDL] You planted all of, you planted the whole bag?!

All of 'em, yeah. – Billy

Billy and his family's carelessness in planting is similar to many of the other growers as they started out, although none of the rest of the sample started with that many seeds. In the years between his first experience and the time of the interview, Billy had grown marijuana solo for himself and small commercial batches, and with different combinations of family members. At the time of his interview, Billy was financing a commercial marijuana garden. Here he compares his role to that of his garden tender:

Um, he grows for everybody. Like me, everybody. You know, I go out and do stuff, but I'm more of the facilitator. [...] Um, like I pay the bills, I have the property, I find – I'm more of that, organizing person. – Billy

In addition to those duties, Billy was responsible for recruiting additional people to help with harvesting and processing, and for sales. Billy's role was that of the "boss"

that garden tenders talked about. He negotiated the percentage of profit that he and his employees would receive:

Oh. It's pretty much, it would be determined, whether it be amount or percentages, kind of the same, 'cause it's a certain amount of product that's mine. 'Cause the other parts that aren't mine means that's the cost to cover the other people. And vice versa. [...] So, so for me, it'd be like...to give it a safe number, I might, myself, make like...anywhere from seventy to ninety percent. Just depends. [...] No, I shouldn't say that. Stop. [...] Eighty percent. – Billy

Billy anticipated earning nearly two-hundred thousand dollars following the harvest of the marijuana he was growing at the time of the interview. He was paid entirely in cash, however, which presented some difficulties with banking. His full-time job as a construction worker helped give him the appearance of legitimate income. Billy's wife did not participate in marijuana production for sale, and while she supported his participation at the time, it was a point of concern for him. Consideration of his wife was a primary limit on how long Billy thought he would continue to produce marijuana commercially:

I think as long as it'll...as long as my relationship with my wife and my life will allow me. Both. Like, you know what I mean? That's pretty much, that just depends. If my wife doesn't want me to do it then... - Billy

Current life-course theories of criminology would not anticipate patterns like those of Elise and Billy. On fairly simplistic variables like age, marital status, and employment, the two present similar profiles but, as with the typical offenders profiled above, their day to day experiences are quite different. Although their somewhat mythical status as offenders who completely defy expectations is notable and relevant on its own,

their differences show that even people who are involved in the same type of law-breaking can have distinctly different behaviors and experiences.

## **Discussion**

On nearly every front, the participants in this study buck the expectations of life-course criminology. They are older than anticipated, there are more females than expected, females take on a wider variety of roles than expected, they participate despite legitimate employment and marriage... the list goes on. There are a few members of the sample who do meet the expectations of life-course criminology. As young as they are and without the opportunity for follow-up, it remains to be seen if they will age out, marry out, or work out of growing marijuana for sale. There are also a few who look like what life-course criminology would expect of older offenders – single, otherwise unemployed, with no clear hooks for change to alter their offending trajectories. But those respondents are the minority in this sample. These differences have implications for life-course criminology, as well as policy-makers and law enforcement.

While the contributions of life-course criminology to the study of crime and offenders generally are undeniable, the current study identifies some room for improvement. First, life-course criminologists should consider differentiating their theories by type of crime. Growing marijuana for sale functions more like a job than like a typical crime for most of the participants in this sample. Participants were hired and fired, they worked for hourly wages or percentages of profit. A few even had clearly defined business plans. Many of them, especially women, worked multiple “jobs” in this “field.” To the extent that commercial production of marijuana offers what participants consider to be better opportunities than other jobs, it is unlikely that legitimate

employment will be a hook for change. Second, commercial marijuana production was, for multiple members of this sample, a family and intergenerational affair.

Intergenerational transmission of offending can operate both downwards (to younger generations) and upwards (to older generations) in commercial marijuana production. Unlike other forms of deviance, in which offenders as parents vocally do not want their children to participate (Giordano, 2010), parents in this study actively recruited their children to be a part of their business and, in one instance, an adult child introduced his parents to the industry and helped them get started in an effort to secure their financial stability. In two instances, brothers and sisters recruited each other to be part of their businesses, and in a third instance a sister got her brother his first job in the industry through connections at her legitimate occupation. Marijuana production was not something that participants generally tried to hide from their household, even when all adult members were not participating. Life-course criminologists should therefore begin to consider what criminal careers look like when criminal behavior is a normal, acceptable, and even valuable part of family life. Third, life-course criminology could benefit from an examination of late entry into offending as a result of shifting laws and public opinion. More than one adult-entry respondent reported that they would not have gotten into commercial marijuana production if it were not for new opportunities presented by changing state laws regarding marijuana.

Policy-makers and law enforcement officials could similarly benefit from taking the variety of people in this sample into account, as well as their criminal career histories. Changing laws in this instance were directly responsible for entry into federally illegal endeavors, sometimes on a large scale. State legalization for those participants did not

mean that people who were already in the industry were simply off the hook. Instead the changing laws drew new participants to produce marijuana. Some of this expansion was certainly anticipated, and can be clearly seen in Washington and Colorado's tax schemes, for example (Colorado Department of Revenue, 2013; Washington State Liquor Control Board, 2015). Law enforcement officials should be aware of the different organizational roles that protect wealthier growers. For example, raiding an Oregon grow site will likely result in apprehending a low-paid garden tender, while missing the person financing the operation. Additionally, both policy-makers and law enforcement should consider the ramifications of the age distribution of the sample. Older adults have increasingly become a burden on the correctional system in recent years, and full enforcement of federal marijuana production prohibition would likely result in an influx of prisoners who would require extensive and costly care.

In conclusion, the commercial marijuana growers in this sample are a more complicated group of people than those anticipated by life-course criminology. These results offer the opportunity for life-course criminologists to refine their theories, for policy-makers to consider the implications of changing laws, and for criminal justice professionals to anticipate the outcomes of potential courses of action in regard to enforcement of restrictions on marijuana production.

## CHAPTER 5

### TRANSMITTING NORMS, KNOWLEDGE, AND SKILLS AMONG COMMERCIAL MARIJUANA GROWERS

#### **Introduction**

The previous chapter examined who commercial marijuana producers are. The exceedingly long marijuana production careers of some members of the sample, described in the previous chapter, are only possible because those respondents have acquired the norms, skills, and techniques necessary to be successful in commercial marijuana production. Without such knowledge, marijuana production endeavors could fail at any part of the process. For instance, if the grower lacked knowledge of social norms required to gain information on best practices or to interact with employers or customers. Alternatively, an absence of information or skill in producing marijuana would result in a final product that was not salable. These skills should not be taken for granted as innate knowledge. Recall that even with knowledge of agriculture, early European settlers needed assistance growing basic food crops. The current chapter uses social learning theories to explain how respondents gained this knowledge. Social learning has a solid place in studies of marijuana use, and more recent history in applications to marijuana production. It has been used to describe skill acquisition, types of mentoring, and mythologies of quality (Becker, 1953). The members of this sample had a variety of experiences learning to produce marijuana, some of which are explained well by social learning, while others do not fit the theory as neatly. The chapter includes a brief discussion of social learning theories and their application to marijuana production,

followed by results for the sample including differential reinforcement of norms, social and technical mentoring, and learning through media and independent experience. It concludes with a discussion of the results including some limitations and highlights.

## **Theory**

There are a variety of learning theories in criminology, all based on the idea that behavior is socially transmitted. One of the oldest and most applicable is differential association, pioneered by Sutherland (1939, 1947). This theory (and subsequent offshoots) holds that behavior is socially transmitted, both through explicit in-person instruction and mimicry. With an established foundation of empirical evidence (Pratt et al., 2010), social learning theories have been crucial to our understanding of the transmission of criminal behavior. One of the more famous applications of the theory explained the transmission of skills and knowledge among marijuana smokers (Becker, 1953).

Differential association (Sutherland, 1939, 1947), and later social learning theory (Akers, 1973, 2010), contains a number of components that explain deviant and criminal behavior. In social learning theory, social behavior is acquired via direct conditioning or modeling and imitation, through differential reinforcement and normative definitions. Tests of the theory have, overall, found more support for the idea that normative definitions influence behavior rather than imitation and modeling (Pratt et al., 2007). Social learning specifies that direct conditioning or modeling and imitation are the means by which necessary “how-to” knowledge is acquired. The present study includes an examination of how differential reinforcement operates to communicate norms within the sample, as well as how specific skills and knowledge are transmitted via knowledge and

imitation. Social learning theory and life-course criminology complement each other somewhat in this area. For example, instances of modeling by other growers can act as turning points that turn people off of a non-offending trajectory onto a criminal trajectory. Seeing another person's success may make it desirable to others. Furthermore, the pro-social agents of informal social control (i.e., spouses, employment) that are theorized to decrease criminal behavior in life-course criminology take the place of peers and others who were not providing such a pro-social influence. It is from these others, theoretically, that people learn to commit crime. In the current sample, as described in the previous chapter, marriage and employment were not the crime-reducing influences that life-course criminology theorizes they would be. Instead, as described in this chapter and the previous chapter, spouses and other people that growers encountered in their legitimate jobs actively provided information and modeling that facilitated respondents' criminal careers.

The general tenets of social learning theory can be applied specifically to marijuana producers. Direct conditioning can be delivered by two sources for commercial marijuana production. First, other marijuana growers can provide rewards or negative consequences for conformity to a set of behavioral expectations for growing marijuana. Second, buyers can provide rewards or negative consequences through interactions like setting purchase prices or willingness to do business. As discussed in the previous chapter, however, not all marijuana producers deal directly with buyers. In such instances, quality of product is the only way that growers can demonstrate that they have met expectations. For those marijuana producers that do interact with buyers, however,



both social expectations and expectations of the final product will influence buyer rewards and consequences.

Perhaps just as important, however, is the role of modeling and imitation. To the extent that successful commercial marijuana production can only be accomplished by acquiring knowledge from other growers, modeling and imitation are crucial. Modeling and imitation can take place in a variety of ways. While as yet un-researched, formal schools teaching marijuana cultivation have begun offering classes in recent years, again underscoring the importance of person to person transmission of knowledge. In formal schools or other mentoring situations, one or more marijuana growers presents themselves as a person on whom others can model their behavior in order to grow marijuana successfully. This can also take place in less formal settings, for example, when growers ask each other about methods for success or problem resolution – things like strategies for handling pests or plant diseases. The recipients of this knowledge may then choose to apply other growers’ strategies – that is, they imitate what worked for others. Indirect modeling, that is, modeling that is not face-to-face, can also take place through print and other media. The internet may be particularly useful in this context. A quick Google search returns over seventeen million results for “how to grow marijuana,” including step by step instructions and videos. Chat rooms and Twitter feeds related to growing marijuana abound, removing the face-to-face component of learning while maintaining a semblance of human interaction.

Between direct conditioning from other marijuana producers and buyers, and an assortment of resources on which to model behavior, it is clear that the processes of social learning are applicable to marijuana production. The chapter continues with how

social learning processes worked for the members of the current sample as they learned to successfully produce marijuana for sale. The results begin with differential reinforcement, followed by considerations of modeling and reinforcement as they apply to the sample.

## **Results**

In the interviews, respondents were asked, “How do growers learn to care for their plants successfully?” They also often spoke directly as to how they learned to do so themselves. This section begins with an examination of how differential reinforcement operates to convey group norms, specifically how other growers and buyers provide both positive and negative outcomes for complying (or failing to comply) with norms. It continues with a description of participants’ responses in terms of social and technical mentoring, as described by Bouchard and Nguyen (2010). Participants described technical mentoring as occurring in two ways, through sustained learning relationships and through briefer learning encounters. In addition to person to person interactions, growers noted the importance of learning through various media, including books, magazines, videos, and other electronic sources. Furthermore, several respondents stressed the importance of learning on their own and applying their direct personal experience to commercial marijuana growing, something that is not accounted for well in social learning theory. The results section concludes with an examination of how sharing one’s full knowledge as an experienced marijuana producer can be problematic, and how respondents in this sample handled that conflict.

**Differential reinforcement.** As described above, differential reinforcement among commercial marijuana growers takes various forms, including monetary rewards and interpersonal prestige on one hand, and poor profits, dissolution of working relationships, and other negative consequences on the other. Respondents in the present sample spoke to both types of reinforcement. Positive reinforcement was offered in the form of monetary rewards, organizational advancement, and positive reputations or renown. Negative consequences in this sample took the form of dissolution of relationships and damage to reputations both in the marijuana industry and, occasionally, beyond it.

***Positive reinforcement.***

*Reputation.* Four of the respondents discussed participating in competitions to produce the best marijuana. One of these was a relatively new competition, the Cannabis Cup, in which THK had recently won a prize. He described it as a career booster that helped him get his employer to supply him with the plant strains the he preferred, as well as gardening equipment and nutrients to grow marijuana:

No. I really don't have to pay anything because, my part of it, you know, I do all the work, and so I don't pay nothin'. I don't buy nutrients. I don't buy, nothin' you need, bamboo or whatever. That all gets bought for me. So that's somethin' that's cool. And I get the choice of what I want, you know, so that's badass.

[BDL] How'd you manage that?

Fuckin', luck of the draw, sister! Hard workin', that's all I have to say. I worked my ass off to get where I am. I started off at the bottom, no say in nothin'. You get shit work. [laughs][...] Just stuff that, like, needs to be done that nobody wants to do. You do it, if you're just, like, startin' out. And I did it. Eventually got noticed that I was workin' my ass off. And someone's like, "okay dude. Come work for us." And then I became the bottom dude of that thing. I got, I did the whole garden, and, I fuckin' won the Cannabis Cup. So then, they're like, "Whoa, dude! Let's get you your own garden, bud!" So then I got the decision-makin' time, and I was the boss. It was cool. And doin' it again! – THK

THK was able to leverage his success in the national Cannabis Cup into a better role in his organization, but other smaller, localized competitions have also been taking place for many years, and can function as community-builders. The primary reward for the growers in these competitions is prestige. For example, Mitch described annual marijuana competitions in his small town in the nineteen-eighties. One year, he and his wife won after including fly ash in their fertilizer. They kept the ingredient a closely held secret that season, but then shared it with their community after winning. The event helped solidify their reputation as people who grew high quality marijuana, and their willingness to share the innovation in their growing technique also helped their reputations within the community.

Reputation building also featured as positive reinforcement between marijuana growers and their customers. Rob described his business as spreading through word of mouth:

When I originally started growing pot, and I was in [place name]. And I put a greenhouse on the back of our house. And I grew, I think I had ten plants on the back of that house. And, the pot was, of...very good quality, so people that I knew found out that I had grown some weed. And they bought some, they like it. They told their friends. They liked it. They told their friends. Pretty soon the weed's gone. Just from word of mouth. I didn't set up a sale organization, it just happened. - Rob

Contrary to Rob's assertion, these things do not "just happen." Positive reputations reinforce norms about what buyers expect from their marijuana, and provide an incentive for marijuana producers to continue to provide it both through the valuation of their reputations and through accompanying expanding sales. Such direct reinforcement is an important component of the social learning process.

*Organizational promotion and pay increases.* Commercial marijuana production is, of course, a business, and two of the ways in which businesses provide positive reinforcement for performance are through promotion and pay increases. Not all of the respondents in the current sample belonged to a structured, hierarchical group, but approximately two-thirds worked with others in groups where at least one person had decision-making power over at least one other. Similarly to legitimate businesses, organizational promotion and pay increases were forms of positive reinforcement among the respondents in this sample.

Respondents who described promotion or pay increases all followed a common pattern. They began working in the marijuana production industry as hourly paid labor, either doing manual labor at marijuana grow sites or working to process marijuana for sale in jobs like trimming, or both. According to respondents, hourly labor positions at the time of data collection paid around twenty dollars an hour, and usually lasted two to three months. Jack's experience was typical of the sample:

I came out here, three years ago and, uh, started trimming, you know, like during harvest? And just doing all the trimming and everything. And then, you know, when I got hooked up with all these guys they invited me back. – Jack

After working for a couple of years doing hourly work as a trimmer or helping get marijuana grow sites ready for planting, Jack was rewarded with a position as a garden tender, someone who lived at a marijuana grow site and spent four to six months preparing the site, caring for plants, and helping with the harvest and processing. Garden tender in this sample were paid a percentage of the profit from the final product. Although no one in the current sample was willing to discuss their precise percentage,

garden tenders' income was certainly more than the approximately ten to thirteen thousand dollars they earned annually through manual labor, and included housing. This was a common career progression among the garden tenders in the sample. This form of reinforcement operates like job promotion and pay raises in legitimate industries, but for those financing larger marijuana grow sites with garden tenders, it has the added advantage of giving leaders the opportunity to determine if a person is trustworthy before giving them control of hundreds of thousands of dollars' worth of marijuana plants. Trust in drug markets is of concern to participants because of the potential of associates to inform to the police, and research on drug dealers suggests that friendships established prior to serious engagement continue to maintain importance as dealers became more established. However, dealers and other participants must also extend trust as they acquire new customers, and deciding who is trustworthy can be challenging (Taylor & Potter, 2013).

*Negative consequences.* Not all direct conditioning for social norms takes the form of positive outcomes for meeting expectations. Negative consequences are also an important part of direct conditioning for social learning, as people communicate their displeasure with someone's failure to adequately embody social norms. Respondents in the present sample did not bring up negative repercussions for failing to meet expectations often, but when they did the negative consequences took the form of relationship dissolution and reputational damage. The most common way that respondents described negative consequences was relationship dissolution. This was the

case for Colorado Stephen, who was growing marijuana for a dispensary at one point, but quit to work on his own:

But, I, at this particular dispensary, the reason that I didn't stay there for a long period of time was because of cleanliness issues. And, and them not having, um...much of concern about how they ran their business. [...] Um, a lot of times, what I find with dispensary businesses is that people will have the start-up capital, will start business, but they don't have the knowledge to, to do it the way, you know, that I think things should be done. Or, you know, which is clean. Extremely clean, and...

[BDL] Why does that matter?

Well, plant diseases, you know, marijuana is susceptible to diseases just like any plant. You can have powdery mildew, um, you can have infestations with spider mites, um, et cetera. And so, you can't...with marijuana not being regulated, um, at that time, the way that it is now, you could walk into a dispensary and buy, you know, marijuana that had powdery mildew on it, which is not good for anybody's health. [...] So, that was one of the reasons that I didn't want to work there, is because they were selling, you know, pot that had been subject to powdery mildew and other infestations. And they were using certain chemicals to try to combat these things that I didn't think were, you know, helpful. – Colorado Stephen

Colorado Stephen's description includes several violations of norms among marijuana growers in the sample: inattention to cleanliness, selling contaminated product, and using disreputable chemical. While the money that he made from working at the dispensary was acceptable to him at the time, the way in which the organization conducted their operation was not, which led to his dissolution of the relationship.

In another case, negative repercussions went beyond dissolution of relationships in the marijuana business and spilled over into reputational damage in other businesses. Wolf's experience demonstrates the importance of both word of mouth and social media in enforcing norms:

[BDL] Have you ever been ripped off?

Uh, yeah. Last year we had this girl that was trimming for us. [...] And I was like,

‘Cool, well you’ve only done this much, so I will front you this [amount of marijuana] if you can sell it. And then, you can just come back and trim for us until you’re done, before you go to [another country].’ [...] And then, she went to [place] and got in a car accident. And, like, was fine, but, you know, banged up her head pretty well. She doesn’t remember us fronting her weed. And her friends that were also working with us were like, ‘No dude you, they fronted you a bunch of weed.’ So like, she just sold all the weed and like, never hit us up. She like came once after that, like, ‘oh no, I’m gonna’ come out and help you guys.’ It’s like, ‘okay, that’d be great, thanks.’ You know, came out, worked one day and wasn’t feeling too good because of the car accident, so I was like, ‘why don’t you just go home. You know, we don’t wanna’ like push you through this because of that.’ And then eventually it was just like, before I was done with my Facebook thing and deleted my account, I hit her up. I was like, ‘So I see you’re moving to Costa Rica, that’s cool. You know you kind of owe us like, six hundred dollars and my parents could probably use that money. And like, I don’t even care, ‘cause I’ve already taken care of my stuff. But that’s my family, and we were going out of our way to help you out. And now here you are going on your trip. And, you know, you haven’t put in your aspect.’ So it was just kind of like, ‘you burned a bridge. That really sucks, ‘cause I’m in the artist world, and you’re a photographer, and I can really just, I can mess that up.’ [laughs] It’s just in the aspect of talkin’ shit. ‘Nah, she’s a horrible photographer, blah blah blah.’ – Wolf

Wolf’s account illustrates the importance of trust and fulfilling one’s obligations as social norms among marijuana growers. When his employee broke his trust by not bringing in the money he owed, he was sympathetic to her car accident and offered her the opportunity to work off her debt. When she still did not pay, he dissolved their relationship in the commercial marijuana industry, but also used social media to damage her reputation in her legitimate business. Negative consequences like this operate within social learning theory to communicate norms and expectations, and to reinforce their importance when they are violated or not met. Violating group norms in this instance thus resulted in negative consequences both in and out of the commercial marijuana industry.

**Social and technical mentoring.** In order to gain the knowledge and skills necessary to grow and sell marijuana successfully, most participants turned to other industry members for instruction and advice. Those dispensing instruction and advice



acted as social learning theory's models, while those learning took the part of imitators. Following Bouchard and Nguyen's (2011) model of learning about marijuana production, this modeling/mimicry, person to person knowledge transfer takes two forms: social mentoring and technical mentoring. Both types of mentoring, discussed below, were present among the participants in the current study.

***Social mentoring.*** Social mentoring in commercial marijuana production does the work of providing normative definitions, that is, social mentors communicate attitudes, definitions, and values that make marijuana production acceptable to participants (Bouchard & Nguyen, 2011). For many of the respondents in this study, the work of social mentors occurred decades prior to the interview and the social context of the time had faded into "just what everybody did." Al's discussion of how he got started illustrates this perspective:

Everybody just kind of tried it. – Al

When marijuana and marijuana production become ubiquitous in a social context, it can be difficult or impossible to pick out a single social mentor. Instead, the entire social milieu is filled with potential social mentors who reinforce that marijuana production for sale is acceptable and enjoyable. For instance, the idea that "everyone we know" is involved with marijuana production came up in multiple interviews, even among relatively newer growers like Tara and Starr.

My family grows. Almost everyone I know grows. - Tara

Well, our friends are all part of it. – Starr

Similarly, respondents' friends and families would often visit their grow sites, examining their crops and demonstrating approval:

[BDL] What kind of people saw them? [the plants]

Friends.

[BDL] And then did anyone besides you handle the plants while they were growing?

Oh, a buddy came and took some pictures of the buds. You know, he squeezed them and sniffed them. - Butch

Respondents who were newer to marijuana production were more likely to be able to point out specific instances of social mentoring. Kepuha illustrates how social mentoring overcame his reluctance to participating in the industry:

[...]when I first started here, like first started learning how to grow marijuana, [...] I was totally against it before that. I was like, I didn't even want to trim weed. [...] It was, that it was such an illegal act and I was, I've already been through that, like doing the whole legal thing. Like I stopped getting in fights, once I got off probation and whatnot. And then, I don't know, it was like, I just thought that like there's so many good people that do it, and are very prosperous doin' it, and don't hurt people doin' it, and like I didn't even know that [my girlfriend's] whole family does it or, and all of 'em are nice-ass people, (laughter) they're not doing anything wrong. It kind of changed my perspective on things. [...] I just started getting into it, and this is how I'm gonna launch my life. – Kepuha

Kepuha's first exposure to the commercial marijuana industry was through his girlfriend's family. While she did not participate herself, the example of her family as good people who were successful while not hurting others changed Kepuha's mind about marijuana production and made his entry into the industry possible. Social mentoring, both through general social milieu and specific individual mentors, thus operates to endow new participants in this industry with the attitudes required to participate successfully.

*Technical mentoring.* In contrast to the normative definitions provided by social mentors, technical mentors provide the actual skills and knowledge needed to produce marijuana successfully. In the present study, respondents spoke about two general ways in which technical mentoring occurred. First, some respondents had relationships with people who provided technical know-how in sustained relationships. These relationships may have been as short as a single growing season, or lasted several years. Second, respondents received technical mentoring through brief learning encounters, in which they gained technical knowledge through conversations with other growers without being in an organizational or mentoring relationship.

*Learning relationships.* Several of the growers in the sample had direct contact with people who explicitly taught them how to produce marijuana. These technical mentors trained the respondents in things like how to set up their grow sites, care for their plants, and keep notes.

[BDL] How do growers learn to care for their plants successfully?

Me, personally? These guys [in his organization]. Yeah, other growers. Guys that have been doing it. Yes. Yes. If I didn't have them, I mean I could turn to a book I guess, but then it would be so much trial and error. Which I'm sure there's a lot of growers that have gone through that trial and error. But, with me, I'm pretty fortunate, because I'm surrounded by guys that've been doing it for a while. And I learn everything that I learn from the people that I work with. – Jack

As Jack pointed out, having technical mentorship from a sustained relationship cut down on the time it takes to learn and reduces the likelihood of failure. While he acknowledged that learning technical skills directly from others was not his only option for improving, for Jack and other growers, learning relationships were the preferred way

to pick up knowledge and skills quickly in an industry which can be quick to leave behind organizational members who do not meet expectations. Such teachings did not always take root for the long term, however.

[BDL] Okay. Do you keep any records of your crop?

I have, uh, I've gotten pretty lax with that because the guy I learned from in Humboldt County was a *meticulous* note-taker, you know? And that's how I learned from him and I did that for years, but more and more it's just... I just do it. – Butch

While Butch did not scrupulously adhere to the original teachings he learned in his mentoring relationship, he had been producing marijuana independently of that relationship for more than a decade by the time of his interview. He still considered those teachings valuable and applied many of them, but had let certain aspects that he no longer found useful fall away.

Another way that learning relationships occurred in this sample was between spouses. Tara first learned about growing marijuana from her family, but had since helped her spouse learn the business as well:

[BDL] How do growers learn to care for their plants successfully?

Probably from knowing somebody, or, you know, being raised, a lot of people out here were raised, like, around it their whole entire lives. It's like a family thing. Other people read about it. I'd say mostly advice from others, though.

[BDL] Is that how you learned?

Well, yeah. Well, I grew up in it. Um, [spouse] didn't. And he'd kind of ask me stuff. And now he's like, a master at it. Just from askin' all his buddies, and figurin' out what works for him. – Tara

April's experience, in contrast, was that of learning from her spouse and then continuing independently when the relationship ended:

[...] when you marry a man, you marry their lifestyle. Pretty much. [...]But I learned so much, that I thought, “I can do this.” And when I learned that marijuana was turning into medical marijuana, I was like, “I can do this! Yeah.” – April

It was more common for spouses to learn together, and to an extent that was true for April, but she also felt like she acquired skills for marijuana production specifically from her husband when she first started. Learning relationships that imparted technical knowledge did not always focus on marijuana. In some cases, respondents learned technical skills about plants in general from mentors that were not in the marijuana industry.

Well, it’s just a matter of, um...I, I have, um, I was raised with a father that did a lot of, um, gardening. And, in fact, that was his hobby. So I, just learned, um, that whole, um, game, gardening game, from my dad. And my uncles were in the same business. Um...so it’s just something I, like any, any other, if your father’s an architect or any other, you become interested, usually, you become interested in what they do. And I became interested in what my father did, and I had a feel for the earth, just through him and what he did. So, it was easy for me to, to, to start growing marijuana, because I had a feel for growing things. So, that’s what I did. –Rob

Rob’s father imparted technical gardening skills over the course of their relationship that Rob later independently applied to growing marijuana. In relationships like these, technical mentorship is not necessarily about imparting criminal knowledge so much as imparting specific knowledge that was later used in the commission of a criminal offense. This is similar to relationships between chemistry teachers and their pupils. The teachers may impart technical knowledge, but it is wayward students that may later apply that knowledge to weapons of destruction. While it was not necessarily the instructor’s intent to impart knowledge to further criminal ends, a different set of social mentors may still encourage the use of that knowledge in criminal endeavors.

Learning relationships can thus take multiple forms. Some of those appeared to be a form of apprenticeships, like Jack and Butch. On the other hand, other respondents had sustained learning relationships that did not necessarily have to do with marijuana, like Rob, or managed to operate their own organizations independently of their mentors.

*Learning encounters.* In contrast to sustained learning relationships, commercial marijuana growers also mentored each other through brief learning encounters, in which growers sought technical advice from each other or exchanged successful techniques during informal conversation. For example, respondents gained knowledge from other growers by asking for help with specific problems, or by asking what others did following a particularly successful harvest. Eagle Fist put this succinctly:

[BDL] How do growers learn how to care for the plants successfully?  
By conversing with other growers, and exchanging solutions to problems. - Eagle  
Fist

April elaborated on the informal exchange of information:

[BDL] How do growers learn how to care for their plants successfully?  
[...] I think it's just word of mouth. Some people study everything diligently, but I'm not like that. I just learn as I go. Usually what I need to learn or know just comes to me when I need it. I've always been like that. [...] Like, when you're just around gardeners and they share information. It's like being around an artist and they're telling what to use You know how people just share? [...] So, it's like that. It makes you really appreciate people, 'cause they do share so much. So grateful. – April

Another source of informal knowledge was stores that catered to marijuana growers. Just like law-abiding consumers might go to a garden store to ask for help with a vegetable garden, marijuana growers had favorite stores that they went to for specific products and advice. Mad Scientist described one such place that he has used:

Some of these places here actually do supply more towards the grower. [...] I went into a place, it was a co-op. It was like a Home Depot, but it was a locally run co-op place. They had a whole line of, uh, nutrients. [...] Yeah, definitely towards the whole weed. You can tell. I mean, when they have Fox Farm [brand nutrients] and stuff like that, it's not for the people, your average tomato grower. – Mad Scientist

Another way in which technical mentoring occurred through learning encounters was via participants working short stints with other commercial marijuana production organizations. Starr, for example, appreciated the chance to see in person how a variety of organizations operated:

Everybody does it different. And that's why I like working at different sites. You like, learn things and see how other people do it. – Starr

While she preferred to take a back seat in organizational matters and had not developed a serious learning relationship with an individual or organization, working briefly at different commercial marijuana production sites provided her models to follow in her own family operation. She was thus able to take advantage of learning encounters at multiple grow sites without establishing a long-term mentor/mentee relationship with any single person or group.

***Mentoring recap.*** In the present sample, both social and technical mentoring were in evidence, and took a variety of forms. In some instances, as with Al, social mentoring occurred through the general social setting of participants in some instances. Social mentoring also occurred through contact with specific individuals or groups who imparted normative definitions and made commercial marijuana production acceptable, as with Kepuha. Technical mentoring was also present in several different forms, both in

extended learning relationships and through briefer learning encounters. The presence of mentoring in the sample demonstrates the importance of face to face learning for commercial marijuana production, but, while common, mentoring was not the only way in which respondents acquired the skills and knowledge to successfully produce marijuana commercially, as seen below.

**Media.** The most common response regarding learning to care for marijuana plants, however, was that growers learned from books or other media. One book in particular came up repeatedly:

If you really want to learn more about this, if you're really serious, Jorge Cervantes, and it's called – he's an, he's an old grower. But Jorge Cervantes has a book that called *Grower's Bible*. And you'll learn all aspects about marijuana, and marijuana growing. And visuals. 'Cause it has a lot of pictures. – Billy

Cervantes' (2006) book, *Marijuana Horticulture: The Indoor/Outdoor Medical Grower's Bible* came up in almost a third of the interviews. It was by no means the only printed source available:

Well one of my favorites, that's how I learned about breeding, is the Marijuana Botany, by RoBeth Clarke. –Butch [Clarke, 1981]

Despite the illicit nature of their content, none of the growers complained that these books were difficult to come by, even many decades ago when some members of the sample first used them. Respondents also pointed out specialty periodicals devoted to marijuana production:



Um, a guy that, like, a lot of growers started reading was, uh, Jorge Cervantes. That's his pseudonym. I forget his real name. He would advertise out of High Times magazine. – Colorado Stephen

*High Times* magazine is so ubiquitous that it would have been surprising if it had not come up in the interviews. Additionally, respondents were quick to point out the myriad of internet resources currently available:

Well, the internet is just, there's a plethora of information. There are sites that you can go on where, I mean, there's one called Grass City Forums. There's, uh, International Canagraphic. And these people just get online like they would any subject, whether you're talkin' about cars or music. And trade information and knowledge and experience. – Colorado Stephen

Beyond this, however, a few growers highlighted the importance of seeking out published resources on agriculture or gardening beyond those dedicated to marijuana. Wildstar in particular took issue with the idea of limiting his knowledge base to “marijuana solutions”:

[...] I have practically every book that's ever been written on marijuana. Read most of 'em, or parts of 'em. And what we're doing is, many, many years ahead of what the latest books say. Um, and, you know that's, that's another one of the promises is, you know, that – well, one of the things that we're tryin' to do, is we're tryin' to marry, and I think we did successfully to a degree, but we want to do it even more – so we would always say, what is the best commercial farming practice for this issue? And how do we apply that to marijuana? And, what a lot of people do is they say, well, we've got a problem, what's the marijuana solution? You know, and the marijuana solution is sometimes, you know, I'm gonna' call my uncle, the marijuana guru, and see what he did. Um, and it's sort of this, this anecdotal, um, not documented, um, you know, we're growing it in our attic space type knowledge. And so what we say is we want all that knowledge. But we also wanna' take the best agricultural principles and science of commercial, um, commercialization of plants, and apply it to marijuana. So, you know, we talked to commercial dahlia farmers, and commercial orchardists, um, you know, people growing plants in the area. How did they deal with frost? How did they mitigate against frost? How did they predict it? Um, and that had nothing to do with marijuana. It

had to do with farming. Um, and I think that's another reason we were successful. - Wildstar

Similarly, Washington Steve made sure to broaden the scope of his reading material beyond exclusively marijuana-based sources:

[BDL] What did you read? [In order to learn how to care for your plants]  
Um, any...basically just uh, any sort of biology and horticultural books. – Washington Steve

On one hand, this points to production of marijuana not requiring “special” skills. After all, to the extent that general plant knowledge is applicable, perhaps anyone could be a successful marijuana producer. On the other hand, general plant knowledge is still fairly specialized knowledge that must be learned in order to be usefully applied.

There are several reasons that media as sources of knowledge transmission are notable. First, sources like books and magazines avoid the interpersonal interaction that characterizes criminological thinking on how knowledge and skills are learned for criminal behavior. Second, in the process of avoiding face to face knowledge transmission, they also monetize the transmission of a criminal skill set through sales of books and magazines, or website subscriptions. Third, some forms of media, like social networking or internet chat rooms, permit knowledge transmission through interpersonal communication while avoiding face to face interaction.

**Solo learning.** A few members of the sample insisted that, at least in their early attempts at marijuana production, they learned on their own. This runs in contrast to prior research on commercial marijuana production, which insists that “To become a cannabis grower, one needs to associate with others who are already in the industry.” (Bouchard &

Nguyen, 2011; pg. 115) This assertion is only true in the most liberal association of the word “associate,” because for some of the respondents, the most prior association they had with anyone in the industry was with people who had sold them marijuana to smoke.

Even for respondents who worked in groups and readily noted the influence of other people or media in expanding their knowledge, personal experience and trial and error frequently arose as sources of learning. This was the case for Washington Steve, who had never worked as a solo grower but noted the importance of trial and error:

[BDL] How did you learn to take care of your plants successfully?

Uh, trial and error. [...]And, and reading.[...] Uh, marijuana’s not unique in the sense that it’s a plant, and all plants require certain things. Uh, so, if you’re educated, if you look into it and kinda’ figure out, uh, what the plant needs, and then through trial and error you can dial back or increase certain nutrients. Uh, dial back or increase certain environmental factors. Uh, and observe, uh, as you see what changes occur. Uh, you can change what you’re gonna’ do. – Washington Steve

Al, who was a solo grower at the time of his interview, considered himself a master grower by virtue of his experience:

[BDL] Okay. How’d you come to be a master grower?

Forty-five years of experience. And knowin’, knowin’ what good pot is. You know, if it’s, you know, you can get the prettiest plant in the world and it won’t do a damn thing to you. - Al

The idea of doing and learning everything on one’s own, by trial and error, harkens back to the idea of the rugged individualist of the West. But as with those individualists, Al’s experience did not occur in a social vacuum. Even early cowboys had others to rely on. As described in his earlier quote, Al was surrounded by other people growing marijuana when he began doing so himself. There is something to be said,

however, for learning about physical things by physically doing them. Like Al, Rob emphasized the importance of experience in learning:

[BDL] How do people learn how to take care of their plants successfully?

Um...you either have to have, just, just experience, um, uh, just like I, I've said, I started back in around, what 1980, something like that, and it's just a matter of the repeating cycle of growing year to year. And, um, gaining experience. And, and, and having a feel, for, uh, horticulture. And knowing, knowing something about what marijuana plants do in their growth process. But it's all a matter of just, experience. - Rob

Indeed, a combination of learning methods including personal experience was the most common way that respondents talked about learning to produce marijuana. THK includes this among sustained learning relationships and brief learning encounters in his description of how he learned to care for marijuana plants:

Um, well...about, fuck, six years ago? My friend, my first serious girlfriend's brother, he's like, come grow weed with me, man. And so I grew weed with him, and he showed me all his tricks of the trade. And he was just a beginner grower, and, um, most of the things I learn from is the – the only book I've ever read in my life, like, completely read, is the Hydroculture, whatever, the Grow Bible, is what I call it. And, um yeah, I read that. That was the first book I ever read. And I learned a fuckload from that. And then, um, just throughout the years, once you grow, you come up with problems. And every time you have a problem, you have to fix it, and then you learn how to fix it, 'cause you look it up, or someone tells you. Or, you go to a grow store and someone tells you how to fix it, or whatever, and every time you make a mistake you just learn, just like everything else, you know. [...] You gotta', just always ask questions. That's how I learned. Always askin' the dudes. [laughs] The OG guys. - THK

THK's description is instructive for multiple reasons. First, like THK, many of the respondents in the sample used a variety of knowledge sources, including other marijuana growers, stores, media, and their own experience. Second, not all technical mentoring is created equal. While THK had a sustained learning relationship with his first technical mentor, he learned more from reading and, eventually, from other marijuana

growers and his own experience. Third, despite his extensive contact with technical mentors, THK considered his own experience as an important part of his learning process. Ultimately, while transmission of skills and knowledge between people either directly through person to person interactions, or indirectly through books or other media were undoubtedly crucial for many of the respondents, the experiences of the respondents in the current study make it questionable whether person to person learning is strictly required in order to be successful at producing marijuana commercially.

**Full sharing as problematic.** Despite respondents' assertions that they could and did go to other marijuana growers for knowledge and help with technical problems relating to marijuana production, there was not a completely free and open exchange of information. The most common form that reluctance to share information took was the protection of nutrient and fertilizer "recipes" that respondents considered proprietary. MacGuyver, for instance, was willing to freely share general information with other growers but not specific keys to producing a high quality product:

And so I will share vital information with people, you know, and I don't charge for it, but there are certain things that I will not – you know what, no, that's my information. I put money on the line. I will benefit from it. - MacGuyver

This was a point of concern among members of the sample during their interviews as well. Respondents requested (and received) reassurance that specific recipes would not be disseminated as a product of the research. From a business standpoint, this secrecy makes sense. While they may be friendly with each other, as many of the respondents in this sample were, different groups of producers are still competing against each other in the marijuana market.

Growers believed that plant care and fertilizer recipes affected quality. Starr and other respondents reported that using organic recipes produced the best results:

You can use stuff that's organic, and then they have stuff that's not, I guess. I like making my own stuff. My worm castings, and I have my worm bed. And the teas that you make. You know, you just kind of – I go catch a fish, and I put that fish, you know, all of the guts and bones and stuff? And I put it in my teas. Or rabbit poop. Or chicken poop. You know, it's just, yeah. You don't really have to go buy all of that crap that people put in there. Yeah. And you can tell when they do, um, when you smoke it, you can tell, like if they used some chemical. [...] Yeah, you can tell if they overdo it, yeah. Yeah, it's just the way it's just prepared, or whatever. Yeah. - Starr

There was disagreement among the respondents about what fertilizing recipes and techniques provided the best results, but this is not surprising considering that the variety of combinations of nutrients and fertilizer additives used in the sample. While some of the growers reported ingredients that their recipes had in common, there was no consensus about which commercially produced fertilizer or homemade fertilizer concoction would yield the best quality or quantity, and several of the respondents reported varying their recipes from season to season as they acquired new ingredients or saw improved results.

Part of the interview schedule was directed at price of marijuana and how it was determined. While respondents could typically offer prices for varying quantities of marijuana, often at both retail and wholesale prices, they were less clear about how prices came to be set. There was a general consensus that marijuana that was perceived to be higher quality could receive a higher price. "Quality" and "market rates" were the two factors that respondents most often used to explain how prices were set. Market rates were seen as out of the growers' control:

[BDL] How do you determine price?

[Rob] Just by what the market will bear.

[Carly] Just what the market's priced. We charge the same as everybody.

While market rates were perceived to be beyond respondents' control, quality was a factor that they felt they had more control over.

[BDL] Okay. How is price determined?

Quality.

[BDL] Can you tell me a little more about that?

Well, your seeds and the way you grow them and how much water and how much fertilizer you give 'em is what makes them either bigger or smaller and good or bad. See you can take Mexican seeds, see, and grow 'em right and they'll be really good plants. But, genetics is a wonderful thing. You can get some really good seeds and clones right now.

[BDL] So do you, you set the price, or do you test it first and then set the price or?

Oh, yeah. Oh yeah. I see what quality, yeah. A lot of times you can tell by looking and smelling because the crystals – the more crystals there are on it the more THC it has really.

[BDL] Okay. And then do your customers just sort of take your word for it, or do they test it?

Oh, they better try it.

[BDL] Before they buy it?

Before they pay that price, they want to try it, yeah. – Beth

Similarly, Washington Steve's organization focused on improving quality as a way to maximize price in a market that was becoming increasingly crowded:

Uh...in my mind, we focus on what we can control. So all we can control is producing the highest quality product we can. Uh, and focusing on our brand. And as long as those two things are there, the market, there's gonna' be a market for top quality. That's just the way it is. And the way it's always been. Uh...they're finding with, a lot of the outdoor crops that're out there, they mass produce the lowest quality, and they're sitting on hundreds of pounds with no way to move it, because nobody wants it. Uh, so you gotta' create a product that people like, and that people want, and that's consistent. I don't know that they're gonna' do that. – Washington Steve

There was, therefore, a monetary disincentive to sharing one's full knowledge of how to produce a high quality produce in the commercial marijuana market. Absent in the current study, however, was a desire to prevent people in the same organization from having access to information. Mad Scientist described educating subordinate group members as part of his organizational role:

So you have me, and you have the dude that brought me in on the top. And then I'm the one that grows it all. These are helpers that kinda' learn, and you know they have some plants here; they're learnin' how to group it under my rule. And these are gonna' be the people that end up bringin' to trim it all out. And then there probably could be even more, that some are there that go to, you know other people that help out, too. – Mad Scientist

Even people in more subordinate positions in Mad Scientist's group were encouraged to learn more about successful marijuana production. This stands in contrast to previous work finding that, in some instances technical knowledge was kept from subordinate group members (Bouchard & Nguyen, 2011). Alternatively, one respondent had begun to monetize his marijuana production know-how. Rather than share information freely, MacGuyver had begun training new marijuana growers for a fee:

[...]And, you know, I do have people, you know, because I have a, uh, grow company, that I'm puttin' together, where if you want to do what I do, and then you're going to pay me for all the education that I've amassed over the years. And so I can make anybody, if you follow my recipe, I can make you a master grower. First time out.

[BDL] Okay, so you are settin' it up to be like a school, so you get paid to tell everybody how it works?

Not really a school. I work more on an individual basis. You know, I come to you, you tell me what your needs are, what you're trying to do and I'll tell you how much it's gonna' cost you.[...] And then you know, you're payin', you're really payin' for my knowledge.

[BDL] And so then, because you're doin' that, that just helps you not tell, just anyone?

Oh, well, yeah, I'll tell a certain amount. But then I've got secrets that you have to



pay.[...] You have to pay for it. Because I won't do, it cost me tens of thousands of dollars. - MacGuyver

MacGuyver thus set himself up as a technical mentor, and was able to profit from it. By using his knowledge to help set up new growers, but maintaining some proprietary secrets, he was able to both make money and keep an eye on potential new competition, possibly even controlling what new growers learned. This did not keep members of his own organization dependent, but did help to protect his interests outside of his organization.

## **Discussion**

The findings in this chapter demonstrate the variety of ways in which commercial marijuana producers reinforce group norms and gain the skills and knowledge necessary to accomplish their goals. It is important to note that the results address both how illegal organizations handle dissemination of knowledge, but also how individuals can acquire the relevant knowledge in the absence of structured organizations through social milieu or media. Positive reinforcement came from other members of marijuana grower's current organizations, other marijuana growers, and customers. It took the form of monetary rewards, organizational advancement, and positive reputation. Negative consequences in this sample, in contrast, came primarily from members of one's own organization. They most often took the form of relationship dissolution, but also included reputational damage both inside and outside of commercial marijuana production. There are two additional points about negative consequences that should be noted. First, none of the growers described violent retaliation in their interviews, even in response to theft or destruction of crops. This stands out because violence as a means of differential

reinforcement has been documented in other kinds of criminal groups (Akers & Silverman, 2014), and also because of media focus on violence in the marijuana industry (Boyd & Carter, 2012; Griffin, et al., 2013). This is not to say that violence is never a part of differential reinforcement among commercial marijuana growers, but its absence from the experience of the members of this sample suggests that it is not typically a go-to method of ensuring compliance with group norms. Second, none of the respondents discussed negative consequences from buyers, although lower prices or relationship dissolution or at least reputational damage are almost certain results for commercial marijuana growers whose product fails to meet expectations or who violate norms in other ways. This is likely an artifact of the survey instrument, which addressed price and quality but not instances of failure to meet buyer's expectations. The data available in the present study, however, does illuminate methods of differential reinforcement by which commercial marijuana growers communicate group norms.

The present study also sheds light on the ways in which modeling and imitation operate to transmit skills and knowledge about how to successfully produce marijuana. While this knowledge was often passed directly from person to person, per the specifications of social learning theories, it also occurred via print and internet materials, without another person directly on hand. Furthermore, some of the growers used knowledge acquired from sources intended to benefit other endeavors, like legitimate agriculture. This points to an issue not generally addressed by social learning theories: if all of the active industry participants were rendered suddenly unavailable, interested people could still learn to produce marijuana commercially without resorting to trial and error. The relevant information is already widespread and readily available. This presents

some additional difficulty for abolitionists, who would undertake a Sisyphean task in attempting to prevent the availability of such knowledge. As soon as one magazine is closed or one YouTube video removed, another will pop up. Ultimately, the availability of a variety of learning methods, whether through sustained learning relationships, briefer learning encounters, media sources, or simple trial and error and experience, make acquiring the necessary skills and knowledge to produce marijuana are easier than ever.

## CHAPTER 6

### COMMERCIAL MARIJUANA GROWERS' COMPLIANCE WITH STATE REGULATIONS

#### **Introduction**

From the previous two chapters, we have an idea of the characteristics of those who grow marijuana for sale and how they learn to do it. This chapter focuses on how the marijuana growers in the study operate their businesses to work with, around, or against state laws regarding marijuana production and sale. Using the growers' own explanations of their behaviors, the chapter situates decisions about whether and how growers comply with state laws, as well as their motivations for participating in the industry, in the theoretical frameworks of rational choice and techniques of neutralization. In this sample, the majority of growers intentionally complied with some if not most of the state laws regulating their products. In contrast to this "partial compliance" group were a minority of individuals who fell on opposite ends the spectrum, either rejecting or fully embracing

compliance with all state laws regarding commercial marijuana production. The final portion of the chapter discusses patterns of risk management and techniques of neutralization among the three groups, as well as implications for both the growers and their governments in the final portions of the chapter.

### **Rational Choice and Techniques of Neutralization**

There are two theoretical frameworks most usefully applied to commercial marijuana growers and their law-abiding or law-breaking behavior. The first is rational choice theory, which, briefly, contends that all criminal behavior is the result of deliberate decision-making on the part of individuals who rationally weigh the costs and benefits of obeying or breaking the law (Cornish & Clarke, 1986). The second is techniques of neutralization, which suggests that in order to break laws people must somehow rationalize their behavior as acceptable in order to avoid guilt (Sykes & Matza, 1957). Each theory is briefly discussed below in relationship to commercial marijuana growers.

Rational choice theory has multiple applications to commercial marijuana growers. First, the theory fits the action fairly well, particularly compared to some other types of crime. Growing marijuana for sale takes a considerable amount of time, effort, and resources. It is not quick. Growers have plenty of time to make considered decisions about whether and to what extent they wish to participate. This differs from other crimes like armed robbery, which can happen quickly and under considerable emotional pressure (Wright & Decker, 1996). Second, rational choice theory allows for the actor's considered costs and benefits to be any number of things that the actor finds relevant to the decision to violate the law (Cornish & Clarke, 1986). In this case, as the chapter will

explain, risk management is important to the growers in the sample. They consider, among other things, the likelihood of getting caught, competing federal and state laws, and the costs of compliance with state laws (for example, licensing fees); and on the other hand, the amount of money they stand to make. In this manner, rational choice theory is not incompatible with techniques of neutralization. Third, rational choice theory encompasses the concept of risk management, which is particularly applicable to decisions about law following/breaking when growing commercial marijuana. Because of these applications, rational choice theory provides a useful framework for examining the extent to which marijuana growers comply with or break state laws.

Techniques of neutralization serve to enhance the rational choice model when it comes to growers. As originally set forth, there are a limited set of techniques defined by the theory, which include denial of harm, denial of victim, appeal to higher power, condemnation of condemners, and rejection of responsibility (Sykes & Matza, 1957). Originally set forth as a theory of juvenile delinquency, techniques of neutralization have since been used to explain a variety of adult law-breaking, including crimes ranging from sexual assault to corporate crime (Piquero, Tibbetts & Blankenship, 2004; Weiss, 2009). As will be shown, all of the five techniques of neutralization are used by growers to justify their decisions about following/breaking state laws. Techniques of neutralization provide lawbreakers with ways of explaining their behavior to themselves and others that make their behavior acceptable, or at least less objectionable. Again, since marijuana growing takes months, growers have plenty of time to consider what they are doing, and they need a way to make sense of their law-breaking that allows them to feel comfortable with themselves. Neutralization provides a variety of ways for growers to explain to

themselves that, essentially, they really are good people after all. The theory works especially well in conjunction with rational choice, which enables growers to make cold calculations about breaking the law, while techniques of neutralization are there to cushion the consciousness from the social improprieties of doing so.

## **Results**

Growers in this sample were not uniform in their decisions to comply with state laws. For simplicity, this chapter splits growers into three groups: full compliance, partial compliance, and no intentional compliance. Partial compliance is the modal category, with two-thirds of growers falling into this group. As the modal category, it will be discussed first. No intentional compliance is the second most frequent compliance style. Only three growers interviewed were in full compliance with state laws. Table 4 depicts the sample in terms of compliance, organized by state, gender, and compliance group. In the table, X indicates that the respondent was in compliance with state laws in that area, regardless of intent to comply.

### **Partial-compliance group.**

*Sample description.* Of the growers interviewed in this sample, seventeen were in deliberate partial compliance with state laws regarding marijuana production and sale. This group of marijuana growers is distinct in that the participants deliberately, purposefully complied with some or even most state marijuana laws while intentionally breaking others. These included thirteen of the fourteen growers in Oregon, nine of the eleven growers in Arizona, and two of the three growers in Colorado. This largest category of respondents also includes the largest number of women: five of the nine

active female growers. Partial-compliance growers had a fairly wide range of size of operation, from growing less than ten plants to upwards of fifty at a time. Organization sizes and styles also varied; some were limited to individuals or family members, while others employed outside help for growing and/or processing.

*Areas of compliance.*

*Obtaining documentation.* Participants who were in partial compliance with state laws most often discussed licensing and limiting the number of plants grown as areas of compliance. All four states had different laws regarding licensing and allowable quantity of marijuana at the time of interviews. In Oregon, growers generally found the process of getting licenses to grow marijuana to be fairly easy and straightforward.

Uh, I just went into the doctor. Er, we found out, like there was a billboard or something [at the doctor's office] that said, get your weed card! And we were just like, oh shit! - THK

Furthermore, the Oregon growers noted the ease of maintaining their licenses.

[BDL] Do you have a license to grow?

Yeah.

[BDL] Um, and who issued it?

The state.

[BDL] And how'd you get that?

Um, by, my doctor signin' off on it. And then when you fill out the paperwork, if you wanna' be your own grower, you just write in there.

[BDL] Okay. What do you have to do to maintain the license?

You have to have your doctor sign it every year. You see your doctor once a year. And then you have to pay the, the fee. Every year, to renew it.

[BDL] Do you have to keep any records of what you grew to maintain your license?

Nothin'. - Violet

Even though the process of getting a license was perceived to be easy, there was some concern about increasing costs:

And it's gotten a lot more expensive this year! Like, when I first started, it was so cheap to get your card. It was like, two hundred bucks, I think. Maybe three hundred. But now it's like, double that. It's kind of ridiculous. - THK



**Table 4: Areas of Compliance with State Laws**

Note: X indicates compliance with state laws, regardless of intent.

	Pseudonym	Plant Count	Documentation	Siting	Sales	Firearms	Compliance Group
Arizona	Beth	X				X	Non-compliance
	Carly					X	Non-compliance
	Patricia					X	Non-compliance
	Sheila					X	Non-compliance
	Ben					X	Non-compliance
	Joe					X	Non-compliance
	Phil	X				X	Non-compliance
	Mitch						Non-compliance
	Butch					X	Non-compliance
	Charlie	X	X	X	X	X	Partial Compliance
	Al	X	X	X	X		Partial Compliance
Colorado	Elise	X	X	X			Partial Compliance
	The Dude	X	X	X		X	Partial Compliance
	Sean					X	Non-compliance
Oregon	April	X	X	X		X	Partial Compliance
	Starr	X	X	X		X	Partial Compliance
	Tara	X	X	X			Partial Compliance
	Violet	X	X	X			Partial Compliance
	Billy	X	X	X			Partial Compliance
	Eagle Fist	X	X	X			Partial Compliance
	Jack	X	X	X			Partial Compliance
	Kepuha	X	X	X			Partial Compliance
	Mad Scientist	X	X	X			Partial Compliance
	Rusty	X	X	X		X	Partial Compliance
	Swarly	X	X	X			Partial Compliance
	THK	X	X	X			Partial Compliance
	Wolf	X	X	X			Partial Compliance
Rob						X	Non-compliance
Washington	MacGuyver	X	X	X	X	X	Full Compliance
	Steve	X	X	X	X	X	Full Compliance
	Wildstar	X	X	X	X	X	Full Compliance

The requirement that, in order to grow larger quantities of marijuana, a grower must have designated, legal patients has given rise to different ways of connecting growers and patients. Some growers paid for patients to get medical licenses and list them as the designated grower.

[...] 'cause we'll buy our patients' cards, we'll pay for 'em. We'll help 'em out. I guess some patients are working for the state, the state'll help 'em out. But uh, you know, if you had like Oregon Health Plan they deduct like fifty dollars or somethin' off of your card. But you know, some people have their card and need to get it renewed, it's like, 'here's some money, let's go get that taken care of and then you don't have to worry about it.' - Wolf

In contrast to the experience of Oregon growers, Al found getting a license to grow marijuana in Arizona to be a challenge:

Well I just think they're going about it wrong, with the uh... with who they're givin' the permits to, how they're distributed. Uh, it's difficult now here in Arizona, it's difficult now to get it. There's three little dispensaries, and twenty dollars a gram, and everybody's worried about it. The people, I knew the president of NORML, uh, in Tuscon, he, that just give up on everything. 'Cause they put a dispensary next to her, so she couldn't grow. [...] It's a trap. See, twenty-five, you gotta' be twenty-five miles away. [...] That's why people go looking for land to rent in [interview town name]. All they gotta' do is put an address down. I just don't like the way it's set up. Uh, they could make it a lot simpler.

[BDL] All right, well then that was my next set of questions. So you have a personal use license?

Oh yeah.

[BDL] Issued by whom?

State of Arizona!

[BDL] How'd you get it?

I went down, with my medical records, to a, to a doctor that was a marijuana doctor. He gave me a referral prescription to get it. - Al

The distance requirements that Al notes severely limit the number of legally compliant marijuana growers in Arizona who do not work for dispensaries, as more than 97% of the population currently lives within the 25-mile limit (Arizona Department of Health Services, 2014). While he himself lives outside of that limit, his mention of people using addresses outside of the 25-mile limit without actually living there describes one way that some growers get around the distance requirement. In Colorado, two of the growers in the sample had previously obtained medical licenses to grow marijuana, but chose to let them lapse when growing recreational marijuana at home became legal in that state.

I don't need one. It's recreational. I could get a medical. I've got piles and piles of medical, um, reasons that I could get it, but, I don't need to. – Elise

Similarly, the third Colorado grower cited allowable recreational marijuana as his reason for not having a license to grow or use marijuana.

[BDL] Do you have a personal use license?

No.

[BDL] Why not?

A personal use license?

[BDL] Yeah.

Because I don't need one livin' in Colorado. – The Dude

The choice to not get a license when not strictly required, even when obtaining one is possible and even easy, speaks to a desire for privacy and a lack of complete trust in a system that is not federally legal. These growers were not comfortable with being on

a list that might be read by the federal government. The contradiction between state and federal laws thus acted as a barrier to full compliance in these cases.

*Documentation and number of plants.* Licenses to grow marijuana and the number of plants grown were frequently linked in the minds of growers. Both came up often when growers discussed following the rules of their states. In the case of Starr, the two were so linked that when asked about how many plants she was currently growing, she answered in terms of the number of licenses she had.

[BDL] Okay. So how many plants are you growing at home right now?  
We have four cards, so four times six...  
[BDL] Is twenty-four.  
We have five [cards]...

[BDL] Plus your six is twenty-four?  
Yeah. – Starr

Mad Scientist had similar thinking:

So that we have eight patients. And eight, so we have eight patients that have six plants apiece. We have the cards in an envelope in there. – Mad Scientist

However, licensing and number of plants were not universally linked among the growers, particularly the Colorado growers for whom licensing was not a requirement. Elise stressed the importance of limiting the amount of marijuana she grew:

The main thing is to keep, in the right amounts, you know, so that you're not over your numbers, that's the main thing. - Elise

The Dude expressed the link between following the state laws and number of plants grown explicitly when asked why he chose the number of plants he had at the time:

[BDL] Okay. And how many did you get?

Six.

[BDL] How'd you decide how many to get?

Uh, the law. – The Dude

For growers like The Dude, keeping the number of marijuana plants below legal limits was such an obvious step that it did not bear additional explanation. However, it was more common in this sample, particularly for growers in states with mandatory licensing, to describe their justification for limiting the number of plants. For instance, stories of growers who obtained documentation but still grew more than the legal limit were nearly always told as cautionary tales. When participants spoke about times this had happened in their experience, it was almost always about other growers who had gotten caught by law enforcement. In describing her first experience working in the marijuana industry, Starr discussed a grower to whom this had happened:

But it was a big, huge garden. It was way overboard .... Yeah, it was a lot of people that worked out in this, where, yeah, this garden. And he had a lot of people that didn't have cards, and the stuff, and it was like a big deal back then, I guess. ... Um, I believe there was like over two hundred plants. Way too many. ... He's not doing it anymore. He actually left the country. [laughs] 'Cause he got in big trouble over this stuff, yeah. – Starr

*Alternative perspectives on documentation and number of plants.* In a few instances, growers also discussed limiting the number of marijuana plants that they grew as a way to demonstrate compliance with state laws in hopes of advancing a more

tolerant legal stance on marijuana nationwide. Al was provided an example of this perspective:

'Cause I wanna' see the laws change. I'm actually spending more money growing it to sell [legally] than I would have allotted myself out of my budget to buy it off the street. - Al

Thus, while Al uses state law as a shield, he also views himself as actively advocating for change at the national level by following Arizona laws. Commitment to following state laws prevented some growers from maximizing their profits. In Oregon, several growers had enough space and capital to grow more marijuana than allowed by their licenses. This is evident in Kepuha's response when asked how many plants he would be able to take care of:

No, it's uh, how many cards you have. You have to, have to be totally carded up for the amount of plants you have... – Kepuha

On the other hand, commitment to only growing the allowable number of marijuana plants did not encourage growers to cultivate only what they personally needed for medical or minimum income purposes. For instance, one of Swarly's primary reasons for growing marijuana was to provide the plants for a family member with cancer, yet he answered as follows:

[BDL] If it wasn't for her would you have grown less this year?  
No, I would still have grown the same amount, just because that's what I'm allotted. - Swarly

Even though fewer plants would have met his family's medical needs, Swarly justified growing a surplus to sell by appealing to the legal limit.

*Site requirements.* All three states in which sample members grew marijuana have regulations regarding site requirements that can be quite specific and restrictive. This rarely came up as a point of concern for growers in the partial-compliance group for several reasons. First, not all growers in this group had any input into where the grow sites were located. Garden tenders whose job was to watch over and care for the plants were typically hired onto sites chosen by a financier or other decision-makers. Growers in this category often lived at the grow sites, but did not choose the location themselves. This was Jack's situation:

No. I didn't choose this [site], I didn't, I came into this job, yeah, already established. You know what I mean? – Jack

To the extent that garden tenders had input into siting decisions, it was typically in choosing where on the property to place the plants:

[BDL] Did you have any part in choosing a site?

No...I did have a part in choosing where we planted the ones on the site that we have. That make sense?

[BDL] Uh-huh. So how'd you do that?

By lookin' at the sun and seein' how much sun, the best spot for the sun. How many plants we have. The space between the plants that we need, and where it'd all fit. – Mad Scientist

Second, of the partial-compliance growers who did choose their own locations for growing marijuana, several had limited means to choose a property based solely on its

attractiveness as a grow site. These growers, when asked how they chose their site, tended to default to a version of “it was what we had on hand.” Violet was typical in this regard:

Um, ‘cause I own my house, and that’s the only place I have to do it. – Violet

A third group of partial-compliance growers, however, did choose to rent or buy property with an intentional eye towards growing marijuana.

I found a... I was introduced by a friend, and I flew here from Arizona and picked the site. – Billy

Still, none of them explicitly talked about legality as a reason for choosing growing sites. It is likely that this was in large part due to the fact that, when obtaining licenses to grow, partial-compliance growers had to list the addresses of their grow sites and therefore believed that the state government, if not always the federal government, knew the location of their marijuana grow sites. Despite this, there is a glaring omission in terms of legality and risk management that growers who selected property to rent or buy specifically for growing marijuana ignored when discussing site selection and qualities: they had additional residences that were not at their marijuana growing sites. This was a quality they held in common with the financiers of the garden tenders in the sample whose bosses did not agree to be interviewed. When partial-compliance growers had the means to do so, they maintained residences separate from their grow sites. While they did not talk about this in terms of risk management, it is nonetheless an important risk reduction strategy when it comes to federal law enforcement. When federal agencies



raid drug production facilities, they can seize the assets there, including the sites themselves (Worrall, 2001). By maintaining residences away from their marijuana grow sites, growers who could afford to do so insulated themselves (and in some cases, their children) from residential disruption in the event of law enforcement intervention in their businesses. The garden tenders who lived at the sites would be at risk of arrest in such an event, even though they did not own the property themselves. Those who could both distanced themselves personally from risk of having their residence seized and put the risk onto others in their employ when possible. Rather than grow marijuana at her own residence, for example, April asked to use a friend's property:

[BDL] How did you choose your site?

I asked a friend, and it was an immediate yes.

[BDL] Okay. Why did you ask that friend?

Because he uses marijuana, and he's really open. And he's a farmer. And he was excited! [laughs]

[BDL] Okay. Why was he excited?

Well, I think he had visions that, um, us being part of his land, in the beginning when he first bought the land. And nobody had approached him, so I when I approached him he was so excited. "Yes! Let's do that!"

As April mentioned, landlords were often willing participants, knowledgeable that marijuana was being grown on their property. Still, the landlords were usually not licensed to grow marijuana themselves, and it is debatable whether they would assume responsibility in the event of law enforcement action. Although the partial-compliance growers did not specifically mention legal site requirements when discussion how they chose their grow sites or what made their sites good places to grow marijuana, their

responses to these questions frequently related to risk management in another way.

Specifically, seclusion was perceived as beneficial to a grow site.

[BDL] Okay. All right, what makes your site a good place to grow?  
Privacy. And...um...ah, we'll just say privacy, that's fine. – Billy

Seclusion or privacy minimized risk in three ways: by making the grow sites less accessible to thieves; by making them less accessible to law enforcement; and by minimizing exposure to neighbors who might constitute risks either as potential thieves or as potential law enforcement informants. Jack expressed a desire to be further from his neighbors:

[BDL] Okay. Is there anything that would make [the grow site] better?  
Neighbors a little further. I know I just said, but yeah. Yeah. Sometimes it does make me a little, like, uncomfortable sometimes, you know what I mean? Just having people. Even though it's not that close, still, like, I don't want anyone by me.... And, yeah, I think they just don't approve of what's happening next to them. But it's so, it's not like, you know what I mean? It's like if it was happening way over on the other side of those trees. You don't even [laughs. You can't see what's there.] You know? So that makes me a little bit nervous I guess. Just, neighbors not approving of it. Yeah. - Jack

While growers in the partial compliance group were glad to have less visible/more hidden grow sites, they did not take additional measures to hide the plants themselves. When describing their outdoor gardens, partial-compliance growers talked about clearing trees, laying out their gardens in organized plots, and fencing them for protection from animals. This left them vulnerable to overhead surveillance, but as mentioned, they tended to think that the state was already aware of their locations due to their licensing.

[BDL] Do local law enforcement officials know about your site?

I'm not sure, um, we're not hidin' anything. It's all, uh, you know, registered with the state, so. And it's not like we went to the, the cop station and told 'em, that, you know, we're here, to the cops, but, you know, it's all out on public record. – Mad Scientist

There was a single instance which a partial-compliance grower mentioned legal site requirements as part of his decision-making process for his site. Most growers discussed fences as security features, but Rusty viewed his more as a site requirement:

Uh, well, I'm pretty sure that's the law. You gotta' keep it, you're not supposed to be able to really see it [the marijuana] when you're driving by. – Rusty

Rusty's concern with following state law extended to features of his business beyond licensing and numbers of plants. Growers' efforts to conform to state site requirements serves the growers by minimizing risk of law enforcement intervention, and bodes well for efforts to limit locations where marijuana can be grown. But this was an isolated instance, and it is perhaps more concerning that, when possible, partial-compliance growers are physically distancing themselves from their sites and hiring garden tenders to assume that risk.

***Partial compliance as risk management.*** The primary reason that growers in this sample paired licensing and plant numbers as areas to obey state laws was to minimize the risk of arrest. This is precisely the kind of cost/benefit analysis that rational choice theory addresses. Growers were especially concerned about site inspections by law enforcement.

I have all my papers, everything like that. I was actually going to, um, laminate, take a copy of my card and laminate and everything like that for the house and put it out

on my pots. So that they, so if anybody did come by, you know what I mean, I could say, “yeah, these are mine.” You know what I mean, those are mine, right there, and kind of have like a nice, you know, visual exposure for them. I don’t know. – Swarly

Swarly was so concerned about a potential site visit by law enforcement that he wanted to go above and beyond the minimum requirements of the law to provide a visual aid for law enforcement officers demonstrating his compliance. Doing so, in his opinion, would decrease his risk that officers would perceive him as breaking any laws - which, as described later, he actually was. Wolf, below, extended his faith in his license as a form of risk reduction for law enforcement to working in other marijuana gardens, even those in which he was not technically the licensed grower.

I was like, ‘Well, I’m gonna’ be living at my parents, taking care of these plants, and it’d probably be better like, even though I am on, like a, a resident of the house, it’d probably be better if I was also like at least some form of grower or caregiver.’ And also it just helps, because this is the type of work that I do, if I go to another garden to do work, it’s just nice. I’ll have that in case, for whatever reason, if a Sheriff has to come out and do somethin’, and needs to check everybody out to make sure you’re supposed to be there, at least I know I can be there. Don’t have to have that, that worry. – Wolf

His faith is not necessarily justified, but does illustrate the idea many growers had that having a license, any license, would be an effective means of reducing the risk of arrest for growing marijuana. Tara, below, believed in the protective power of a license to cover her children as well.

Just like, having our cards, and, you know, doing everything legitimately.  
[BDL] Why is that important to you?  
Because, the kids. Mainly. [laughs]  
[ BDL] Well, how so?  
Um, because, I’m just scared of what would happen, you know, if we got caught, or, if we weren’t doing it the right way, like, would they take my kids away? You know, I wouldn’t, like, that would just kill me if somethin’ like that happened, so. – Tara

Again, this faith is not necessarily justified, particularly in the event of intervention by federal law enforcement. Additionally, state child protection agencies may or may not consider a license to grow marijuana an acceptable protection for children of growers. While growers viewed licenses to grow marijuana as means to reduce risk, they may also reinforce growers' commitment to following some, if not all, laws:

Meaning, like, I don't really want to get pulled over, and I don't wanna', I don't wanna', um, step out of line. I want to obey the law. I like respect it more, actually, now that I have a card, 'cause I don't really wanna' get involved with the law ever. – Billy

Billy's response indicates his commitment to mainstream cultural values and norms. This commitment is an integral part of neutralization theory, because without it, lawbreakers would not have to rationalize why they broke laws. Obtaining a license both reinforced Billy's respect for mainstream norms while providing him with a rationalization for breaking federal law – that is, it is legally acceptable in his state, so it must not be that bad. Ultimately, licenses and limited numbers of marijuana plants become psychological, if not always actual, shields for the growers. Al put it most succinctly:

I'm following the rules! They can't bust me for nuthin'! – Al

***Partial-compliance growers: Areas of non-compliance.***

*Areas of non-compliance: Sales.* At time of interviews, all three states in which growers were in partial legal compliance prohibited growers in these circumstances from selling marijuana. Despite this, all twenty growers who were in partial compliance sold

marijuana in various forms. Their takes on why they sold marijuana tended to fall into three general categories that relate to both rational choice theory and techniques of neutralization. These three categories, discussed in detail below, are: the desire for money; the idea that the growers themselves were helping people by breaking the law; and the feeling that growing marijuana for sale is enjoyable.

*Perspective 1: Material rewards.* The most common reason that growers in the partial-compliance group gave for growing marijuana for sale was that they needed or liked the money. Reasoning about the desire for material gain, however, took a variety of forms.

Um...just because it's hard, you know, like you have to have something extra goin' on these days or it's really hard to make it. It's like, we do it for things that we need, you know. – Tara

Tara's assertion that legitimate means of earning income are insufficient relates to the idea of denial of responsibility in neutralization theory. From this perspective, law breaking was out of the offenders' control; they were victims of more powerful forces. In Tara's case, these were economic forces, and for Swarly, below, they were a combination of economics and their relationship to what he perceives as educational discrimination:

Really, because I don't have my education right now, and that's what I'm trying to work for. And, even in America my high school diploma is not, not accepted. I have to go back to school for my high school diploma. – Swarly

Both Tara and Swarly insisted that, for one reason or another, legitimate means of earning enough money to meet their needs are not available. Therefore, they must turn to

a quasi-legal industry in order to support themselves. In contrast, other growers asserted that growing marijuana for sale was simply a way to make more money than they otherwise would have, even though they could support themselves without participating in the industry. Mad Scientist and Billy, below, both expressed this opinion.

Hell it, it makes good money. I need money. That's one of the biggest reasons. You know, right now I couldn't see makin' money any better way than this. - Mad Scientist

That's because the money is better at the rate that I'm doing it, probably than some even, at least up to the point now, I think, where it's better than your average income. – Billy

Billy and Mad Scientist both joked about their income from marijuana being higher than the income of doctors and lawyers. Billy had previously had his own small but successful construction company. Neither one of them expressed the same sort of fatalism or lack of control over their own circumstances as Swarly or Tara. In these cases, growers' rationale fit rational choice theory better than neutralization theory. In their personal balance of risks and rewards, the tangible, monetary rewards outweighed the risks. There was no further attempt to rationalize their behavior to themselves. Kepuha's comment, below, also expressed the anticipation of monetary reward, but complicated the issue with intangible rewards and an appeal to higher loyalties.

I'm looking forward to doing to, to prosper my life in the end. And, I mean, that's, I feel, is an excellent way to do it. You get a lot of money to start off a career, and then you continue your career, you continue doing what you love to do, just growing weed, and smoking weed, and taking care of your family that way, I don't know. – Kepuha

His remarks were more complicated than those of the other growers discussed in this category. Money was clearly a motivating factor, but so was love of his job, which is an intangible reward. Moreover, he brought in the idea of taking care of his family, which ties into neutralization theory's technique of appealing to higher loyalties. Using this technique of neutralization, he was not breaking the law solely for himself, but to provide a benefit to other people who are important to him. This type of comment from growers is important because it defies easy oversimplification and points to the complexity of human desires and reasoning.

*Perspective 2: Intangible rewards.* Intangible rewards were of a higher priority than monetary rewards for some of the partial-compliance growers. Wolf put it very simply when asked about why he participated:

It's fun. Definitely... - Wolf

It may be tempting to think that fun or enjoyment is more of a side benefit than a primary consideration for commercial marijuana growers, but the connection is easier to see when put into the broader context of these growers' lives'. At the time of his interview, Wolf, for example, was participating in growing marijuana for sale primarily to help his parents get their own growing business established, and helping friends on the side in order to have a place to stay and earn a little extra money between gigs as a performance artist. He made less than thirty thousand dollars from his most recent harvest with his parents, and money was clearly not as important to him as fun and freedom in his day-to-day activities. The difference in life circumstances between growers who focused



on intangible rewards and those who focused on monetary reward is striking when comparing Wolf to Mad Scientist and Billy, the latter two of whom who were making upwards of a hundred thousand dollars a year and had children to support. Fun or enjoyment, therefore, can be a more understandable goal than it may first appear. For a few growers, the community aspect of their marijuana-growing group was also enjoyable and motivating:

'Cause it just feels like a wonderful thing to be part of right now. And it's community, and, um, my little place in it feels really safe. – April

Weisheit (1991) explored the phenomenon of intangible rewards in his examination of the great lengths marijuana growers may take when producing a product. Indeed, growers in the current study also tended to go to great effort and expense to produce top quality marijuana, and they were often direct about their enjoyment in doing so. Starr was a good example of this mentality:

Um, because I enjoy it. Um...it's mother nature, really. It's...um...I really don't care about the feds, but I don't know. [laughs]

[BDL] What do you enjoy about it?

Oh, I love just watching 'em grow. And all the work you put into it. And what you put into your soil. And how natural, really, it is. Or I should say, "organic." [laughs]  
– Starr

Starr's delight in working with marijuana overwhelmed her concerns about federal intervention. While it is apparent that she had thought about the risks involved, she was dismissive about the risk of apprehension by federal law enforcement. Finally,

intangible rewards also took the form of enjoyment of the rebellion and freedoms that come with the growers' lifestyles:

[BDL]Knowing that the business is federal illegal, and that state regulations vary, why do you participate?

'Cause I like the tax-free income, and I've always been a little bit of a rebel. I like it. – Violet

Jack went to some length to explain this:

Um, it does have a little edge to it. You know what I mean? And I kind of like that part of it. I like that it has a little edge to it. Um, I've never been...I mean, I don't have like a problem, per se, with authority. But at the same time, it's like, if I don't agree with a law, or the way they run certain laws, or, then...I don't stop myself because of that. If I disagree with it, I'm probably gonna' take the outlaw path on it. You know what I mean? So, I don't know, I kind of like the little edge to it. I like that I don't have to pay taxes on it. I know some people see that as so wrong, but, I've also paid a lot of taxes in my life too, you know what I mean? I like that part of it. Um, I like that there's no time clock. I like that all the people I work with are pretty like-minded, you know? I like, I mean, yeah, I would say that I just like the freedom. I mean, my life is a camping trip. [laughs] You know? Really, and I like that. I like that, you know? It's helped kind of like, it's just helped me see – and I'm not saying just because it's marijuana. It's like, the whole scene has helped me just thing about certain things in life a little differently, maybe. Or, I don't know, seeing what I can get away with. Not that I'm trying to get away with anything, but, like I said, I don't agree with every law. So why should I, you know, why should I stop myself because of that. Uh, yeah, I, I thoroughly enjoy the lifestyle. Let's just put it that way. And again, it's more than just, oh I can smoke weed all day. 'Cause I know a lot of people think that's what people like me think about it. But it's not. It's so much more than that. If I didn't smoke weed, I would still love doing this. You know? And a lot of it is the freedom, you know? - Jack

While he ultimately focused on the freedom aspect, it is clear that he also enjoyed the “edge” that comes with the job. This enjoyment is consistent with personality traits of white-collar criminals as well, who endure similar durations of higher-risk environments in some contexts (Blickle, Schlegel, Fassbender, & Klein, 2006). For lower-income respondents like Wolf and Jack, the intangible rewards that came from producing

commercial marijuana constituted an important motivator for continuing to work in a quasi-legal business.

*Perspective 3: Helping people.* Growers also contended that their business was helping their patients and customers. In doing so, they employed Sykes and Matza's (1957) technique of denying that there are any victims to their crime in order to neutralize any guilt they may have over breaking the law. Mad Scientist asserted that selling marijuana helps people by making them happy:

You know, right now I couldn't see makin' money any better way than this. This is the most, least stressful, and helps millions.

[BDL] How so?

How so? 'Cause millions of people are happy. And you can't argue against a million plus satisfied customers, you know what I mean? – Mad Scientist

The idea that customers are happy and satisfied denies the possibility of them being victims. Other growers cast themselves as helping people who had been victims of the legal pharmaceutical industry. Rusty did this somewhat jokingly:

'Cause, I'm helping people. Trying to cure AIDS, which we're really close. We're not gonna tell you about that right now though [laughs]. - Rusty Shackelford

In contrast, Swarly took a serious, even heavy outlook:

My mother was a hell of a person before she got down and got on all the medicine and everything. I literally watched that take her life, you know what I mean? She was fifty-eight when she died. Like, it's, I'm, I'm strictly against, like, I'm so against pharmaceutical medicine. So you know, I wish that we could do this [legally]. – Swarly

The idea that pharmaceutical companies are the real criminals and that marijuana is the best real medicine pushes the rationalization beyond simply denial of a victim, and casts the growers as heroes of the people. For April, however, the idea of providing marijuana to people as a form of help was not so clear cut:

[BDL] Knowing that the business is federally illegal and that state regulations vary, why do you participate?

'Cause it just feels like a wonderful thing to be part of right now. And it's community, and, um, my little place in it feels really safe. And it's helping people. To some degree. I even question that, though, actually right now.

[BDL] Why?

Well, I don't know. Like, I'm evolving, and I realize that, the one thing that you have that is really important is a clear, thinking mind. And I don't think fogging it up with a substance is necessarily going to be healthful in the long run. And I really, I really like the idea of being drug free, so. – April

April had been using the idea that providing marijuana to people is helping them as a way to deny that there were any victims to her crime, but this technique of neutralization was starting to wear thin for her. If she is to continue to grow and sell marijuana, she will eventually have to contend with her growing acceptance of current norms in which marijuana is not universally beneficial.

*Discussion: Areas of noncompliance - sales.* The three broad perspectives on sales outlined here should not be considered mutually exclusive. Growers frequently employed a combination of risk/benefit analysis with techniques of neutralization in order to enter and continue in their current business. The combinations of tangible rewards, intangible rewards, denial of responsibility, denial of victims, and appeals to higher loyalties tended to reinforce each other, so that the loss of one rationalization would be unlikely to motivate the growers to change professions. A possible exception to this would be if

marijuana prices were to fall so drastically that the business became unprofitable for those whose primary motivation was on earning money. For instance, when Tara talked about how long she planned to continue growing marijuana for sale, the market made a difference:

Um, probably price-wise, you know, until it's not worth anything anymore. –Tara For those with a stronger combination of motives, or whose strongest motivating factor was enjoyment of the process, the possibilities of loss of income or incarceration seem unlikely to provoke growers to quit. Jack, who was motivated by money, enjoyment, freedoms of the work, and a rebellious streak, illustrated this perspective:

[BDL] Do you plan to continue?

Yeah, I do.

[BDL] For how long?

As long as I can? You know that's, if I get good at it, I'll just keep doing it. I mean, why, why not?

[BDL] What determines how long you can?

What do you mean?

[BDL] Well, is it like, till I'm physically too old to work? Or, until I get busted by the cops? Or what?

Well, I, kind of the physically too old I don't really think about that too much, honestly. But, yeah, until it get like, if it got to a point where it was like, okay dude, you're gonna' go to jail? I would probably quit, yeah. [laughs] But, I don't even know if I would then. I really don't know. I might just, like, pay my fines and go back to it. I don't know. But, I do like it. I mean there's like a certain freedom about it.

[BDL] Yeah?

Yeah. Really, there is. So, yeah, as long as my convictions tell me otherwise. Yeah. Yeah. - Jack

*Areas of noncompliance: Firearms.* A common site restriction among the states sampled was a prohibition against keeping firearms on sites where marijuana is grown. Despite this, several growers acknowledged keeping firearms on their grow sites. There were differences of opinion on why firearms were desirable/necessary to have on hand, as

well as differing reasons for not keeping them. Growers' thinking on either side of this issue shows how people can weigh the same risks and rewards and come to different decisions.

*Perspective 1: Firearms protect from wild animals.* Privacy was a valued commodity for marijuana grow sites, and growers reported that many of their sites were relatively remote. As such, the presence of wildlife posed potential threats. Billy discussed wildlife threats in his response to questions about anyone being armed at his grow site:

Um...I would say that the site, mainly the property, has firearms, or a firearm. Like, one firearm.

[BDL] Okay.

And that's only because there's bear, cougar, and other fucked up shit, probably, that I wouldn't even know about, but, just for protection of, you know, predatory animals. Otherwise, yeah, yeah there is. And that's just, I would say that would be based on the like, demographics where we live. Otherwise if it was up to me it would not. We've never fired it, how 'bout that.

[BDL] All right, if it was up to you you wouldn't have one. Why not?

I don't believe in guns and marijuana. Or any drug for that matter. Really, I don't believe in guns other than hunting. Now if I really felt threatened, then yeah, I probably would have a pretty serious gun collection. But I'm not that threatened. Someone needs it that bad then they can take it. – Billy

In the above instance, Billy considered threats from thieves, as well as a personal moral code against keeping guns for use beyond hunting. Ultimately, he allowed a firearm on his marijuana growing site to protect the growers from wild animals. However, he placed that decision in a context of low threat from other people, suggesting that his choice might have been different if he had perceived the risks differently.

Similarly, when discussing security measures, Swarly focused on guns as protection from threats by wild animals and dismissed countering threats from thieves by using guns:

[BDL] Okay, cool. Um, any security measures taken to protect the plants or the people growing them while they're growing?

Um, I mean, you know, locked gates. Um, the fence is for, is for animals. You know, it's not really gonna' keep anybody out [laughs]. Um, people, I mean, uh, we're really going off of good faith here. That's why we don't really bring a lot of people up here too. You know, like, I mean, we only have a gun in the house for animals, you know what I mean? I mean, if a bear came up here, there's a mountain lion up the road, that lives up here. Yeah, yeah. So I mean we try not to, try not to worry about that 'cause there's not really much you can do unless you kind of want to get into the things that we don't want to. Like we don't want to shoot at somebody.

[BDL] Why not?

Why?

[BDL] Yeah.

Because it's a plant! It's a fucking plant, okay? Somebody got their ass kicked at the bar over a cigarette the other day. A fucking cigarette! Like, I understand the moral, like he though [sic] the guy stole it, but it's a cigarette! Somebody really steals this [marijuana], somebody must need it a lot more than us. Like, that's the only way I think about it you know? – Swarly

Swarly even went so far as to provide a technique of rationalization to justify a hypothetical theft in his assertion that “somebody must need it a lot more than us.” In doing so, he employed Sykes and Matza's (1957) denial of responsibility rationalization to the imaginary thief, in which the thief should not be held accountable because he/she must really need the marijuana. By sticking to the idea of using guns only for wild animals, Swarly had set up his own technique of neutralization for having an illegal gun on the property – denial of harm. Since he planned to use the gun exclusively against animal threats, he rationalized, there was no harm done in breaking the law.

*Perspective 2: Firearms protect from people.* In addition to wild animals, growers also expressed concern over the possibility of people damaging or stealing their plants

and, in a minority of cases, discussed firearms as necessary to protect their plants and themselves from theft or physical harm in addition to threats from wild animals. The common techniques of neutralization in these instances were a mix of denial of injury, and denial of the victim. In most cases, the growers had never fired a gun at a thief, so they rationalized that there was no harm in having the gun. Additionally, should they ever use a firearm against a person, they would be justified in doing so because it would be protection for themselves and punishment for the thief/attacker (denial of victim).

[Why keep a firearm on the property?]

Look at the news! From some other idiot running around with a gun trying to kill me! Wetbacks, you also have rabid animals that come up. I got a, I've had to shoot two skunks in the last several years. Uh, and for protection. [digression about skunks] Yeah, yeah. I'm a shooter. NRA all the way. – Al

Above, Al distanced himself from potential thieves, referring to them not only as idiots running around with guns but also as “Wetbacks,” illegal immigrants coming across the southern Arizona border. The “idiots” are inferred to be reckless and of low intelligence, and therefore deserving of being shot if they attempted to rob him, and his use of the term “Wetbacks” sets potential thieves up as members of a group of people often reviled in southern Arizona, and who are already breaking the law. He also attaches himself to the NRA (National Rifle Association) a group that, presumably, he believes would find him justified in shooting a person trying to rob him. This further distances himself socially from potential thieves and legitimizes himself through the association, so that keeping an illegal firearm and even shooting someone becomes a justifiable, morally supported action, rather than a crime to feel guilty about. In other cases, growers were not



so explicit about guns being protection from theft specifically. This was the case for Violet, below.

[BDL] Is anyone armed at the site?

Yeah, I have, uh, yeah I own guns.

[BDL] Why?

Uh, actually, I have like – for protection. I have a gun safe. And we’re livin’ alone.

[BBL] Protection from, like, what?

Bad guys. [laughs] And I just like goin’ in the mountains and shooting guns. That’s the only way I’ve used a gun. I haven’t actually had to use it for bad guys. That’s good. – Violet

Violet used the expression “bad guys” to describe human threats, leaving it ambiguous as to whether she would use her firearms against people only if they were physically threatening her, or if she would use them in cases where she caught a thief. She was also quick to point out that the potential for shooting people was not her only reason for having guns, rationalizing that she would have them anyways because she enjoys shooting. This displaced her discomfort with breaking the law and her own potential for violence in having the weapons, and made having the weapons seem more acceptable.

Alternatively, Mad Scientist was explicit about keeping a firearm for personal defense against people and animals, rather than defense of his plants from thieves:

[BDL] Is anyone armed at the site?

Umm...I am, but I wouldn’t really say I’m armed. I have a black powder pistol that I like to shoot more for fun, but it can definitely protect me in case of, somebody tryin’ to come in and hurt me. Or an animal for that matter. Mountain lions out here...um, definitely...family of mountain lions that lives in this bowl. More scared of them than anything.

[BDL] Yeah, mountain lions are, they're scary!

Yeah. But not like I'd see it ever coming if I did end up getting' eaten by a mountain lion. They'd just pounce on me, like, four feet away. – Mad Scientist

Similarly to Violet, however, he was quick to minimize his pistol as something he would keep for enjoyment regardless of its protective potential. He also emphasized his fear of wildlife over his fear of people, even though protection from people came to mind first. His minimization of his lawbreaking in this instance went so far that, despite his acknowledging that he has a firearm at the site, has access to it, and knows how to use it, he did not consider himself armed.

In all cases where partial-compliance growers kept firearms at their marijuana grow sites, they had taken the precautions of obtaining licenses when required and keeping the number of marijuana plants they were growing down to those allowed by state law. As discussed, those precautions were widely seen as protections against law enforcement intervention, particularly in cases of site visits. It seems ironic then, that they would keep illegal firearms at their grow sites, when the weapons would almost certainly be discovered in the event of a site visit by law enforcement. Rather than irony though, this choice is a calculated risk. Growers reported that in their rural communities, law enforcement was sparse and would not be able to arrive quickly in case of an emergency. Between law enforcement officers finding illegal weapons in a site visit or not having a firearm on hand in case of threats to their persons or property, the growers chose to keep the guns.

*Perspective 3: Don't keep guns.* Among growers that did not have guns, two primary ideas emerged. First, guns posed too big a threat to people. Second, some growers did not keep guns on the property specifically in order to be in compliance with state laws. April demonstrated the first perspective:

And nobody has guns. We talked about it. Nobody's into guns at all.  
[BDL] Why not?  
Oh, 'cause guns kill people. They have weird energy associated with them. –  
April

Here, growers made a rational choice to minimize what they perceived as risks to their own safety from gun violence. While it kept them in compliance with the law, that compliance was not their first concern. For some other growers, compliance with state laws was the priority in their decision to eschew firearms at their grow sites.

[BDL] Is anyone armed?  
Like these guns? [Flexes muscles]  
[BDL] Yeah.  
No. (laughter) Only these biceps.  
[BDL] (laughter) Why?  
Uh, 'cause I don't think, you're not supposed to have guns with uh, on the same property as your grow spot. – Rusty

Rusty did not take a position on whether or not he thought guns would be useful on the property, but he was clear that his focus was on following the laws. In contrast, Starr openly expressed a desire to keep guns at her grow site:

[BDL] Is anyone at the house or in the garden armed?  
No.

[BDL] Why?

We're not allowed to. I have guns, in my gun safe. 'Cause I hunt. But um, we're not allowed to be armed. We're not allowed to have guns in our garden area. It would be nice if we could, for our safety. But, we just can't. – Starr

As with maintaining documentation and limiting the number of marijuana plants, the choice to not keep guns around the marijuana growing sites is a rational choice made to minimize risk of law enforcement intervention. In this case, Starr believed that she would be safer if she could keep a gun with her marijuana, but the risk of running afoul of law enforcement outweighed the risks of dangerous people or animals.

*Discussion: Areas of Noncompliance - Firearms.* Should these marijuana growers be arrested by federal officials in relation to their grow sites, the primary violation would most likely be growing the marijuana itself. Any firearms violations would be supplementary. While firearms at marijuana grow sites are thus not necessarily a law enforcement focus, the presence of guns at the sites nonetheless has serious implications for both the growers and law enforcement. For the growers, having firearms at the grow site in violation of state and federal laws presents a threefold risk. First, the violation of state law essentially negates the protection that their licensing provides, making them vulnerable to state prosecution. Second, the presence of firearms in the commission of a drug crime increases the mandatory minimum sentence under federal laws considerably (18 USC § 924(c)). Third, having a gun on hand creates the possibility of injury or killing someone with that gun, either intentionally or accidentally, a possibility that some growers were unwilling to face. This third risk is also relevant for law enforcement, who may be the ones on the other end of that risk. Growers in the partial compliance group were aware that they were not permitted to have firearms at their marijuana grow sites,

but those in this sample were more often than not willing to take the risks posed above in order to mitigate other threats to themselves or their plants from people or animals.

*Summary: Partial-compliance group .* The partial-compliance group, those respondents who deliberately complied with some, but not all, state marijuana regulations, made up the majority of the sample. The areas of state law with which they were most likely to comply were those involving documentation of themselves as marijuana producers and those restricting the amount of marijuana they could grow. They perceived compliance in areas as reducing the risk of law enforcement intervention in their business. In contrast, they universally broke prohibitions against selling marijuana, rationalizing a need for money, a belief that they were helping people by selling marijuana, and noting the enjoyment that came from participating in marijuana production. Partial-compliance respondents were mixed in their compliance with state prohibitions on keeping firearms at marijuana grow sites, with those that did so justifying their decisions on the basis that firearms protected them from dangerous animals or thieves. The partial-compliance group had marijuana sales and rejection of firearms restrictions in common with the noncompliance group. While their reasoning for doing so overlapped, as will be seen in upcoming sections, the noncompliance group had some unique rationalizations for doing so.

### **Noncompliance group.**

*Sample description.* Growers who were not deliberately in compliance with any state laws regarding marijuana comprise the second most common group in the sample. Eleven total members of the sample were in deliberate noncompliance, eight from

Arizona, one from Oregon, and one from Colorado. Four of the growers were women, all from Arizona. They are just under half of the women in the total sample. Crop sizes ranged from under ten to over forty plants, with under thirty plants being the most common. Only two of the organizations employed help outside of immediate family.

*Comparisons with partial-compliance growers.* These noncompliant growers conducted business, including selecting the number of plants to grow, siting, and sales decisions, without any intentional compliance with state laws, although they were occasionally in incidental compliance with some laws. In particular, those with smaller marijuana gardens were occasionally in compliance with state limits on plant counts, and most of the group declined to carry firearms. While none of these growers were in deliberate compliance with state laws, specific choices and rationalizations for noncompliance are especially relevant for their similarities and differences with growers in partial compliance. Faced with the same state laws, living in the same or similar communities, and incurring the same federal penalties if apprehended, noncompliant marijuana growers arrived at the decision to participate in the business for many of the same reasons that partial-compliance growers did, but employed distinctively different reasoning when it came to licensing and plant counts.

*Documentation.*

*Primary perspective: Rejection of documentation.* Documentation was a special point of contention for growers who were in deliberate noncompliance. They generally believed that licensing made them more vulnerable to law enforcement intervention than growing without documentation. These growers tended to be older, had seen previous

movements towards relaxation of marijuana laws come and go, and were suspicious of what they saw as invasive attempts at government surveillance. Below, Butch describes his optimism about legalization approximately thirty years ago, when he first started in growing marijuana for sale.

I planned to do it forever, and it's a lot, but, yeah, thought that it would've been totally legal by now, you know, I mean, way back then I really thought that it was, you know, a viable...uh...viable way to make a, a legitimate living. – Butch

Noncompliant growers often, and sometimes vehemently, expressed the belief that licensing should not be required to grow or sell marijuana. Patricia was particularly emphatic about this:

[BDL] Do you have a license to grow?

No.

[BDL] Okay.

Yes! I do! It's from nature! From the Creator! From the Great Spirit! Of course I have a license to grow just by being here on this Earth. I have no *human*, their model, for their information, for the power people, no, I don't have one of their licenses. I don't see where they have any say over anything, personally. – Patricia

Rob took this idea further, rejecting government regulation in general:

[BDL] Um, are you guys, is your business registered as growers? Do you have a business license to grow?

No.

[BDL] Why not?

Um...you know, I wouldn't have a license on my car, I wouldn't have a license [to drive]. I wouldn't have anything the government requires. Because I just, I just, uh, have an aversion to it, every time it comes up. And I have to get some sort of card, or I have to go sign up somewhere for something, I just freeze. I don't want to do any of it! I

just don't want to do any of it! I don't care what it is. But if it's government connected, I don't want anything to do with it. - Rob

Unlike their counterparts whose relationships with licensing reinforced their commitment to conventional social norms, Patricia and Rob were driven further from acceptance of authority by licensing requirements. Given their general rejection of authority, however, it is difficult to imagine a situation which would bring them closer to acceptance of authority. This attitude may be exceptionally difficult for policy-makers to overcome as they continue to set regulations.

*Alternative perspective: Documentation is expensive/prohibitively hard to get.*

In addition to a general unease with licensing, some growers found licenses to use or grow marijuana prohibitively difficult to get. This feeling was sometimes expressed in conjunction with the belief that licensing shouldn't be required at all.

That's where a greenhouse would come in handy.[...] See, that's another thing. A grow card can give you what card holders are required to have grow. So of course I can't, I can't grow my plants, because I'd also have to get that together [a greenhouse and fees]. I don't think they'd go for what I have now. The only reason we're able to even rent this place, is because of some nice, nice people and they felt sorry for us. – Patricia

Complaints about the cost of licenses were more common in this group than in the partial compliance group who, as discussed above, could be somewhat dismissive of the cost of licensing. The idea of cost as an unreasonable imposition that justifies ignoring licensing requirements fits with the idea of appeal to a higher power in neutralization theory. Costs like this are considered unreasonable, even unjust, and noncompliance is



thus a reasonable stance in the face of injustice. For marijuana growers on small incomes or who rent (Patricia is both of these), getting a greenhouse and several hundred dollars together is seen as entirely out of reach, much less a reasonable request.

*Alternative perspective: Licensing is desirable but grower is prohibited.* Rejection of regulation was not universal in the noncompliant grower group. In contrast, a very few growers expressed a desire to be in full legal compliance but found licensing impossible to attain, like Phil, whose conviction for marijuana growing made him ineligible for a license to grow in Arizona. Phil saw growing marijuana for sale as an opportunity for upward mobility. His hope at the time was to be allowed to grow medical marijuana for bands touring Arizona. While this seems to be an unlikely dream, as he lived in a small town and had no music industry contacts to speak of, the idea kept him going in his attempt to get a license to grow marijuana.

*Plant count.* The absence of licenses precluded the possibility of growers being concerned with having sufficient licensing to cover the number of marijuana plants that they had on hand at any given time. Growers in the noncompliant category, therefore, never conflated licensing with number of plants as those in the partial compliance group sometimes tended to do. Those with smaller gardens in particular took a lackadaisical approach to the number of plants that they had in their gardens at the moment or in the previous year. Even some of those with larger gardens found it difficult to come up with a plant count off the top of their heads.

Mm...I think probably, well, let's see, we bought the, you know, we bought two dozen clones, then we bought another dozen clones. And, we had, like I think, probably

six plants that we planted from the seeds. So. So thirty – I think we started out with...well, we've got close to forty-five plants now. But I think we started with, like, forty-nine. But we've just lost a few along the way. – Rob

This inability to specify may be attributable to age or memory issues, but similar growers with similar age and drug use habits were quicker to reach a firm number when discussing how many marijuana plants they had on hand, and did not equivocate with phrases like “close to.” Not all of the growers in the noncompliant group had this issue, however. Beth, for example, kept her responses about plant count short and to the point:

Um, I got fifty. And I had thirty survive. – Beth

Ultimately, noncompliant growers were not uniform when discussing their plant counts. Lack of precision, however, could signal differences in how growers think about their marijuana gardens when managing licensing requirements is not a concern. For example, when growers are not worried about keeping their plant counts within the legal range, it may be easier simply pull and destroy male plants at large marijuana grow sites than to record and replace them with female plants. Similarly, there would be less need to count plants that did not survive to maturity without a desire to keep the number of immature plants within allowable limits.

*Siting.* The noncompliant growers in this sample were much more limited in styles when it came to siting than partial-compliance growers. While all marijuana grow sites are vulnerable to legal concerns over siting, and unlicensed sites even more than others, most noncompliant growers still used their own private property, most commonly their own residences, whether rented or owned. Similarly to partial-compliance growers,

noncompliant growers commonly chose their homes as their grow site for lack of alternatives. Patricia was a bit frustrated when discussing this, as though it should be perfectly obvious:

Uh-fuh, it's what's here. – Patricia

Beth elaborated a little more, but the question of how to choose a site tended to come across as tone-deaf and obvious with most of the noncompliant growers:

It was my home. And it was secure. I was able to make it secure. – Beth

Beth's concern with security, which does seem reasonable given the illicit nature of her business, was not echoed by all of the noncompliant growers with home sites. Butch offered a contrasting opinion:

[BDL] Why did you choose to grow at your house?  
I like to look at it. – Butch

As with Patricia and Beth, Butch treated his response as though it were the only obvious answer, and was unwilling to elaborate. Only one noncompliant grower in this sample had multiple grow sites at the time of his interview and chose sites based on his anticipated growing needs. Mitch had an indoor grow site at an associate's apartment in Arizona, but also had property in Hawaii that he employed a garden tender to run. He also had the largest operation of any of the noncompliant growers. In addition to Mitch, only Rob and Carly maintained a residence away from their grow site, and grew

marijuana on a property used exclusively for that purpose. This was a recent occurrence for them; in over twenty years of growing marijuana they had only grown marijuana away from their primary residence in the last two years. Unlike the partial-compliance growers who chose sites specifically for growing marijuana and hired garden tenders to live there, Rob lived at the grow site himself as a garden tender, while Carly maintained their residence and took care of other aspects of the business. Despite acquiring a rental property specifically for marijuana growing, Rob was fatalistic about the process. Rather than describing acquiring the property as choosing as site, he insisted:

No, no. It just happened. – Rob

He followed the above up with a long story about fighting with family members who had previously worked together, serendipitous offerings of rental takeovers, and uncertainty about the future of the property. His overall attitude towards his site recalled Sykes and Matza's (1957) denial of responsibility, in which the delinquent claims that they are the victim of forces beyond their control. Directing this attitude towards his grow site reinforced Rob's rationalization that his marijuana growing was more something that was happening to him than something that he was choosing to participate in.

In a few other cases, growers discussed growing on public lands or on the private property of unwitting land owners, although generally in the context of past efforts. For example, Ben, Patricia, and Butch all had fond memories of growing on public land. Growing marijuana in national forests was a risk management intended to distance growers' marijuana gardens from their homes. Using public land also allowed growers to

cultivate more plants than they would otherwise have room for at their homes.

Additionally, it allowed them to spread out their plants, so that if law enforcement found some they would not necessarily find all of them. Butch provided an example of this, describing a site that stretched over forty acres:

And it stretched out over, you know, great distances. You [know], just the one here, and one there. – Butch

This strategy minimized risk of law enforcement seizing growers' private property while maximizing their potential profit. It did have other drawbacks, however. First, growers had to travel to their plants in order to care for them. As Ben described, this meant attempting to avoid notice while traveling to grow sites, the plants were vulnerable to wildlife, and hauling water out to the plants. Despite these drawbacks, public lands were still considered ideal by some growers. Unlike partial-compliance growers, noncompliant marijuana growers located their plants, particularly their outdoor plants, with an eye towards risk management. While partial-compliance growers tended to group their outdoor plants together and fence them in to protect from animals or to comply with the law, noncompliant growers were more likely to spread their outdoor plants out and make other efforts to hide or disguise their grow sites.

Patricia accomplished this by growing in portable pots:

And, I keep them in pots. So that I can move them around. So that if it looks like anything strange is going on, I do not put them in the ground on anybody's little private property. If I had my own place... Then I would put them right. In. The ground. – Patricia

In the above quote, Patricia was concerned about her landlord should she have a

problem with law enforcement. Using pots not only allowed her to hide her plants quickly or divest herself of them should the need arise, it also absolved her landlord of responsibility, because to Patricia, the landlord would not be expected to know about or be held accountable for something as impermanent as pots. Whether law enforcement would agree with her is debatable, but this is the only instance in which a grower who was renting property on which they grew marijuana expressed concern over what would happen to the property owner in the event of law enforcement intervention. Another common strategy among the outdoor Arizona growers was to plant their marijuana plants under the shade of mesquite trees, as Beth describes in her ideal site:

Because I was in the middle of nowhere and we had a great growing site. [...]Um, secluded, lots of hills and plenty of water. Lots of trees for cover. – Beth

Doing so provided extra nitrogen for the plants and some protection from the intensity of the Arizona sun, but also protected them from the view of government flyovers that were common in the area. Flyovers were mentioned by both partial-compliance growers and noncompliance growers, but while partial-compliance growers would clear-cut to provide sun and space for their gardens in full view of overhead law enforcement, non-compliant growers had a greater concern for being caught by this tactic, and so tried to minimize risk by hiding their plants.

***Discussion: Noncompliance and risk management.*** For growers in the partial-compliance group, careful attention to licensing and plant counts were strategic choices in furtherance of reducing the risk of apprehension. For growers in the noncompliant group, however, avoidance of licensing was also a risk management strategy, although

not always a straightforward one. Avoiding licenses meant that noncompliant growers were not on state registries that might be examined by federal law enforcement agencies, thus decreasing risk from that area. However, noncompliant growers also phrased their avoidance of licensing in terms of rejection of marijuana laws and appeals to higher powers. Furthermore, some members of the noncompliant group were ineligible for licensing even if they wanted it. Risk management thus did not always appear to be the primary reason that noncompliant growers did not obtain documentation, although it was certainly a part of it.

On the other hand, noncompliant growers used siting to their advantage in risk management in ways that partial-compliance growers did not. While both partial-compliance and noncompliant groups thought that privacy was an important part of a marijuana grow site, noncompliant growers were more likely to take steps to make their sites less detectable to law enforcement when possible, using strategies like hiding plants under trees, growing on public land, and hiding indoor grow sites from neighbors. Still, in both groups, the marijuana growers with smaller crops tended to be less insulated from risk of apprehension than those with larger crops because they were more likely to grow at their residence.

*Reasons for participating/sales.* For the partial-compliance group, the primary rationalizations for growing marijuana for sale were material rewards, intangible rewards, and helping others. The noncompliance growers overlapped in their rationalizations, with the added reasoning of rejecting the current marijuana regulation schemes in their entirety. The techniques of neutralization used by both groups are therefore also similar,

including condemning the condemners and appeals to higher loyalties, while monetary and intangible rewards also feature prominently in noncompliant growers' thinking.

*Perspective 1: Material rewards.* Similarly to those in partial-compliance with state laws, some growers in noncompliance noted a need for money as their primary motivation for growing and selling marijuana. Carly, a retiree who received Social Security income, stated this explicitly:

If we didn't sell marijuana, we wouldn't make it. – Carly

Carly noted a need for money for everyday expenses, which was a typical experience among the sample. As with the partial-compliance growers, noncompliance growers who focused on money perceived their decision to grow and sell marijuana as a calculated risk in which the rewards outweighed the costs. It was not, however, universal among those growing marijuana primarily for money. Sheila, for example, originally began growing and selling marijuana for the main purpose of buying a piece of property. She was arrested and incarcerated her first season, but came back and successfully grew and sold marijuana from dozens of plants annually from the same property until she paid it off. Once her original goal was met, she scaled back her business and primarily supplied friends and family.

*Perspective 2: Intangible rewards.* Growing marijuana for fun or enjoyment is another commonality between partial-compliance growers and non-compliant growers.

Because I love it. I love everything about it. – Mitch



Love of the plant and the process are quite genuine among growers. None of the respondents expressed feelings of frustration or irritation at the process itself, even when things did not work out for them. Mitch, for instance, had recently lost an entire indoor crop to pests after leaving their care to associates while he traveled. He felt sad that the plants did not survive, but was not put off of either growing or those who had helped (failed) him. In addition to love of the plant, Colorado Stephen saw growing marijuana as a hobby:

Because it's a hobby. It's just like, it's a fulfilling hobby. – Colorado Stephen

Growing marijuana as a hobby has certainly been documented (Weisheit, 1991), however, it is a little hard to swallow Colorado Stephen's claim that growing is primarily a hobby for him at first pass. His most recent completed harvest used approximately three-thousand square feet, growing approximately a hundred plants, that he then sold at prices undercutting Colorado's dispensaries. This was not what one thinks of as a hobby garden. A broader look at his life/habits, however, lends his statement more weight. Stephen was one of the most organized growers in the sample. He kept detailed records of his harvests, labeled his final products, and was very interested in the details of successful growing. He consistently held professional jobs such that, even when he had large harvests, he was not in need of money to meet daily needs. Perhaps most convincingly, he stopped and started growing marijuana for sale repeatedly since his first grow, as he changed residences and his available space changed, or as he temporarily lost

interest. At the time of his interview, he had started six marijuana plants to grow for the season, but ended up giving them away to a friend after deciding he did not have an ideal space for them. This confluence of circumstances makes his claim that growing marijuana for sale is primarily a fulfilling hobby for him quite plausible.

Joe – paraphrase: Sell to have money to continue to grow his own, to satisfy his need for control over his own marijuana

Joe’s experience, of growing small quantities of marijuana for his own enjoyment and then selling any surplus to acquaintances is covered in other literature. These growers are sometimes promoted when activists want to tout growers as “harmless.” Joe, however, included his teenaged daughters’ friends among his customers. Admitting selling marijuana to minors is almost certainly not the harmless grower activists would like to portray. More growers in this group had direct experience with the legal risks of growing marijuana than those in the partial compliance group. A number of them had been arrested and served time for marijuana cultivation, possession, or sales in the past, yet upon their release they returned to growing and selling marijuana, sometimes for many years consecutively, as discussed in the previous chapter. This experience lends weight to their assertion, then, that they plan to continue to participate as long as they are physically able to do so.

*Perspective 3: Helping people.* Growers who were not deliberately compliant with state laws were also similar to the partial-compliance growers who felt that growing and selling marijuana is a good thing. A common comparison was alcohol to marijuana, with marijuana viewed as preferable and beneficial.

Because I think it's a necessary thing. I think marijuana is a good thing. I would like to see a lot more people on marijuana than alcohol. – Beth

Favorably comparing marijuana to alcohol relates to Sykes' and Matza's (1957) neutralization technique of condemning the condemners, in which delinquents insist that those who make the laws are doing worse things than the crimes they themselves are committing. Here, growers insist that alcohol is worse than marijuana, but that alcohol is still legal, therefore their production of marijuana is justified.

*Perspective 4: Bad law/Personal right.* A primary difference in attitude between partial-compliance growers and noncompliance growers was in how they thought about marijuana regulations. Partial-compliance growers did not tend to rail against the system they were manipulating. In contrast, noncompliance growers tended towards an all or nothing attitude towards legalizing marijuana. Even living in states where licensing was possible, or, in the case of Colorado, not necessary for small quantities, the growers wanted nothing to do with anything short of complete legalization.

[BDL] Knowing that the business is federally illegal and that state regulations vary, why do you participate in this business?

Because, um, the laws that exist, the uh, classification of marijuana is *completely* out of line.

[BDL] Okay. What should it be like?

Well, marijuana should be legal. – Rob

Some went so far as to express their primary reason for growing and selling marijuana as a personal right:

Because I believe it's my right. As a, as a human being.- Butch

I feel that I have a perfect right to grow any plant that I, that comes out of the soil. And that there is no human person that has any right to tell me that I cannot do this. – Patricia

Marijuana is not the only plant in the U.S. with restrictions on planting, production, or transport (USDA, 2016). Nor is it the only illegal plant with supporters who wish to legalize it, as websites like “legalizeallplants.com” attest. But the focus on plant production as a right comes across as more of a technique of neutralization, specifically, Sykes and Matza’s (1957) condemnation of the condemners, than as part of a risk management strategy in a rational choice scheme. Certainly, moral outrage rationalizes this behavior, but it situates marijuana production as acceptable or even imperative rather than maximizing direct benefits or minimizing risks to the respondents.

*Summary: Noncompliance and reasons for participation.* There was noticeable overlap in the reasons for participation between the noncompliant respondents and the partial-compliance respondents. Both groups noted a desire for money, a belief that they are helping people, and the intangible rewards that marijuana production provides. They diverged on the issue of whether or not the government has a right to regulate marijuana, however, and this difference appeared to drive responses to regulation, with those who rejected regulation refusing to participate in licensing, manage plant counts, or abstain from sales. As seen in the next section, there were also group differences in decisions about keeping firearms at marijuana grow sites.

*Firearms.*

*Perspective 1: Don't keep guns.* The majority of the noncompliant group was not armed at their marijuana grow sites, or armed in general. As with the partial compliance group, those that did not keep guns typically did not do so because they did not like guns and felt they were too dangerous. Unlike the partial compliance group, none of the noncompliant growers mentioned that keeping guns with marijuana plants violated state laws. A common sentiment among noncompliant growers was that they did not like guns:

Um, I just don't like guns. I find them very dangerous. - Rob

I'm just not into that. Yeah I got turned off to that when I was first learning about it in Humboldt County. Where I lived, some people were into that. You know, like going and shooting off around their plants and stuff like that, but I just, I never like that. I don't, yeah, that's... to me it's not about violence. Or money. – Butch

Beyond basic dangerousness, Butch's description makes it sound like the presence of guns makes growing marijuana about violence. Violence was most typically something to be avoided for the noncompliant growers. Still, this opinion was not universal:

[BDL] Okay. Was anyone armed at the growth site? At either one?

Um, nope.

[BDL] Why not?

I don't, I just never felt like I needed that kind of protection. I mean, if anything, we needed guns for bears, versus, you know, 'cause we'd get bear visitors. [laughs] I had one year where a bear actually pulled a branch over on one of my plants. And, basically, cut it in half. But, you know, we never worried about – I'm not a violent person. Even if somebody were, like, possibly, stealing my plants, I wouldn't shoot 'em. I mean, it's not worth that, you know, somebody's life. I would of course try to, you know, beat the shit out of 'em, but I wouldn't shoot 'em. – Colorado Stephen

Although Colorado Stephen protested that he is not a violent person, he was still demonstrably willing to deploy violence in defense of his plants, just not lethal violence or gun violence. This aside, his story about the bear lends credence to other growers' concerns about wildlife damaging their plants.

*Perspective 2: Guns protect from people.* There was one notable exception to the noncompliant growers group's avoidance of guns. Mitch continuously went armed for personal safety against other people. He discussed having been attacked by two men while hiking sometime previous to his interview, and feeling like he needed to carry a weapon since then. Unlike the partial-compliance growers, who did not bring firearms to their interviews and in most cases seemed reluctant to use a firearm against other people, Mitch wore a pistol to his interview and sounded quite prepared to use it against people should he feel threatened.

*Discussion: Noncompliance and firearms.* Compared to the partial compliance group, the noncompliant growers in the sample had less to lose by carrying firearms. While they faced the same risks in terms of prosecution, noncompliant growers did not risk losing the shield of documentation that partial-compliance growers put such faith in. Noncompliant growers also faced the same risks as to their crops and persons as partial-compliance growers in terms of wildlife and thieves as partial-compliance growers. Despite this, the noncompliant growers were less likely to carry firearms than the partial compliance group. There are several plausible explanations for this difference. First, noncompliant growers tended to have smaller marijuana crops than partial-compliance growers. They thus had less to lose should their plants be damaged or stolen, so the risk

of injuring or killing someone to defend the plants might have seemed less important. Still, even those with crops between thirty and sixty plants most often did not keep firearms. Second, the growers in the noncompliant group tended to be older than the partial compliance group, and there are likely ideological differences, in that several members of the noncompliant group fit the “hippie” stereotype, which tends to value nonviolence. Future research, and law enforcement, would thus be unwise to count on these differences persisting in other samples.

***Summary: Noncompliant group.*** The noncompliant group of marijuana growers in this sample eschewed any attempt to cooperate with state or federal laws regarding marijuana production and sale. Rather than embrace documentation and licensing as a risk reduction strategy, the noncompliant group rejected documentation. This rejection was often both on principal and as a risk reduction strategy for those who feared government regulation, but in some cases was a reaction to laws making licensing prohibitively expensive or legally unobtainable. The noncompliant group participated in growing marijuana for sale for many of the same reasons that the partial-compliance group did: material rewards, intangible rewards, and to help people, but also as part of a rebellion against what they perceived to be unreasonable laws. Despite having less to lose from having firearms, the noncompliant group was less likely to keep guns at their marijuana grow sites than the partial-compliance group, and none of the noncompliant group discussed regulations in their reasons for doing so either way. While there are similarities between both groups, ideology and perceptions of government precipitated the primary differences.

### **Full-compliance group.**

*Sample description.* Only three of the thirty-one commercial marijuana growers in the sample reported being in full compliance with state regulations. All three were men from Washington. Two were licensed under Washington's recreational marijuana regulations, and the third operated a medical marijuana co-op that did not require licensing. These growers produced some of the largest crops in the sample, had the most expensive and complicated set-ups, and were all included non-family employees as part of their organization. They were also each the leaders in their organizations. Risk management was a common thread promoting regulatory compliance.

### *Areas of compliance.*

*Documentation.* For growers in this sample who were in full compliance with state laws, documentation was a high priority. It was especially salient for the two growers licensed under Washington state's recreational laws, which limit the number of production licenses available for recreational marijuana (Washington State Liquor Control Board, 2015). Unlike partial-compliance growers' views that licenses were typically easy to acquire and maintain, full-compliance growers found licensing to be difficult and time consuming to acquire, with stringent maintenance and oversight requirements:

The licensing process was weird. Um. So we...I'm very thorough, probably obsessive compulsive. And my idea was, full transparency, disclose everything. So we submitted, probably an application that was this thick [about phone book thick]. With



every detail of everything. And, when they finally got around to reviewing it, they said, “Fill out the application again, and do not write outside of the lines.” So if it had two lines, the answer was two lines. They didn’t want my three page addendum with all the stuff on it. You know. They didn’t want my site plan, created by an architect, done to scale, like what the directions said. Um. They wanted a simple line drawing with all the extraneous detail removed. I thought that was weird. - Wildstar

Washington Steve had an easy time with state licensing, but a more difficult time with the city:

Um, on our end it went fairly smooth. Um, the state was very helpful. The city [name] was not. Um, ran into a lot of issues with the city. They were very slow. Uh, it was kind of a bureaucratic nightmare. Emails weren’t responded to on time. Um...everyone was very condescending. We were young. And we, we’re in an industry that is still controversial in a lot of people’s minds. Um, it took, you know, it would be like, just to get an email response for a meeting it would take two weeks, when we really didn’t have any time. So, that was frustrating. Um, as far as all the other permitting and licensing through the city, it was very slow and that really held us up. Uh, the state was on top of it. We had a fantastic experience with them. – Washington Steve

Moreover, the newness of retail licensing brought up frequent questions as to what was permissible. For example, in an effort to legally expand his business, Wildstar had been attempting to acquire additional licenses:

Just recently, I was trying to acquire, um, a second Tier 3 growing license. [...] Just common sense, legal, you know, two decades of legal experiences tells me I can do it. All the experience reading the rules tells me I can do it. My question is just the mechanics. [...] ‘Cause they don’t need to background check me. Already did it. So I thought I was being helpful. Well it turns out, you know, that um, unbeknownst to anyone, they don’t believe that that can be done. And even though I had supplied her with, here’s four other people that appear to have done the same thing, and she says to me, “well, I’m gonna’ research that, because they may have fallen through the cracks.” – Wildstar

The third full compliance grower, in the medical marijuana arena, took advantage of Washington's much looser regulations for medical marijuana cooperatives:

[BDL] All right, does your cooperative have a license to grow?  
Mm-hm. Well, no. We don't need a license to grow. – MacGuyver

He did, however, have his dispensary set up as a legal nonprofit entity, and maintained records as to who was a member of the cooperative per state regulations. At the time, however, there was no state registry of medical marijuana patients (Washington State Liquor Control Board, 2015).

*Documentation as risk management.* Full-compliance growers were acutely aware of the split between federal and state laws regarding marijuana production and sale. Like partial-compliance growers, they saw their state licenses as shields against federal prosecution. An influence on “transparency” with local law enforcement for the retail growers is a good example of this:

Uh, we're happy to engage law enforcement.

[BDL] Okay. So, local law enforcement obviously knows about your site. What's your relationship like with local law enforcement?

Uh, they know where we are. Uh, we're very transparent with them. If they ever wanna' come and check out what we're doin', um, they're more than welcome to. Uh, we have them on speed dial for our alarm system. We've been as transparent and above board with local and nonlocal jurisdictions, uh...just to, 'cause that's what we wanted to do. We wanted to be above board.

[BDL] How come?

Uh, because we're in, we're tryin' to set an example for the industry. Um...the medical industry has a lot of shady things happening. Um, the black market is a black market. Um, the fact that this went legal and now can actually be a real business where people can make real paychecks, um,[...] Uh, so, having said that, we feel like we're on the ground floor, uh, of an industry that's about to explode in the United States. And we can set the example for the rest of the country, um, and the state. – Washington Steve

Even so, full-compliance growers were arguably taking a bigger risk with federal law enforcement than the partially compliant and non-compliant growers simply by virtue of their visibility. Wildstar went so far as to maintain a social media presence for his company, and to invite media out to his facility. For this kind of transparency to work as a risk management strategy, however, full compliance was necessary:

I mean, one of our mission statements is to be transparent to the media, transparent to the government. And if you're gonna' have everybody traipsin' through your marijuana farm, you better make sure that you're compliant [laughs]. – Wildstar

While the partial-compliance growers have increased risk from breaking their state laws on sales, even full compliance with state laws is not a foolproof risk management strategy because of the difference between federal and state laws.

*Plant count and acquisition.* Unlike the other states in the sample, Washington regulations regarding how much marijuana a business could grow at once were not a straightforward plant count.

I mean, I kind of like the canopy idea, but it's, that's a perfect example of fluidity. Like, and here's a, here's a French term, what the hell does that mean? Like, if you have multi-tiered plants, like an indoor grow, that's hydroponic, or the plants or 16 feet tall, you know, um, you know, is the plant canopy based on, um, the profile or the top view? – Wildstar

It was therefore sometimes confusing and open to interpretation how many plants a grower could have. Still, full-compliance growers full compliance growers in this sample had put obvious thought into keeping their plants within those allowable by law, spacing them to keep their canopy under control. Plant acquisition for the two growers using the

recreational platform was considered to be one of the riskier parts of the process.

Washington law allowed for an amnesty on plant acquisition during the beginning of the licensing period, so that growers could bring in new stock:

You know, the Washington law said, you can have these plants, and they can be any size, unflowering, we're not gonna' ask any questions about where they came from. I mean, you have the same problem with a seed. You know, technically, the seed is illegal. Technically, the plant is illegal. So it doesn't really matter if you grow it from a seed, or you get it from a clone, it still has to start somewhere. So, the law contemplated this, the lawmakers, the administrative agency contemplated it. – Wildstar

After that, however, all plants and seeds had to be barcoded and closely tracked:

Yeah, actually the way it works from the legal side in Washington, it's, the Liquor Control Board gives you a ten day window to bring in as much as you want from anywhere, they kind of turn a blind eye. Uh, once it's in the system after that fifteen days, you actually register it with BioTrack, the BioTrack that Washington has. And so, from there on, every subsequent clone or seed produced has to come from in-house, or from another licensed producer/processor. So really the only way new genetics are coming in, uh, are during people's fifteen day window. – Washington Steve

This meant that growers needed to anticipate their needs far into the future in order to make decisions about initial plant and seed acquisition. It also meant acquiring plants from non-legal sources under the amnesty, which the full-compliance growers were somewhat reluctant to talk about.

[BDL] Did they come from in state?

They came from, um, various undisclosed locations. – Wildstar

Uh, clones are brought in from medical dispensaries. Um, we all come from the medical industry, so we have been collecting genetics over the past five years. – Washington Steve

Wildstar went out of his way to take extra security precautions during this process:

And we had the paperwork, here's the application, just in case. And we had a whole plan of what was gonna' happen. Um, and even there, you know, I and my business partner, we had a discussion, like, who's gonna' drive those plants? And, you know, I said, I'm willin' to do it, you know, we're in this together. I'm willin' to be in that Uhaul. I'm willin' to, to do that. And, together we decided, I think it was his idea, he was like actually, why don't you let me do it, because if we get caught, at least you, you know, will bail me out. And um, you know, and we were very paranoid about it. – Wildstar

As with the partial-compliance group, full-compliance respondents paid close attention to meeting state regulations regarding documentation and plant count. Because of the unique state requirements of Washington, however, the recreational license holders went to additional lengths to obtain plants in accordance with regulations. This added a level of complication to the process that other respondents did not have to deal with, but helped to reassure full-compliance respondents that they were as legally protected as they could possibly be.

*Siting.* Siting for the full-compliance growers in this sample was more complicated than for either the partial-compliance or noncompliant growers. In large part, this was because of their involvement in the retail industry. Marijuana growers licensed for retail in Colorado face similar siting restrictions and requirements, as do medical dispensaries in Arizona. The partial-compliance and noncompliant groups either avoided such dispensary operations or did not have the option available to them at the time

interviews. Wildstar owned a suitable sixty acre property before he started, but went to considerable effort and expense to get it ready:

New building, yeah. I built, the building went over budget, um...uh...but it's a nice building. You know. I think it's the first building of its kind that was specifically permitted and built for growing and processing marijuana. [...]Um...you know, we applied, said it's gonna' be an agricultural building. You know, and they said, well, actually, we don't think it's agricultural. We think it's gonna' be a factory or a storage unit, but we don't really know, because we don't know what marijuana is like. [...] So anyway, we negotiated with them, you know, about what zoning laws would apply. And, uh, you know, we revised the building plan to accommodate that. You know, they wanted, um – so that's a little bit why the building went over budget. But we're very proud of the building, and it's, it's a beautiful building.

[BDL] How much do you think you spend getting your property ready?

Um, to be – the honest, here's the honest truth, is I still do not have a tabulation of all the money that went out. [...]Um, but, um...the property itself, let's say four-hundred and sixty thousand. That's fence, cameras, building, gravel, dirt work...um...amendments, irrigation system. Everything that you would need. A big chunk of money. And a lot of that was because the stupid building department wanted, you know, everything. Yeah. – Wildstar

Although his company was renting a warehouse, Washington Steve went to similar lengths to meet state requirements. Whereas game cameras were occasionally mentioned as security for other categories of growers, for full compliance retail growers in Washington, they were an expensive necessity:

Well, the issue is that there's sixty-four cameras, uh, all over the building. And, everything is traced from seed to sale. So at every point, uh, everything has to be weighed in front of the camera. – Washington Steve

Both of these growers, however, endured the trials and tribulations of government oversight and eventually were able to start their growing. MacGuyver's process in choosing a site more closely resembled that of partial compliance or noncompliance growers who were able to choose sites specifically for growing marijuana:

[BDL] So how do you choose your site?  
It's different factors. You know, security...how much work's involved in getting it ready.

[BDL] Okay. What do you look for?  
The least amount of work. Turn key. Places, minimum modifications and you're rockin' and rollin'. – MacGuyver

He was focused on security and ease of use. It is likely that this difference between MacGuyver and the other two full-compliance growers is because the legalities under which he grew marijuana were much more similar to the partial-compliance growers than the retail full-compliance growers.

*Firearms.* All three full-compliance growers had a no firearms policy for their marijuana grow sites. They acknowledged the laws prohibiting guns when talking about them:

[BDL] Okay. Um, is anyone armed at the growth site?  
Ah, no. It's illegal to have a firearm on the premises. – Washington Steve

It was, perhaps, easier for Washington Steve to hold to that policy, since his grow site was indoors in the middle of a densely populated area and he did not have to be concerned about the wild animals that outdoor, more rural growers contend with. Wildstar complicated the issue a bit by saying that, while his rural, outdoor grow sit itself has a no firearms policy, he, the owner, carries a gun when walking around the property. As with some of the partial-compliance growers, he felt the need to carry a gun for protection from wild animals:

I carry a gun around all the time on the property. But there's also man-eating cougar.

[skeptical look from BDL]

There is! Killed six sheep and a baby horse. If I see it, I'm gonna' kill it. –  
Wildstar

As with partial-compliance growers who used the neutralization technique of denial of harm to justify keeping firearms at their grow sites, Wildstar also placed his gun use in the context of protecting people and livestock from harm. Not only was he denying that it may be harmful, but he takes the technique of neutralization even farther to insist that he is preventing harm.

*Summary: Areas of compliance.* Having a prohibition on firearms at their marijuana growing properties was possibly the least effort full-compliance growers had to make in their quest to comply with state laws governing marijuana production for sale. Acquiring licenses and sites, keeping extremely close track of their plants, and managing site requirements took a large amount of money and effort for these growers. In a state in which laws and regulations around marijuana production have changed frequently in the last ten years (Washington State Liquor Control Board, 2015), it would have been easier and less expensive to grow marijuana for sale without the hassle of keeping abreast of compliance requirements. The next section explores why the full-compliance growers chose to make that effort.

*Compliance as risk management.* All three full-compliance growers believed that compliance with state laws minimized risk on several fronts. First, full compliance immunized them from interference from local law enforcement and allowed them to



conduct business on a larger scale than that which they thought would be possible otherwise:

Best case scenario is being above board, uh, doing things the right way. Um, growing a high quality product, having a high quality brand that is received well by retailers and consumers. Um, and expanding to a size that we're all comfortable with. – Washington Steve

Second, as with partial-compliance growers, full-compliance growers viewed compliance as a way to minimize the likelihood of being arrested for having a business in which state and federal laws are at odds.

And, you know, by being transparent, not only does it help protect the business with the domestic regulatory agency, being transparent also helps protect us ironically, or counterintuitively, from the federal regulatory agencies, or, or individuals. It might seem, it might seem counterintuitive, like, if it's federally illegal, and you're broadcasting it on Facebook, aren't you causing yourself trouble? Well, we did it [grew the marijuana] anyway, and now we're just saying, you know, we've got nothin' to hide. – Wildstar

Additionally, Wildstar prided himself on the relationships he had been building with local law enforcement and other first responders. After a particularly bad fire season, he hit it off with a local deputy who was guarding the road. The conversation went so well that the deputy eventually asked for Wildstar's help with funding for training new K-9 officers:

And he hits me up for a sponsorship! 'Cause they need money to, you know, train the dogs and stuff. - Wildstar

These relationships, in his perception, were supported by his full compliance, and helped minimize the risk other risks to his business, like threats from fire or thieves, although he had yet to enlist their aid directly:

Haven't had to yet. Knock on wood. But they're our first line of defense. – Wildstar

Along these lines, full compliance generally was thought to deter theft among this group of growers:

Uh, when it's above board like this, you feel like crime's gonna' be less, less a part of it. 'Cause you do have the law on your side to a certain extent. On the black market you do not have the law on your side. – Washington Steve

Since robbing drug dealers (although not necessarily marijuana producers) for cash is a well-documented phenomenon (Jacobs, 2000; Topalli, Wright, & Fornango, 2002; Wright & Decker, 1997), not having local law enforcement on your side is a reasonable concern, especially for urban producers like Washington Steve.

### ***Reasons for participation and techniques of neutralization.***

*Monetary rewards.* Monetary rewards were a common reason for participation among all three compliance types in this sample. However, the full-compliance growers had much more money at stake than other members of the sample, and their monetary rewards were correspondingly higher. Money was the primary motivating factor for all three of the full-compliance growers. Wildstar was the most forthcoming about his financial situation.

Well, our operating budget's four hundred thousand bucks. That's what we've penciled in. It could be a little higher. - Wildstar

He was holding approximately a million dollars-worth of ready to use marijuana at the time of the interview, waiting for the market to turn up so he could sell it at a higher profit. He had even set himself a target for getting out of the business:

[BDL] How long do you plan to do this?

I don't know. Until...until I have....until I'm not having fun, or make too much money.

[BDL] How much is too much?

I'm really not greedy. Um. I mean, all I really want is twelve million dollars. Um. Six million is enough, that you could have a thousand dollars a day forever, without ever touching the principle. And, that's more money than I would ever need to spend. A thousand dollars a day, are you kidding me? Twelve just means you can fuck it up at least once. [laughs]- Wildstar

Unlike several of the growers in the partial-compliance and noncompliance groups, however, Wildstar did not need the money he was making from his marijuana business. Instead, it was a sideline from which he anticipated large profits. Washington Steve was also straightforward about profit as his driving motivation:

Uh, because it's one of those things that, we were sitting around looking at starting a business. The profit margins are, are unlike any other business, uh, even with the excise tax. Um, and, it was one of those, you know, I'd always talked about taking advantage of opportunity. And there's not very many other instances like this where something like this has ever occurred. Uh, barring Prohibition. – Washington Steve

Although technically only allowed to accept “donations” under Washington's medical marijuana law, MacGuyver was also in the marijuana industry for the money, although he hedged when asked about his profits directly:

Mm, well that's, um, you know that can be, um, you know. But it's, you know, it's great. It is, you know, it is. There's only two industries out there that make money, you know, kinda' like no matter what happens. Okay? Uh, the drug industry – okay, when times are hard, who's doing business? It's the bars, okay? People are drowning their sorrows, okay? So you just gotta', you know, you gotta' be in an industry that's hot, and this is it. There's nothing hotter. – MacGuyver

Additionally, even though he was careful about using terms like “donation,” his thinking about the matter was apparently not consistent, as shown in an aside to his wife during the interview:

To wife: Can you do me a favor and upgrade WeedMaps? I've put in buy instead of donate in the coupon. – MacGuyver

Slips like this show how profit was the primary motivation, not simply helping ailing patients who, in a truly voluntary donation system, would not have to “pay.” Whether acknowledged up front or not, profit was clearly important to full-compliance growers.

*Helping people/Political change.* In opposition to noncompliant growers who believed that licensing made them more vulnerable to law enforcement while not furthering efforts towards marijuana legality, one of the full-compliance growers exhibited a strong belief that compliance with state regulations would further not only the cause of legalizing marijuana, but of social justice in general.

I mean, one of our stated objectives is to change the world. We want to help, um, and believe me, I'm more an entrepreneur than I am, uh, a social engineer, but, I believe in my heart of hearts that not only is it a good business opportunity, it's also a chance to bend, or help bend, be one of those gravitational forces that helps to bend the, the moral arc of the universe toward justice. And how do we do that, as a private capital enterprise? Well, you do that by being the beacon of light on the hill. – Wildstar

This approach combines a denial of harm technique of neutralization with one of appeal to higher powers, in this case social justice. This appeal stands out distinctly not just for the poetry of the phrasing, but because it was cribbed from a speech by Dr. Martin Luther King, Jr (King, 1965). The grower puts the legalization of marijuana on par with the Civil Rights movement in the United States. While it is believable that Wildstar wants the laws to change to enable him to grow and sell marijuana without risk of incarceration, he undermined his overall intent somewhat with his attitude toward other growers:

I'll tell ya', in my experience, I think, there's one out of 20 people in this industry that, um, is not what I would consider batshit crazy. You know, and, again, mostly all good people. But they're just not used to the business world. They're not used to the normal world. They're used to their cloak and dagger pot world, you know, that is, that *is* delusional. And it's delusional on a lot of levels. – Wildstar

He also appealed to the founding fathers and federalism in general to justify breaking the law:

...you know, the you could say, technically, we're violating federal law, I really don't think, if we are violating it – if we are violating the letter of federal law, I don't think we're violating the spirit of federal law. And, at least in my mind, uh, uh, we're operating in a good faith, belief, uh, you know, as an officer of the court, as somebody sworn to uphold both the federal constitution and the state constitution, I personally do not believe I'm in conflict. Because, this is an authorized experiment under the federalist system. – Wildstar

Wildstar's insistence that he is upholding the spirit of the federal system makes it possible for him to break the federal law while still holding a position as a lawyer, a “sworn officer of the court.” MacGuyver, who operated a medical marijuana dispensary,

spoke at length about the medical benefits of marijuana and the service he provided through his business:

And, you know I want, I want marijuana to be, you know introduced early in cancer treatment. Immediately. Before, you know, unless it's gone to when the doctor says we need to operate today, I mean, you know what I'm sayin'? But if we've got time, we need to get on that immediately so we can hopefully get things reversed. Because here's what happens: when you do the research, most people die, not from the cancer, but from the treatment. Because when they go through chemotherapy it robs your body of everything. You'll die of a cold. Plus you have all these other side effects. So, you know, I believe that if we can get this medicine, you know, to you sooner, then you wouldn't have to go through that. And the person that putting – I've got patients, dude, that they're in a room, cancer patients, dyin' and dyin', dyin', dyin', dyin', when we, deals not there. Okay? This guy's there, he's gainin' weight, he's got energy. Everybody else is just freakin', they wanna' die. And so, there's proof in the pudding. Uh, for me, we have medical, uh, records showing his bloodwork. Dude, you know, he's started to improve and he's doin' better, and all this stuff. And so, I believe that it's there. I believe CBDs is a little 800 pound gorilla that doesn't get the credit that it deserves. – MacGuyver

It is believable that MacGuyver felt that he was helping people. But this motivation also seems secondary to his desire for money in light of his above quote about marijuana being a “hot” market. While denial of harm and appeals to higher powers thus feature in the thinking of full-compliance growers, their use as a technique of neutralization, rather than a primary motivation, is clear. They are breaking federal law to make money, but doing so in the name of helping others through promoting social change or providing medicine makes breaking the law acceptable.

*Fun/Enjoyment.* A final similarity between the full-compliance growers and those in the rest of the sample was their enjoyment of the plant and the process of growing and preparing it.

Uh, and from our standpoint, and since we enjoy it so much, um, you know, we think it's great, we figured that it would be a great business to get into. – Washington Steve

Washington Steve in also enjoyed the flexibility of being an entrepreneur:

I wake up every day, and no matter how hard the day is, I'm excited to go to work. So. Because I'm workin' for myself. I don't have to answer to anybody. Uh, take breaks when I want. Uh. So the allure of bein' an entrepreneur is really what made me become an entrepreneur. – Washington Steve

Like the other compliance groups, the full-compliance growers rationalized that because they enjoyed growing marijuana, because it made them feel good, there was no harm in doing growing and selling it. They could pursue their profit and enjoyment without trouble to their conscious because they used the rationalization of denial of harm.

*Direct denial of harm.* Unlike the medical dispensary owner or the respondents growing on medical licenses in Oregon, the two respondents licensed under Washington's recreational marijuana production regulations could not use the rationalization that they were helping people medically through producing marijuana. While, as described above, they did assert that they were helping people, without the medical rationalization they were also likely to directly deny that they were causing any harm. Washington Steve illustrated this perspective:

[...]and the fact that we think that marijuana isn't a harmful substance, that it's um, you know, no more, uh, of a burden on any, on society than alcohol or cigarettes or caffeine, or anything else associated with side effects [...] – Washington Steve

Notably, both Washington Steve and Wildstar went beyond stating that marijuana was not harmful, to declaring it less harmful than alcohol.

But, um, I never really had an emotional objection to marijuana, just ‘cause it never seemed to hurt anybody. Um. And that’s part of the reason why I was okay with it. Um. I think alcohol is more dangerous than marijuana, in my opinion. – Wildstar

Thus, they each denied direct harm, while simultaneously placing responsibility for harm on a socially and legally acceptable substance. This shifting of harm is an indirect condemnation of condemners, in that it positions illegality of marijuana as hypocritical in light of the legality of a more harmful substance, alcohol. Alcohol came up as a more harmful substance than marijuana in a few interviews from the other groups as well, but its demonization was most pronounced for the recreational marijuana producers in the full compliance group, who did not have the benefit of medical marijuana use to fall back on.

**Summary: Full-compliance group.** The three growers in this sample who were in full compliance with state laws regulating marijuana production exhibited many similarities with the rest of the sample in terms of risk management and techniques of neutralization. As with the partial compliance group, they believed that compliance with the laws minimized their risk of law enforcement interference. The full compliance group is set apart, however, by the effort and expense they took in order to comply with state laws, including more expensive licensing fees, complex site requirements, and seed to sale tracking systems for the retail growers, and a complicated record keeping and donation set-up by the medical grower. While the full-compliance growersfull compliance growers’ primary motivation for participating in the industry was making money, they employed similar techniques of neutralization to the rest of the sample in order to make breaking federal law acceptable, including denial of harm and appeals to



higher powers. They were distinguished from the other two compliance groups by their openness to the public and to law enforcement, which they hoped would maximize profits while minimizing risk.

## **Discussion**

**Patterns of risk management and techniques of neutralization.** All three compliance types exhibited similarities in risk management and techniques of neutralization. First, regardless of the outcome of a grower's choices to comply (or not) with state regulations, risk management featured prominently. Growers operating under all three conditions, regardless of variation in state laws, believed that their compliance choices minimized the risk of being apprehended by state or federal law enforcement. Growers in the partial-compliance group used state licensing and adherence to plant count regulations as a shield to protect them from law enforcement intervention, believing that adherence to these regulations will generally keep them below notice. In contrast, growers in the noncompliance category tended to feel that licensing made them more vulnerable to law enforcement by drawing attention to themselves, although they tended to focus more on outright rejection of regulation. The full-compliance growers also used their commitment to state regulations as defense, but were much more open with local law enforcement, media, and others about their business. Rather than using licensing as a shield, they tended to think of full compliance as a banner that they could wave in their quest to stand out as examples of how to be successful, especially those in the retail industry.

Second, techniques of neutralization were similar across all three categories, with a few notable exceptions. The idea of marijuana as medicine came up repeatedly, with growers who thus perceived themselves as helping people obtain their medicine despite laws against doing so. This enabled them to deploy the denial of victim and denial of harm techniques of neutralization. Similarly, the idea of liberating marijuana from its undeserved status as prohibited arose both for fully compliant growers and non-compliant growers, but not as much for partially compliant growers. In part, this difference stemmed from differences in underlying philosophies. Noncompliant growers were more likely to reject any regulation outright, while partially compliant growers sometimes saw criminalization in other states as an opportunity for them to obtain higher profit. More pervasive than both ideas about medicine and freedom, however, was the drive for money. While growers may rationalize the illegality of the way that they made their money, making money as a motivation for participation was much stronger/more prevalent than other reasons.

**Implications for policy and law enforcement.** These results offer several implications for policy and law enforcement. The diverse compliance responses to existing regulations are all spawned from a belief that they minimize the risk of law enforcement intervention. This presents a challenge for policy-makers and law enforcement agencies hoping to elicit a more uniform, compliant response from marijuana growers. The partial compliance group is the largest in the sample, and they are using licensing as a cover while they illegally sell marijuana. This makes them difficult to apprehend for state and local law enforcement agencies, because there is only a small space of time in which they are actively breaking state law. Marijuana eradication

efforts typically focus on aerial surveillance, which is more useful while marijuana plants are growing than after they have been harvested (DEA, 2015). Full enforcement thus becomes virtually impossible when a large number of growers follows the partial compliance model, because there simply are not enough law enforcement resources to catch them all in that short of a time span on a large scale.

Along these lines, it will be difficult to use law enforcement to coerce compliance anyway, especially for noncompliant growers. In this sample, even people who have been caught in the noncompliance group do not perceive compliance as their best strategy to minimize risk. Efforts to gain compliance then, will need to focus on directly addressing rejection and suspicion of regulation. While this affects growers, such suspicion also impacts their clientele, driving some buyers away from medical dispensaries and retail outlets for fear of surveillance. Addressing political concerns will be intensely difficult as long as marijuana legislation remains in contention between federal and state governments, because the state has no realistic way to reassure growers that the federal government will honor state laws on this issue.

Since the most relevant motivation behind growing marijuana for sale is money, however, efforts to increase compliance with state regulations will need to address compliance from this angle. There are several issues here. One is costs to growers. State regulations that rely on “seed to sale” tracking systems are expensive, and would price out most growers in this sample before they could get a license. Similarly, the cost of licensing and/or business operation for marijuana under state laws can be prohibitive. Second, limits on the number of licenses available, like those for recreational licenses in Washington State, will encourage growers to go beyond the boundaries of state

regulation. Limits on who can get a license, especially those that deny licenses to people with prior drug convictions, will also encourage growers currently operating outside the law to continue to do so. A third issue is the cost of marijuana available from storefronts in states that allow it. In both Arizona and Colorado, partial compliance and noncompliance growers were able to undercut the price of marijuana at local dispensaries. Reducing the price in these outlets has the potential to undermine smaller growers partial compliance and noncompliance marijuana growers, but states with retail outlets may be reluctant to do so because of the accompanying loss of tax revenue, which has been a boon in recent years (Basu, 2016). Ultimately, states will need to deploy a variety of strategies that address growers' law enforcement avoidance strategies, trust in state laws, and money issues surrounding marijuana production and sale if they hope to increase marijuana growers' compliance with state laws.

## CHAPTER 7

### DISCUSSION AND CONCLUSIONS

Currently, marijuana is the biggest cash crop in the United States produced and sold for both recreational and medicinal use (Gettman, 2006), but little is known about the people that produce it, how they learn to do so, or how they navigate existing regulations. This dissertation enhances knowledge about domestic commercial marijuana producers in the current legal context in which marijuana is federally illegal but permitted under limited circumstances by many states. Given the current legal divide between federal and state restrictions on marijuana production, commercial marijuana producers remain a

hidden population engaged in committing a federal crime. Additional knowledge about who these people are and how they operate offers the opportunity to generate not only theoretical implications, but to provide policy considerations as well. As the federal government and states without provisions for legal marijuana production eye those with such provisions, an understanding of who marijuana producers are, how they learn to be successful, and where and how current policies regulating marijuana production succeed and fail can help inform next steps. Such knowledge is also important for states allowing marijuana production, in order to assess what, if any, changes should be made to existing policy in order to gain compliance or identify and sanction those unwilling to comply. Furthermore, knowledge generated from this dissertation can assist in anticipating future concerns about marijuana production and those who produce it.

Three primary questions were addressed in the dissertation:

- (1) How do U.S. commercial marijuana growers match expectations of criminals according to the life-course criminology paradigm?
- (2) How do people learn to be successful commercial marijuana growers?
- (3) To what extent do commercial marijuana growers comply with state laws regarding marijuana production, and why or why not?

The answers to these three questions provide insight into participants in the commercial marijuana industry by first addressing the basics of who they are and the forms of their criminal careers, then examining how knowledge is transmitted in the industry, and finally addressing the practicalities of law abiding or breaking as well as the attitudes and rationalizations that facilitate or impede doing so. The remainder of this

chapter will address the findings for each question separately, as well as their theoretical and policy considerations. The chapter will then describe the limitations of the dissertation, as well as directions for future research, before reaching its concluding statements.

Life-course theory plays a role in understanding individuals' criminal behavior over their life. However, results from this dissertation suggest that marijuana growers should be considered as a separate type of offenders from the generalized offenders depicted in life-course criminology. This group differs from expectations of life-course criminology on several fronts, and setting them up as a stand-alone group would enable a more effective examination of how age-graded informal social control works for them as a type, rather than trying to shoe-horn them into a mold that they do not fit. Life-course theory suggests that crime declines as age increases. As with previous research on U.S. marijuana producers (August, 2013; Hafley & Tewksbury, 1995; Wiecko & Thompsen, 2013; Weisheit, 1991), the age range of the respondents in this sample exceeds that anticipated by the general age-crime curve (Hirschi & Gottfredson, 1983). Some respondents started commercial marijuana production much later, with more than one entering into the industry only after state laws permitted. Furthermore, older respondents in the sample had careers in commercial marijuana production extending well over twenty years. Clearly, this group of offenders has a different age-crime curve than the general population, for whom offending peaks in late adolescence and declines thereafter.

Life-course theory suggests that social bonds and institutions – such as marriage and employment – slow down or halt criminal activity. Marriage and employment are very

common among U.S. marijuana producers, a finding which is replicated in my sample. Many of my respondents used legitimate employment to support their marijuana production businesses: this stands in stark contrast to existing research on the importance of employment for criminal desistance (Laub & Sampson, 2001). Results from this study indicate that rather than forging the adult social bonds that encourage desistance with employers, marijuana growers may instead use legitimate employment to forge or reinforce social bonds with other like-minded people. Similarly, the high incidence of marriage in the sample, combined with respondents growing marijuana with their current or ex-spouses, indicates that marriage does not encourage desistance for commercial marijuana growers.

The suggestion that commercial marijuana producers stand apart as a single unique class of offenders is in contrast to a tendency in previous studies to separate them out into more specific types (Bovenkerk & Hogewin, 2002; Hakkarainen et al., 2014; Hough et al., 2003; Potter, 2006; Riggs Hafley & Tewksbury, 1995; Wiecko & Thompson, 2014; Weisheit, 1992). The distinctions made in existing typologies are important for understanding differences in scale, organizations, and motivation. However, for more general considerations of commercial marijuana growing over the life-course, existing types do not exhibit enough differences to be meaningful. Whether or not to consider marijuana producers as a single class or as more finely graded types (in terms of life-course situations), should therefore be determined by the purpose of future research questions.

Furthermore, policy-makers should understand who commercial marijuana producers are, not just in terms of names and locations but in terms of the variety of life situations that they occupy. Some of the respondents in the current sample would be able to support themselves if their income from marijuana evaporated. For example, those with full-time jobs and higher education would probably not be at risk of being unable to support themselves. Others, however, are more vulnerable . Respondents who were in their early twenties with less than a high school diploma, those who are retired and receiving Social Security income, and those with documented criminal histories would struggle financially if their marijuana production jobs were unavailable. These growers are less likely to be able to find other legitimate, full-time employment (Bureau of Labor Statistics, 2016; Bushway, 2004). Laws that exclude certain categories of people, like felons, from participating in the marijuana growing industry, or those that limit the numbers of licenses or make licensing prohibitively difficult to obtain are also likely to put the youngest and older participants at a disadvantage to legitimate participation. Exclusion of felons with drug production convictions is hypocritical at the least because it prevents people from legitimately doing the same type of work they were convicted for, but it also eliminates an avenue of employment for which they may be particularly well suited. Limited and expensive licensing, along with pricey siting and equipment requirements, also provides a barrier for the youngest and oldest growers, who are unlikely to have the capital to meet such requirements. In the absence of avenues for legitimate participation, illegal production becomes more likely. An understanding and consideration of these issues in future policy-making choices may aid in the establishment of regulations that



are more just than they might otherwise be, and that protect more vulnerable marijuana producers as the industry legalizes and expands.

Social learning theory can be applied to understand of how commercial marijuana producers acquire the norms, knowledge, and skills required to be successful in the industry. Previous research on learning how to produce marijuana is a bit conflicted, on the one hand declaring marijuana production so easy that little learning is required (Weisheit, 1991), and on the other hand presenting it as complicated enough that withholding knowledge from other growers is enough to keep them subordinate and prevent them from being successful on their own (Bouchard & Nguyen, 2010). The current study found some truth to both of these perspectives. Respondents in this sample were, occasionally, able to produce marijuana successfully with very little advance learning using trial and error. They did not characterize these results as particularly good, however, especially in comparison with later attempts in which they had gained additional knowledge. Thus, fairly advanced technical knowledge appears to be required to do well in the industry, but is not a barrier to participation.

In acquiring this specialized knowledge, the processes specified through social learning theory were present in the experiences of the respondents. Members of the sample reported learning through modeling and imitation of both social and technical mentors as described by Bouchard and Nguyen (2010), in both short learning encounters as well as longer mentoring relationships. They also, however, used trial and error as well as books and other media in order to learn the requisite skills and knowledge. Internet resources and social media were particularly useful. Their ability to use media to acquire

necessary knowledge represents a side-stepping of the criminal modeling and imitation process that characterizes social learning, and is comparatively unique in criminal endeavors due to the wide-spread availability of print and other media sources dedicated to marijuana production. In particular, the internet is a resource that was unavailable at the time differential association theory was first developed, and its use both as a source of knowledge and as a tool to communicate and reinforce group norms indicates that technology may be enhancing or replacing some direct person-to-person contact in the learning process. In its current state, social learning theory ignores the possibilities of proxies for direct interpersonal contact. It should be updated to include learning through such indirect contact, acknowledging the ability of books and media to act as proxies for in-person models.

Interpersonal transmission of knowledge and skills, which is core to learning criminal activity, was important for many of the respondents, if occasionally problematic. In keeping with Bouchard and Nguyen's (2010) findings on the importance of technical mentoring, respondents in the present study indicated that sharing knowledge with members of one's own groups was encouraged and even expected. None of the respondents in the present study indicated that they withheld information from other group members, as some of Bouchard and Nguyen's (2010) respondents did. As these conflicting findings both derive from direct interviews with commercial marijuana growers, it is highly likely that both knowledge dispersal and withholding take place in other marijuana producing groups as well. What is unknown, however, is what makes either situation more likely. Furthermore, as information about marijuana production

becomes increasingly available through media sources, the ability of marijuana producers to keep relevant knowledge secret becomes increasingly difficult.

There are additional considerations for learning about commercial marijuana production as it becomes increasingly legal. If state and federal laws reconcile in favor of legalization, there is every reason to expect that more people will get involved in the industry. For example, at present, there are over thirteen-hundred licensed marijuana cultivation sites in Colorado, as well as uncounted numbers of home-growers (Colorado Department of Revenue, 2016). As discussed, there is a plethora of sources devoted to educating would-be marijuana growers on how to grow and process the plants successfully. There are two likely outcomes that will result from a reconciliation of marijuana laws in favor of legalization. First, “big agriculture” is likely to get involved in commercial marijuana production. Despite its current illegality, marijuana is the third largest cash crop in the U.S. The legal risks of participating in commercial marijuana production in its current conflicted state have thus far prevented existing large agriculture corporations from entering the market. Should marijuana production and sale become fully legal, it is inconceivable that they would not do so. As they enter the market, these corporations will have to learn how to produce marijuana on a large scale, intending to cater to and maintain high demand (Kleiman, 1997). They will likely look to the agriculture specialists that they already employ, but there are also likely to be openings for experienced marijuana specialists. They might have a bit of a tough time finding truly experienced producers who are willing to work with them due to the outsider aspect of cannabis culture (Sandberg, 2012), but they will be able to find some. Like the marijuana producers in this sample, large corporations are also likely to use existing print media as

they find a system that works. Another likely outcome of full legalization for large agriculture corporations is an attempt to corner the market and put smaller growers out of business. They can do this by flooding the market, lobbying for regulations that would be onerous to small farmers, or patenting genetically modified strains of marijuana as with corn and other plants. This will make it incredibly hard for existing producers to compete, although when intangible rewards are paramount, growers will likely continue to produce marijuana for themselves and friends. If they existing commercial marijuana producers survive the flooded market, they will become a niche market like small farmers at farmers markets, and competition will be fierce between them. Respondents in this sample generally took a live and let live approach to other marijuana growers, but there were indications that, as legalization progresses, this will be less and less the case. This is especially likely in states like Washington, where licenses to produce recreational marijuana are limited. Limits on production, at least in the current study, fueled black and gray markets in marijuana, which are unlikely to completely vanish on their own. These markets are in direct competition with licensed producers, who must spend copious amounts of money to keep up with licensing, site requirements, and taxes. Such licensed producers are likely to act against illegal marijuana growers, who undercut their profits. Although these acts are unlikely to be violent, as licensed producers have much to gain from being on the right side of the law, they are nonetheless likely to shift norms towards hostility and competitiveness amongst marijuana growers. Second, in the absence of sanctions on marijuana production and use, more people will want to grow their own at home (Chokshi, 2014), prompting an expansion of supply and education services. Existing specialty stores catering to marijuana growers will likely expand and even

flourish, but as marijuana becomes more mainstream its specialty supplies will find their way into “big box” gardening and home improvement stores and large online retailers. An increase in growers will also create a market for education services that could be filled by existing producers, as one respondent has already begun to do. Similarly, the market for publications on marijuana production is likely to expand to accommodate an influx of inexperienced home growers. The ways in which the marijuana growers in this sample learned to be successful thus provide insight into likely trends should marijuana legalization progress, along with considerations for social learning theory as proxies for direct social interaction become ubiquitous.

Lastly, this dissertation examined why and the extent to which commercial marijuana growers adhere to state laws regarding marijuana production. More simply, why do commercial marijuana growers obey the law? Rational choice theory and techniques of neutralization provide insight into growers’ compliance with state marijuana production laws and reasons for noncompliance and participation. Rational choice theory was employed frequently by marijuana producers regarding risk management; interestingly though, when respondents were in similar situations, they often did not come to the same conclusions. Here, respondents faced with the decision to comply with all, some, or none of their state laws had different compliance outcomes, all while attempting to minimize their risk. In this case, techniques of neutralization informed rational choice theory well, adding depth and dimension to the cold calculus theorized by rational choice.

The distinction between levels of compliance with state laws is also relevant to policy. Partial compliance growers have already expressed a willingness to comply in

large part with regulations on marijuana production, but this willingness ended when regulations were perceived to threaten respondents' income or safety. The most common areas of noncompliance in the current study were sales of marijuana and firearm violations, both of which respondents felt were crucial for their well-being in terms of income and safety. The most common areas of compliance were documentation and plant count restrictions, which respondents believed to be protective measures against law enforcement involvement. Partial compliance growers, then, demonstrated a willingness to accept restrictions when they perceived that doing so would minimize risk and improve their bottom line. This willingness is something that policy-makers may wish to consider moving forward. To the extent that willingness to accept limitations generalizes to new regulations, new policies may be able to target health risks associated with how marijuana is produced. For example, harsh pesticides used during marijuana growth and mold spores growing on marijuana plants may contaminate the final product, increasing its health risks (Johnson & Miller, 2012). Unregulated marijuana production limits sanctions on these production issues to those that the market imposes itself. Growers who are willing to comply with state regulations, however, may submit to restrictions on production methods or to product testing in order to continue to minimize their risk of law enforcement intervention. This is decidedly a harm reduction approach rather than an attempt to ensure full compliance, but public health is of serious concern in considerations of marijuana use and legalities.

Noncompliant growers, on the other hand, rejected all regulations on ideological grounds. Among the respondents in this sample, ideologies played a role in decisions to comply with state marijuana production regulations. Ironically, ideologies motivated

some respondents to reject any regulations, while they encouraged others to comply with regulations. Understanding the importance of narratives about personal freedom or standing out as a good example may assist policy-makers in developing and presenting marijuana production policies that have a higher likelihood of compliance. That said, noncompliance was highest in Arizona, where even compliance with siting requirements is unavailable outside to home-growers for 97% of the population, who live within twenty-five miles of a dispensary. Laws that put legitimate participation out of reach for current growers are unlikely to inspire favorable attitudes towards compliance.

Full compliance with marijuana production regulations by all marijuana producers is unlikely to happen. In part, this is because of beliefs about personal rights and freedoms that prevent some participants from complying on principle. But the results also suggest that existing regulations are highly problematic. For example, laws against sales of marijuana outside of medical dispensaries or licensed retail outlets are literally unenforceable in states like Colorado, which allows all resident adults to cultivate marijuana at home. This is tantamount to allowing people to print money, then telling them not to spend it. One result of those regulations is the existence of marijuana producers like those in the Colorado portion of this sample, who cultivate relatively small or moderate amounts of marijuana and then undercut dispensary prices. Full enforcement of state laws in Oregon and Arizona is similarly impractical at this time because keeping all of the marijuana produced by medical growers in these states, like those in the current sample, would require levels of border surveillance that does not exist at our national borders, much less state borders. The requisite levels of surveillance, in addition to being impractical, are also likely to be unconstitutional. When unmonitored production of

marijuana is permitted, there will be leakage to unintended buyers and users. Yet, when legal marijuana production requires the expense of strict monitoring set-ups and more expensive, limited licensing as in Washington, compliance becomes impossible for many producers. In Arizona, where noncompliance was most common in the current sample, requirements like a one-inch thick metal gate would have put full compliance out of reach for smaller-scale growers. In such situations, black markets will continue, both because those marijuana producers excluded from compliance by cost, legal status, or limited licenses have restricted options, and because the costs of compliance will keep the price of legally produced marijuana higher than illegally produced marijuana.

If full compliance is unrealistic, an alternative would be to consider whether commercial marijuana growers might be persuaded out of the industry through threat of consequences. The potential of deterrence via state or federal penalties for marijuana production is, in light of this sample, unlikely. Despite an enormous amount of federal money directed at eradicating cannabis, its production has continued to spread and it is likely that marijuana black markets will continue even with legalization. Approximately two-thirds of the current sample had no drug-related arrests, and almost a third had no arrests at all. Penalties have little consequence if apprehension is so unlikely. Even more telling, the third of the sample that had drug-related arrests had gone on to continue growing marijuana for sale, indicating that existing penalties had little deterrent effect. Furthermore, the decades-long criminal careers of the commercial marijuana growers in this sample indicate that incapacitation would have to be similarly long to be effective, and up to thirty years of incarceration would be excessive, not to mention expensive. A final area for consideration of compliance with marijuana regulations is the international



marijuana smuggling trade. If production is substantial enough, the U.S. may be able to meet its own demand. The impacts of self-supply on smuggling and border violence remain to be seen, but it is to be hoped that violence will lessen as the market expands.

As with all research, the current study has its limitations. The interview schedule, while extensive, did not elicit information on some topics that could have benefitted the research. Specifically, there were no questions on military service or the gendered experiences of the respondents. Military service has been theorized as a potential turning point towards desistance in criminal trajectories (Laub & Sampson, 1993), and information on the military service of respondents could have provided insight into how social bonds of such service affect participation in marijuana production. Regarding gender, previous research has found work in marijuana production to exhibit gendered characteristics in terms of organizational positions and different expectations of ability between females and males (August, 2013). More information on how the experiences of respondents in the current sample would have been helpful in understanding the generalizability of such experiences. Furthermore, the sample is relatively small, and was not randomly selected. As a result, it is possible that it is not representative or that additional perspectives, organizational forms, or marijuana production methods were not available to the study. The sample could have benefitted from expansion in Colorado and Washington, where response rates were lowest. Similarly, the research only covered four states. Half of the fifty U.S. states currently allow marijuana production to some extent (National Conference of State Legislatures, 2016), and the commercial producers in those states may vary in distinctive ways from those who participated in this study. Despite these limitations, the sample includes respondents from a variety of organizational types

and in a variety of roles, and the depth of their responses has shed new light on this area of study and paved the way for investigation into new questions. Additionally, the sample has the benefit of respondents who were actively growing marijuana at the time of interviews. At over thirty participants, the sample is large for a qualitative study of active offenders. It has a broad age range, and includes more female participants than similar studies, which adds diversity of experiences.

This study, which supports rational choice theory and techniques of neutralization, though does not fully support life-course theory and social learning theory, generates a plethora of future research questions. While the current study examines the careers of active participants, it would be useful to explore the careers of past participants with an eye towards what events or attitude shifts prompted them to end their participation in the commercial marijuana industry. This would provide insight into whether the members of the current sample are typical in their willingness to continue while employed, married, with children, in advanced age, and occasionally through arrests and incarcerations. Second, more research into new marijuana “schools” and the use of social media among industry participants is warranted in light of the current study. While these topics came up among members of the sample, more directed questions could facilitate understanding of modern means of transmission of knowledge and skills in this illicit industry. Third, we could benefit from additional understanding of how members of marijuana production groups enforce social norms. Although respondents in this study did speak about this issue occasionally, more directed research could advance knowledge of norm reinforcement in illicit industries. Fourth, more research on how marijuana producers manage the sales and transportation aspects of their industry could help provide a more

complete picture of the industry as a whole. Finally, more research on how commercial marijuana producers respond to regulation will be needed as regulations evolve.

This dissertation has aimed to expand knowledge of commercial marijuana growers in terms of who the growers are, how they learn to be successful, and the extent to which they follow state laws regarding marijuana production. In accordance with these multiple aims, the findings and their implications are multiple and many-faceted. First, the findings on the life-course experiences of respondents in this study add to a growing body of information that suggests that commercial marijuana producers do not follow the same life-course patterns of offenders generally, and should therefore be considered as a separate type in future examinations of life-course processes or not be considered in terms of life-course criminology. Second, the results on learning processes both underscore the importance of social learning as it is currently conceived, while highlighting the need for theoretical consideration of how additional information sources like books and the internet affect acquisition of skills and knowledge used for criminal behaviors. Third, the experiences of respondents as they decide to what extent to comply with state regulations exposes the importance of both the rationalizations of marijuana producers and the role that policy plays in creating and sheltering illegal industries. On one hand, beliefs about personal freedom and the right to grow and sell any plants they desire shaped people's willingness to comply with state laws. But on the other, licensing and other regulation and enforcement policies produced only partial compliance in Arizona, Colorado, and Oregon, while compelling full compliance at the expense of limiting legitimate participation in others in Washington. The overall picture that emerges is one of an industry on the frontier of legality, with a diverse group of participants and a

variety of learning and risk management strategies. Ultimately, this dissertation sheds new light on a hidden criminal population at a time when participation in commercial marijuana production is growing, and the future of marijuana's legal status is in question.

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APPENDIX A

INTERVIEW SCHEDULE

## Interview Schedule for Domestic Marijuana Growers Study

### Consent Script

Thank you for coming today. As we discussed on the phone, I am a graduate student working with of Professor Scott Decker in the School of Criminology and Criminal Justice at Arizona State University. I am conducting a research study to learn more about marijuana production for sale in the U.S. Before we begin the interview, I'd like to review the project information to make sure that you understand what is entailed and your rights as a participant.

Your participation, will involve an in-depth interview about your participation in this industry. The interview will last about three hours. You will also be asked to refer other people to be interviewed. If you agree to refer others, we will provide you with copies of this letter and numbered referral coupons.

You have the right not to answer any question, to stop the interview at any time, and to not refer others to be interviewed. Please do not give your real name or anyone else's real name during the interview.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty. You must be 18 or older to participate in the study.

Although there may be no direct benefits to you, the possible benefits of your participation in the research include contributing to academic knowledge of how marijuana is produced. We understand that the interview will take time, and to



compensate for this you'll be given \$30 for your participation at the time of your interview. You will receive \$10 for each person you refer that participates. You must contact the researchers to arrange payment for the referrals after each person you refer has participated.

Your responses will be confidential. The results of this study may be used in reports, presentations, or publications but your name will not be used. In order to maintain confidentiality of your records, the interview responses will be stored securely, and only Dr. Decker and I will have access to them. Your name will never be connected to your interview responses. Your interview will be assigned a random respondent number. We ask that you use a pseudonym so that Dr. Decker and I do not have your legal name at any time. We are interested in analyzing a variety of responses, and will aggregate responses so that you cannot be identified by your demographic information. For example, we will use age ranges in papers rather than your age specifically. A disposable cell phone number will be provided so that you and any participants you refer to the study can contact us, and we will not keep your contact information.

I would like to audiotape this interview. The interview will not be recorded without your permission. Please let me know if you do not want the interview to be taped; you also can change your mind after the interview starts, just let me know. The recording will be kept in a locked office at ASU until it can be transcribed, which may take up to three months. Recordings will be made using a digital recorder. After transcription, the recordings will be erased.

Do you have any questions?

Do you understand what participation entails?

Do you agree to be part of the study?

Do you agree to have the interview taped?

Section I Background

Gender \_\_\_\_\_

Age \_\_\_\_\_

Race \_\_\_\_\_

Nationality (birth, current) \_\_\_\_\_

Highest level of education \_\_\_\_\_

**Offense history**

Have you ever been arrested? \_\_\_\_\_

Age at first arrest \_\_\_\_\_

Offense of first arrest \_\_\_\_\_

Number of prior arrests \_\_\_\_\_

Age at first conviction \_\_\_\_\_

Offense at first conviction \_\_\_\_\_

Have you ever been arrested for drug sales? Drug use? \_\_\_\_\_

Age at first arrest for drug sales \_\_\_\_\_

Number of arrests for drug sales \_\_\_\_\_

Age at first arrest for drug use \_\_\_\_\_

Number of arrests for drug use \_\_\_\_\_

## Section II Current Process

**I'd like to talk about your most recent growing season, but first, could you please tell me about your typical growing process?**

### **Seeds**

How did you get seeds for this year's crop? (harvest own, buy online, etc.)

\_\_\_\_\_

Did you own the seeds before planting, or did someone else? What type of person?

\_\_\_\_\_

How was ownership determined? \_\_\_\_\_

How far ahead of planting were the seeds obtained? \_\_\_\_\_

How much seed was obtained? \_\_\_\_\_

Did you decided how much to get, or did someone else? What type of person?

\_\_\_\_\_

How did they decide how much to get? \_\_\_\_\_

How were the seeds stored? \_\_\_\_\_

How many people saw the seeds before planting? What type of people saw them?

\_\_\_\_\_

Did you handle the seeds before planting? If you did not handle them, what type of person did? How many people? \_\_\_\_\_

### **Sites**

Is the current growing site indoors or outdoors? \_\_\_\_\_

Why? \_\_\_\_\_

Is the growth site the same as the processing site? \_\_\_\_\_

Is the product sold wholesale from the growth or processing site? \_\_\_\_\_

Did you have any part in choosing a site? \_\_\_\_\_

If so, what did you do? \_\_\_\_\_

How big is the growth site? \_\_\_\_\_

Is the growth site rented or owned? \_\_\_\_\_

If rented/not owned by someone in the organization, does the property owner know what

is going on at the site? \_\_\_\_\_

How are they paid? \_\_\_\_\_ How much? \_\_\_\_\_

If the site is owned by the organization or a person in the organization, how is ownership of the site determined?

\_\_\_\_\_

If processing occurs at a separate location from growth, is the processing site rented or owned? \_\_\_\_\_

If rented/not owned by someone in the organization, does the property owner know what is going on at the site? How are they paid? How much? \_\_\_\_\_

If the site is owned by the organization or a person in the organization, how is ownership of the site determined?

\_\_\_\_\_

What makes the growth site a good site? \_\_\_\_\_

Is there anything that would make a better site?

\_\_\_\_\_

If the processing site is separate, what makes it a good processing site?

\_\_\_\_\_

Is there anything that would make it a better site?

\_\_\_\_\_

**Planting**

Did the site undergo preparation for planting? \_\_\_\_\_

If so, what preparations were made before planting?

\_\_\_\_\_

When were the seeds planted? \_\_\_\_\_

Did you handle the seeds during planting? Did anyone else? What type of person?

\_\_\_\_\_

How are the seeds planted? \_\_\_\_\_

How much seed was planted this season? \_\_\_\_\_

**Growth**

What kind of care do the plants get while growing?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Crop rotation? Watering, fertilization, equipment, weed & pest control, plant sexing/thinning, quality control

How do growers learn how to care for the plants successfully?

\_\_\_\_\_  
\_\_\_\_\_

Do you own the plants before harvesting? Which type of person/people hold ownership?  
(single owner, held in common, etc.?) \_\_\_\_\_

How is ownership of the plants determined? \_\_\_\_\_

Do you see the plants during the growing period? Does anyone else? What type of people  
see them? \_\_\_\_\_

What type of person handles the plants during the growing period?  
\_\_\_\_\_

How long does it take to grow the plants? \_\_\_\_\_

Are any security measures taken to protect the plants or the people growing them during  
the growth period? \_\_\_\_\_

If so, please describe them. \_\_\_\_\_

Why is it important to have these measures? \_\_\_\_\_

Is anyone armed? Why? \_\_\_\_\_

If you are at the site during the growth period, are you armed? Why?  
\_\_\_\_\_

### **Harvesting & Processing**

How are the plants harvested? (hand/machine, etc.)  
\_\_\_\_\_

What type of person harvests the plants? \_\_\_\_\_

Are seasonal laborers involved? If so, how do they get paid? How much?

\_\_\_\_\_

\_\_\_\_\_

How long does it take to harvest them? \_\_\_\_\_

What happens to the plants right after harvesting? \_\_\_\_\_

Are the plants processed in any way? \_\_\_\_\_

If so, how? What equipment is used?

\_\_\_\_\_

What type of person does this? \_\_\_\_\_

How long does it take? \_\_\_\_\_

Are the plants stored after harvest or processing? \_\_\_\_\_

If so, where? \_\_\_\_\_

What type of person puts it into storage? \_\_\_\_\_

What type of person owns the storage? \_\_\_\_\_

If storage is rented, does the owner know what is being stored there? \_\_\_\_\_

Does the storage owner get paid separately? \_\_\_\_\_

How does the storage owner get paid? (drugs, cash, etc.)



\_\_\_\_\_

How much does the storage owner get paid? \_\_\_\_\_

How long are the plants/processed product stored? \_\_\_\_\_

Does ownership of the product change after processing? \_\_\_\_\_

If so, how is ownership determined? \_\_\_\_\_

Are any security measures taken to protect the product or the people involved in harvesting and processing? \_\_\_\_\_

If so, please describe them. \_\_\_\_\_

Is anyone armed during harvesting and processing? Why? \_\_\_\_\_

If you are involved in harvesting and/or processing, are you armed? Why?

\_\_\_\_\_

### **Transportation**

When it's ready for sale, where does the product go? \_\_\_\_\_

What type of person moves it? \_\_\_\_\_

What type (or types) of conveyance is used to move the product? \_\_\_\_\_

What type of person owns the conveyance? \_\_\_\_\_

Does the conveyance owner know what the vehicle is being used for?

\_\_\_\_\_

Are transporters paid separately? If so, how are they paid? How much are they paid? \_\_\_\_\_

**Sale**

What type of person is the final product sold to? \_\_\_\_\_

What type of person does the selling? \_\_\_\_\_

Why this buyer/type of buyer? \_\_\_\_\_

**Bookkeeping**

Are records kept of the crop or money related to it? \_\_\_\_\_

If so, how are the records kept? (ledgers, computers, bank accounts, etc.)

\_\_\_\_\_

**Legal**

Have you or your group taken steps to avoid law enforcement officers this season?

\_\_\_\_\_

If so, what has been done to avoid law enforcement? \_\_\_\_\_

Do local law enforcement officials know about your site? \_\_\_\_\_

What is your relationship like with local law enforcement?

\_\_\_\_\_

Have you had any contact with them? \_\_\_\_\_

Have any of the growers been arrested? \_\_\_\_\_

If so, what were the charges? What was the outcome?

\_\_\_\_\_

Do local law enforcement personnel assist your business or participate in it in any way? \_\_\_\_\_

If so, how? \_\_\_\_\_

Do federal law enforcement officials know about your site? \_\_\_\_\_

What is your relationship like with federal law enforcement? \_\_\_\_\_

Do federal law enforcement personnel assist your business or participate in it in any way?

\_\_\_\_\_

If so, how? \_\_\_\_\_

Do you have a personal use license? \_\_\_\_\_

Issued by whom? \_\_\_\_\_

How did you get it? \_\_\_\_\_

Do you use marijuana? \_\_\_\_\_

How often? \_\_\_\_\_

Why? (for recreation, medicinal, etc.) \_\_\_\_\_

How much do you use at one time? \_\_\_\_\_ Per week? \_\_\_\_\_ Per month?

\_\_\_\_\_

Do you use other drugs? \_\_\_\_\_

Which other drugs do you use? \_\_\_\_\_

How often? \_\_\_\_\_

Does your business have a license to grow? \_\_\_\_\_

Issued by whom? \_\_\_\_\_

How did you get it? \_\_\_\_\_

Is it issued to you personally, to a business/group, or to someone else? What type of person? \_\_\_\_\_

What do you (or your organization) have to do to maintain the license?

---

(standards, bookkeeping, process records, etc.?)

Is there a separate set of records kept for licensing purposes?

\_\_\_\_\_

### Section III Current Organization/Roles

How did you come to be involved in the growing business this year? Were you recruited, did you join in with friends, were family members or relatives involved in the activity, or

did you initiate it on your own?

---

What part or parts of the growing business are you participating in this year?

---

Are you a specialist at any part of the operation? \_\_\_\_\_

If so, which part? \_\_\_\_\_

How did you come to specialize in this area?

---

How much time do you spend working with the growing business? (Per week? Per month?) \_\_\_\_\_

How often are you at the growth site? \_\_\_\_\_

If the processing site is separate, how often are you at the processing site?

---

Is this your only source of household income? \_\_\_\_\_

If not, what else do you (or other members of your household) do for money?

---

How many people are involved in your growing business this year?

---

If you know any of the other people in the business, how do you know them? How long

have you known them?

---

How much time do they spend working on the business?

---

How often are people at the growth site? \_\_\_\_\_

Does anyone live there during the growing season? Year round?

---

Do people come/stay there that aren't part of the growing business?

---

(If processing site is separate) How often are people at the processing site?

---

Does anyone live there during the growing season or processing time? Year round? \_\_\_\_\_

Do people come/stay there that aren't part of the growing business?

---

How does the labor of the business get distributed? \_\_\_\_\_

Are individuals responsible for just one part of the process, or multiple parts?

---

What type of person decided who does what this season?

\_\_\_\_\_

Has anyone left the business? \_\_\_\_\_

How did they do it? \_\_\_\_\_

### **Numbers**

How much are you growing this season? \_\_\_\_\_

What is the expected wholesale price for this year's harvest? \_\_\_\_\_

What is the expected retail price? \_\_\_\_\_

How is price determined? \_\_\_\_\_

What type of person handles the money from the sale? \_\_\_\_\_

How will you be paid? (drugs, cash, etc.) \_\_\_\_\_

How much will you get paid? (amount, flat rate, percentage, etc.)

\_\_\_\_\_

If paid in drugs, what will you do with them? \_\_\_\_\_

Personal use? How much? \_\_\_\_\_

Sell? To what type of person? For how much?

\_\_\_\_\_

How does everyone else get paid? \_\_\_\_\_

### Section IV First Experience

**Now I want you to describe your first experience growing marijuana for sale. Use as much detail as you can recall, and remember that what you tell me cannot be linked to you.**

How old were you when you first participated in such an activity? \_\_\_\_\_

What year was it? \_\_\_\_\_

How did you come to be involved in marijuana growing? Were you recruited, did you join in with friends, were family members or relatives involved in the activity, or did you initiate it on your own?

\_\_\_\_\_

Why did you decide to get involved with growing marijuana?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

How long did you plan on being involved? \_\_\_\_\_

**Let's talk about the process from that first experience.**

### **Seeds**

Did you get the seeds for the crop that time? How?

\_\_\_\_\_

If not, where did they come from? \_\_\_\_\_



What type of person owned the seeds before planting? \_\_\_\_\_

How was ownership determined? \_\_\_\_\_

How far ahead of planting were the seeds obtained? \_\_\_\_\_

How much seed was obtained? \_\_\_\_\_

What type of person decided how much to get?

\_\_\_\_\_

How did they decide how much to get? \_\_\_\_\_

How were the seeds stored? \_\_\_\_\_

What type of person saw the seeds before planting?

\_\_\_\_\_

What type of person handled the seeds before planting?

\_\_\_\_\_

### **Sites**

Was the growing site indoors or outdoors? \_\_\_\_\_

Why? \_\_\_\_\_

Was the growth site the same as the processing site? \_\_\_\_\_

Was the product sold wholesale from the growth or processing site?

\_\_\_\_\_

Did you have any part in choosing a site? \_\_\_\_\_

If so, what did you do? \_\_\_\_\_

How big was the growth site? \_\_\_\_\_

Was the growth site rented or owned? \_\_\_\_\_

If rented/not owned by someone in the organization, did the property owner know what was going on at the site? How were they paid? How much?

\_\_\_\_\_

If the site was owned by the organization or a person in the organization, how was ownership of the site determined? \_\_\_\_\_

If processing occurred at a separate location from growth, was the processing site rented or owned? \_\_\_\_\_

If rented/not owned by someone in the organization, did the property owner know what was going on at the site? How were they paid? How much?

\_\_\_\_\_

If the site was owned by the organization or a person in the organization, how was ownership of the site determined? \_\_\_\_\_

What made the growth site a good site? \_\_\_\_\_

Is there anything that would have made it a better site? \_\_\_\_\_

If the processing site was separate, what made it a good processing site?

\_\_\_\_\_

Is there anything that would have made it a better site?

\_\_\_\_\_

### **Planting**

Did the site undergo preparation for planting? \_\_\_\_\_

If so, what preparations were made before planting?

\_\_\_\_\_

When were the seeds planted? \_\_\_\_\_

What type of person handled the seeds during planting? \_\_\_\_\_

How were the seeds planted? \_\_\_\_\_

How much seed was planted that season? \_\_\_\_\_

### **Growth**

What kind of care did the plants get while growing?

\_\_\_\_\_

Crop rotation? Watering, fertilization, equipment, weed & pest control, plant sexing/thinning, quality control

What type of person owned the plants before harvesting? (single owner, held in common, etc.?) \_\_\_\_\_

How was ownership of the plants determined? \_\_\_\_\_

What type of person saw the plants during the growing period? \_\_\_\_\_

What type of person handled the plants during the growing period?

\_\_\_\_\_

Were any security measures taken to protect the plants or the people growing them during the growth period? \_\_\_\_\_

If so, please describe them.

\_\_\_\_\_

Was anyone armed? Why?

\_\_\_\_\_

If you were at the growth site during the growth period, were you armed? Why?

\_\_\_\_\_

### **Harvesting & Processing**

How were the plants harvested? (hand/machine, etc.) \_\_\_\_\_

What type of person harvested the plants? \_\_\_\_\_

Were seasonal laborers involved? If so, how did they get paid? How much?

\_\_\_\_\_

What happened to the plants right after harvesting? \_\_\_\_\_

Were the plants processed in any way? \_\_\_\_\_

If so, how? What equipment? \_\_\_\_\_

What type of person did this? \_\_\_\_\_

How long did it take? \_\_\_\_\_

Were the plants stored after harvest or processing? \_\_\_\_\_

If so, where? \_\_\_\_\_

What type of person put them into storage? \_\_\_\_\_

What type of person owned the storage? \_\_\_\_\_

If storage is rented, did the owner know what was being stored there? \_\_\_\_

Did the storage owner get paid separately? \_\_\_\_\_

How did the storage owner get paid? (drugs, cash, etc.)

\_\_\_\_\_

How much did the storage owner get paid? \_\_\_\_\_

How long were the plants/processed product stored? \_\_\_\_\_

Did ownership of the product change after processing? \_\_\_\_\_

If so, how was ownership determined? \_\_\_\_\_

Were any security measures taken to protect the product or the people involved in

harvesting and processing? \_\_\_\_\_

If so, please describe them.

\_\_\_\_\_

Was anyone armed during harvesting and processing? Why?

\_\_\_\_\_

If you were involved in harvesting and/or processing, were you armed? Why?

\_\_\_\_\_

### **Transportation**

Once harvested/processed, where did the product go? \_\_\_\_\_

What type of person moved it? \_\_\_\_\_

What type (or types) of conveyance was used to move the product?

\_\_\_\_\_

What type of person owned the conveyance?

\_\_\_\_\_

Did the conveyance owner know what the vehicle was being used for?

\_\_\_\_\_

Were transporters paid separately? If so, how were they paid? How much were they paid? \_\_\_\_\_

### **Sale**

What type of person was the final product sold to? \_\_\_\_\_

What type of person did the selling? \_\_\_\_\_

Why this buyer/type of buyer? \_\_\_\_\_

### **Bookkeeping**

Were records kept of the crop or money related to it? \_\_\_\_\_

If so, how were the records kept? (ledgers, computers, bank accounts, etc.)

\_\_\_\_\_

### **Legal**

Did you or your group taken steps to avoid law enforcement officers that season?

\_\_\_\_\_

If so, what was done to avoid law enforcement?

\_\_\_\_\_

Did local law enforcement officials know about your site?

\_\_\_\_\_

What was your relationship like with local law enforcement then?

\_\_\_\_\_

Did you have any contact with them? \_\_\_\_\_

Were any of the growers been arrested? \_\_\_\_\_

If so, what were the charges? What was the outcome?

\_\_\_\_\_

Did local law enforcement personnel assist your business or participate in it in any way?

\_\_\_\_\_

If so, how? \_\_\_\_\_

Did federal law enforcement officials know about your site? \_\_\_\_\_

What was your relationship like with federal law enforcement? \_\_\_\_\_

Did federal law enforcement personnel assist your business or participate in any way?

\_\_\_\_\_

If so, how? \_\_\_\_\_

Did you have a personal use license at the time? \_\_\_\_\_

Issued by whom? \_\_\_\_\_

How did you get it? \_\_\_\_\_

Did you use marijuana then? \_\_\_\_\_

How often? \_\_\_\_\_

Why? (for recreation, medicinal, etc.) \_\_\_\_\_

How much per day? \_\_\_\_\_ Per week? \_\_\_\_\_ Per month? \_\_\_\_\_

When did you first start using marijuana? \_\_\_\_\_



Did you use other drugs at the time? \_\_\_\_\_

What other drugs? \_\_\_\_\_

How often? \_\_\_\_\_

Did your business have a license to grow? \_\_\_\_\_

Issued by whom? \_\_\_\_\_

How did you get it? \_\_\_\_\_

Was it issued to you personally, to a business/group, or to someone else? What type of person or group? \_\_\_\_\_

What did you (or your organization) have to do to maintain the license?

\_\_\_\_\_

(standards, bookkeeping, process records, etc.?)

Was there a separate set of books kept for licensing purposes?

\_\_\_\_\_

What part or parts of the growing business are you participating in that year?

\_\_\_\_\_

Were you a specialist at any part of the operation? \_\_\_\_\_

If so, which part? \_\_\_\_\_

How much time did you spend working with the growing business? (Per week? Per

month?) \_\_\_\_\_

How often were you at the growth site? \_\_\_\_\_

If the processing site was separate, how often were you at the processing site?

\_\_\_\_\_

Was this your only source of household income? \_\_\_\_\_

If not, what else did you (or other members of your household) do for money at the time?

\_\_\_\_\_

How many people were involved in your growing business that year?

\_\_\_\_\_

If you knew any of the other people in the business, how did you know them? How long had you known them?

\_\_\_\_\_

How much time did they spend working on the business? \_\_\_\_\_

How often were people at the growth site? \_\_\_\_\_

Did anyone live there during the growing season? Year round? \_\_\_\_\_

Did people come/stay there that weren't part of the growing business?

\_\_\_\_\_

(If processing site was separate) How often were people at the processing site?

\_\_\_\_\_

Did anyone live there during the growing season or processing time? Year round?

\_\_\_\_\_

Did people come/stay there that weren't part of the growing business?

\_\_\_\_\_

How did the labor of the business get distributed?

\_\_\_\_\_

Were individuals responsible for just one part of the process, or multiple parts?

\_\_\_\_\_

What type of person decided who did what that season? \_\_\_\_\_

### **Numbers**

How much did you grow that first season? \_\_\_\_\_

What was the wholesale price for that harvest? \_\_\_\_\_

What was the retail price? \_\_\_\_\_

How was the price determined? \_\_\_\_\_

What type of person handled the money from the sale?

\_\_\_\_\_

How were you paid? (drugs, cash, etc.) \_\_\_\_\_

How much were you get paid? (amount, flat rate, percentage, etc.)

---

If paid in drugs, what did you do with them? \_\_\_\_\_

Personal use? How much? \_\_\_\_\_

Sell? To what type of person? For how much?

---

How did everyone else get paid? \_\_\_\_\_

Section V Change, Rationalization, Wrap-up

Since that first experience, how often have you participated in growing marijuana for sale?

---

Do you plan to continue to participate? For how long? \_\_\_\_\_

Knowing that the business is federally illegal and that state regulations vary, why do you participate in this business?

---

---

What difficulty, if any, would you expect to encounter if you decided not to participate?

---

Let's talk about how things have changed between your first experience and now.

Has your role in the business changed? How? \_\_\_\_\_

Have the people in the business changed? How? \_\_\_\_\_

Has your knowledge about what works in the business changed? How?

\_\_\_\_\_

Has the size of your business changed? In what way? \_\_\_\_\_

Has your relationship with the legal system changed? With law enforcement?

How?

\_\_\_\_\_

—

Is there any other thing I should know about the marijuana growing business that we have not mentioned during this conversation?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date of Interview:

Location:

Interviewer:

### Post-interview Referral Script


Thank you very much for your interview. In addition to your participation, we'd like to invite other marijuana growers to be interviewed. I have some contact cards and information letters here. For each person that you refer who agrees to participate, you'll be given ten dollars. The cards are marked so that I'll know that it's you who referred them. You must contact the researchers in order to be paid for your referrals after they have participated by calling the number on our card. Would you be willing to refer any other growers of your acquaintance?

Thanks again. If you have any questions later on, you can contact Dr. Decker or myself.

APPENDIX B

IRB APPROVAL

**To:** Scott Decker  
411 North

**From:** Mark Roosa, Chair   
Soc Beh Full Board

**Date:** 06/22/2012

**Committee Action:** Approval

**IRB Action Date** 06/22/2012

**Approval Date** 06/15/2012

**IRB Protocol #** 1205007886

**Study Title** Domestic Marijuana Growers' Organizations Study

**Expiration Date** 06/14/2013

The above-referenced protocol has been APPROVED following Full Board Review by the Institutional Review Board.

This approval does not replace any departmental or other approvals that may be required. It is the Principal Investigator's responsibility to obtain review and continued approval before the expiration date noted above. Please allow sufficient time for continued approval. Research activity of any sort may not continue beyond the expiration date without committee approval. Failure to receive approval for continuation before the expiration date will result in the automatic suspension of the approval of this protocol on the expiration date.

Information collected following suspension is unapproved research and cannot be reported or published as research data. If you do not wish continued approval, please notify the Committee of the study termination.

**Adverse Reactions:** If any untoward incidents or severe reactions should develop as a result of this study, you are required to notify the Soc Beh Full Board immediately. If necessary a member of the Committee will be assigned to look into the matter. If the problem is serious, approval may be withdrawn pending IRB review.

**Amendments:** If you wish to change any aspect of this study, such as the procedures, the consent forms, or the investigators, please communicate your requested changes to the Soc Beh Full Board. The new procedure is not to be initiated until the IRB approval has been given.



APPENDIX C

APPROVED INFORMATION LETTER

## INFORMATION LETTER-INTERVIEWS

### **Domestic Marijuana Growers' Organizations Study**

Date \_\_\_\_\_

Dear \_\_\_\_\_:

I am a graduate student working with Professor Scott Decker in the School of Criminology and Criminal Justice at Arizona State University. I am conducting a research study to learn more about marijuana production for sale in the United States.

I am inviting your participation, which will involve an in-depth interview about your participation in this industry. The interview will last about three hours. You will also be asked to refer other people to be interviewed. You have the right not to answer any question, to stop the interview at any time, and to not refer others to be interviewed.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty. You must be 18 or older to participate in the study.

We would also appreciate your assistance in referring other participants. If you agree to refer others, we will provide you with copies of this letter and numbered referral coupons.

Although there may be no direct benefits to you, the possible benefits of your participation in the research include contributing to academic knowledge of how marijuana is produced. We understand that the interview will take time, and to compensate for this you'll be given \$30 for your participation at the time of your interview. You will receive \$10 for each person you refer that participates. You must contact the researchers to arrange payment for the referrals after each person you refer has participated.


Your responses will be confidential. The results of this study may be used in reports, presentations, or publications but your name will not be used. In order to maintain confidentiality of your records, the interview responses will be stored securely, and only Dr. Decker and I will have access to them. Your name will never be connected to your interview responses. Your interview will be assigned a random respondent number. We ask that you use a pseudonym so that Dr. Decker and I do not have your legal name at any time. A disposable cell phone number will be provided so that you and any participants you refer to the study can contact us, we will not keep your contact information.

I would like to audiotape this interview. The interview will not be recorded without your permission. Please let me know if you do not want the interview to be taped; you also can change your mind after the interview starts, just let me know. The recording will be kept in a locked office at ASU until it can be transcribed, which may take up to three months. Recordings will be made using a digital recorder. After transcription, the recordings will be erased.

If you have any questions concerning the research study, please contact the research team at: Scott Decker ([Scott.Decker@asu.edu](mailto:Scott.Decker@asu.edu), 602-496-6333, Arizona State University, 411 N. Central Ave., Suite 600, Phoenix, AZ 85004) or Brooks Louton ([Brooks.Louton@asu.edu](mailto:Brooks.Louton@asu.edu)). If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please let me know if you wish to be part of the study.

Sincerely,

Brooks Louton, M.S.  
Graduate Student, Arizona State University

 ASU IRB APPROVED FOR  
MARK ROOSA, CHAIR  
6/15/12-6/14/2013