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What Epidemic? Rural, Suburban, and Urban Community Members' Perceptions of Opioid Use in the Current Epidemic

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Abstract

What Epidemic? Rural, Suburban, and Urban Community Members’ Perceptions of Opioid Use in the Current Epidemic

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The opioid epidemic in the United States does not discriminate. With previous research showing the rise of the opioid epidemic and how it is impacting all communities, there is a lack of research addressing perceptions towards the opioid epidemic on a national level and in local communities. Thus, my proposed thesis asks, what are the perceptions rural, suburban, and urban community members have towards opioid use within their community? More specifically, does institutional anomie on the national level, and social disorganization on the community level, influence perceptions of opioid use. Administered through a survey, via Amazon’s Mechanical Turk, I will be examining if community attachment, cohesion, social bonds, cultural values, and social institutions influence attitudes about drug abuse. Understanding the roots of these community variables, may then explain opioid use in communities.
WHAT EPIDEMIC? RURAL, SUBURBAN, AND URBAN COMMUNITY MEMBERS’ PERCEPTIONS OF OPIOID USE IN THE CURRENT EPIDEMIC

BY

CARLY A. BESLER
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A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE MASTER OF ARTS

DEPARTMENT OF SOCIOLOGY

Thesis Director: Keri Burchfield
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CHAPTER ONE

INTRODUCTION

The abuse of opioids has become a growing epidemic in the United States, and the rates of overdose deaths due to opioids are continuing to rise. According to the Centers for Disease Control and Prevention, from 1999 to 2016, more than 630,000 people have died from a drug overdose (CDC 2018). Sixty-six percent of that total number of overdoses was due to opioids (CDC 2018). On average, 115 people die every day from an opioid overdose (CDC 2018). In addition, The National Institute of Drug Abuse estimates that “the total economic burden of prescription opioid misuse alone in the United States is $78.5 billion a year, including the costs of healthcare, lost productivity, addiction treatment, and criminal justice involvement (NIDA 2018:1).” This epidemic does not discriminate; it is taking place in all communities. With previous research showing the rise of the opioid epidemic and how it is impacting all communities, there is a lack of research addressing perceptions towards the opioid epidemic on a national level and in local communities. Thus, my proposed research question is, what are the perceptions rural, suburban, and urban community members have towards opioid use within their community? More specifically, does institutional anomie on the national level, and social disorganization on the community level, influence perceptions of opioid use?
CHAPTER TWO
REVIEW OF THE LITERATURE

Trends in the Opioid Epidemic

The current opioid epidemic has occurred primarily in three different waves. The first wave of the epidemic starting in the early 1990’s. This was due to pharmaceutical companies influencing medical providers to prescribe opioid medication to non-cancer patients who were experiencing extreme pain (Liu et al. 2019). During this time, pharmaceutical companies were claiming that there was a low risk of addiction to prescription opioids which inclined medical professionals to prescribe opioids to their patients (Liu et al. 2019). This was a claim that was backed up with little data (Liu et al. 2019). By the late 1990’s, 86% of individuals using prescription opioids were using them to treat their non-cancer pain, and were becoming addicted (Liu et al. 2019). With an increase in prescriptions, illegal use of the drug was also starting to take place within various communities (Liu et al. 2019). Those prescribed an opioid were illegally selling them to other individuals for the purpose of getting high (Stokowski 2008). It would be some years later before the next wave took place.

The second wave of the epidemic began in 2010. This was due to the increase of overdoses and death from heroin abuse (Liu et al. 2019). Law-makers and medical providers, and those who had been paying attention to the increasing attention about opioid abuse, attempted to deter doctors from prescribing and refilling prescriptions of opioids (Liu et al, 2019). In turn, this resulted in may individuals turning to heroin to treat their pain, or to just give them a high (Liu et al. 2019). It did not matter what age, sex, socioeconomic status, or what type of community you lived in. If an individual needed a high, and pills were not accessible, then the addict could turn
to heroin (Liu et al. 2019). With heroin starting to become more popular by this point and with more individuals starting to become addicted to it, stronger versions of opioids started becoming made, leading to the third wave of the epidemic.

The third wave of the epidemic, the wave we are currently in, began in 2013. This wave was due to the increase of synthetic opioids being used (Liu, et al. 2019). Fentanyl is the most common synthetic opioid. In 2016, “20,000 deaths were from fentanyl and related drugs. The increase in fentanyl deaths has been linked to illicitly manufactured fentanyl (not diverted medical fentanyl) used to replace or adulterate other drugs of abuse” (Liu et al 2019:1). The use of synthetic opioids is supposed to mimic more natural opioids, but it turns out to be far more deadly than prescription pills or even natural heroin (CDC 2018). With the vast amount of information, we have about the different waves of the opioid epidemic, and the different forms of opioids being abused, we do not often hear about society’s perceptions about the current opioid epidemic and their perceptions about the drugs that are involved within their community.

Perceptions about the epidemic

Much of the literature already published has been focused on the prevalence of the epidemic, how the demographics of the typical opioid user are changing, and how users are portrayed in the media. Cicero et al. (2014) found that the demographic composition of heroin users has shifted over the last 50 years, showing that opioid use has changed from an inner-city, minority-centered problem to one that has a more widespread geographical distribution, involving primarily white men and women in their late 20s, living in suburban and rural areas (Cicero et al. 2014). Cicero et al. (2007) found that there is a correlation between therapeutic exposure to opioid analgesics and their abuse, with high prevalence in rural and suburban regions
This research demonstrates that the face of heroin is changing, and the use of prescription pills is expanding beyond urban borders.

Very few studies have focused on looking at community member attitudes toward opioid use. Stanekzai et al. (2012) did. The researchers examined community residents of Kabul, Afghanistan and their attitudes about awareness, knowledge, and harm reduction of drugs, specifically opioids being prevalent in their community (Stanekzai et al. 2012). In a general sense, 86.7% of residents know someone using drugs or have witnessed someone using drugs with, 26.7% perceiving that opioids were the largest drug used (Stanekzai et al. 2012). In terms of how to handle opioid users in the community, 49.5% of respondents have the attitude that the users just need medical treatment, compared to 16.4% who believe that users should be punished punitively (Stanekzai et al. 2012). Although this study was conducted in another country, the percentages show that there is prevalence of it in their community- most residents believe that these drug users need medical help instead of just being locked away. This attitude would be interesting to examine among community members in the United States, and by comparing to urban, suburban, and rural residents.

Community members may not be aware that their community even has an opioid problem, and this in turn may form perceptions about the epidemic in their community. Habecker, Welch-Lazoritz, and Dombrowski (2018) found that, in terms of community residents knowing one person to buy an opioid from, 4.5% knew one person for heroin and 17.8% knew on person for prescription pills (Habecker, Welch-Lazoritz, and Dombrowski 2018). The researchers also found that rural and urban community members had equal access to heroin and prescription pills (Habecker, Welch-Lazoritz, and Dombrowski 2018). Since residents in these
two types of communities have equal access, it would be interesting to see if rural residents perceive their community’s drug problem as better or worse than in urban communities.

With residents possibly not being aware of their community having an opioid problem, this may be because drugs are not seen to be a prominent concern in some communities. McDermott and Garofalo (1996) examined the extent and nature of drug problems in small urban and suburban communities. The researchers found that community members’ greatest concerns for their community were economic development and schools. Drugs and drug-related crime were mentioned less frequently. If community members are not directly seeing fellow members using or selling a drug, they may have the perception that this deviant behavior does not happen here. They may even believe that local community characteristics help to prevent this type of behavior in their neighborhood.

Community structure and perceptions about the epidemic

The structure of the community as well as the social bonds and collective efficacy developed by residents throughout the community may also play a role in perceptions towards the opioid epidemic in their community. Rural, suburban, and urban residents are likely going to have different perceptions about the community they live in. This is based on the different levels of attachment or attitudes each resident has towards their community. The significance of attachment to community perceptions and actions is derived from Kasarda Janowitz’s (1974) early work with the system model. Kasarda and Janowitz (1974) conducted a survey to examine community attitudes, local social bonds, and associations the resident is a member of in the community (Kasarda and Janowitz 1974). In their study, the authors suggest that local social ties help to promote feelings of community attachment (Kasarda and Janowitz 1974).
More recent studies have looked deeper into residential attachments. Woldoff (2002) states that neighborhood attachment can be defined as, “a multidimensional concept composed of attitudes, neighboring, and problem solving (Woldoff 2002: 87).” Those who see their community as being conflict-orientated, disordered, and having untrustworthy residents, are going to be less attached to it, and not want to be involved in efforts to make the community better (Woldoff 2002). Conversely, when residents feel good about their community, and see crime, they may informally deal with it together as a community (Woldoff 2002). Burchfield (2009) also found urban residents with extensive friend and neighbor ties, involvement in local neighborhood organizations, and positive feelings about the neighborhood have higher levels of attachment and informal social control (Burchfield 2009). So, when attachment is high, members of the neighborhood are encouraged to join in on behaviors with other residents to showcase that their neighborhood is a positive place to be (Burchfield 2009).

Thus, local social bonds and attachments within communities will influence perceptions of that community. Rural communities are becoming more connected to urban communities due to urbanization, but there are still key differences between these two communities in terms of social norms, expectations, and cultural values (Keyes et al. 2014). In rural communities, less emphasis is placed on education and more emphasis is placed on working and investment in the community (Keyes et al. 2014). With this being said, rural residents may be closer to one another socially and geographically (Keyes et al. 2014). This is something that is not always seen in urban and even some suburban communities where geographically, residents are more spread-out and may also have different values and norms.
Community attitudes and attachment can then affect the perceptions a resident has about the opioid epidemic and the opioid users in their community. If a resident has a strong attachment to their community, they are most likely going to feel more invested in where they live, and possess more knowledge about what is going on throughout the community and be willing to engage to control and prevent local social problems (Burchfield 2009). Thus, local community attachments should correlate with higher residential knowledge about opioids in the local community. Unfortunately, this is not always true. Residents may have strong attachments to the community, but still be unaware that their community is having an opioid crisis. This is due to the fact that opioid abuse can be so well-hidden because most users typically look like non-users in the community. Users can be good at hiding signs of their addiction, and overdoses might appear as isolated incidents. This makes the question of local perceptions about the epidemic challenging because if residents do not see it happening, know someone addicted, or directly see the outcomes of the epidemic, they may think their community does not have a problem.

More research is needed about the perception community members have about opioids and opioid users on a national level and on a local level in the community where they live. Further, what is needed is a theoretical framework to understand these relationships. Given the relevance of anomie theory for explaining societal and local deviance, I will be applying a contemporary version of anomie theory to explain perceptions towards the opioid epidemic and addicts on a national level, and social disorganization which represents local anomie at the community level.
Institutional anomie

Merton (1938) created strain theory, as an adaption of Durkheim’s (1897) anomie theory. I will be applying a contemporary version of anomie theory, and elements of strain theory to perceptions of the opioid epidemic. Steven F. Messner and Richard Rosenfeld developed a new way of applying anomie theory that they called institutional anomie (Messner and Rosenfeld 2007). Messner and Rosenfeld argue that, “the American Dream itself excerpts pressure toward crime by encouraging an anomic cultural environment, an environment in which people are encouraged to adopt an ‘anything goes’ mentality in pursuit of certain goals” (Messner and Rosenfeld 2007: 67). The anomic pressures that are associated with the American Dream are kept alive through the institutional powers of the economy. Other institutions such as the family, education, religion, and government are weakened. The economic and cultural goals associated with the American Dream, and the imbalance of reaching these goals, may elicit, “wide spread anomie, weak social controls, diminished social support, and ultimately high levels of crime” (Messner and Rosenfeld 2007: 67). Thus, I will be testing how general feelings of institutional anomie correlate to perceptions of opioid use and users on the national level.

Institutional anomie: cultural values

The American dream is powerful in society. Messner and Rosenfeld state that there are four basic cultural values that make up the cultural aspect of the American Dream (Messner and Rosenfeld 2007). These values, “contribute to the anomic character of the
American Dream: its strong emphasis on the importance of realizing cultural goals in comparison with its relatively weak emphasis on the legitimate means to do so (Messner and Rosenfeld 2007: 68). The first cultural aspect is achievement. This is the idea that individuals set goals and expect themselves to reach these goals to ultimately achieve success, even if that means doing whatever it takes to reach success (Messner and Rosenfeld 2007). Failure to achieve goals, correlates with a failure to contribute something meaningful to society (Messner and Rosenfeld 2007). Ultimately, if an individual wants to achieve the American Dream, they need to “win” by reaching the goals they set for themselves (Messner and Rosenfeld 2007).

The second cultural value is individualism. To reach success, individuals often have to “make it on their own” (Messner and Rosenfeld 2007). Each individual in society competes with one another to achieve success, gratifying their own personal worth (Messner and Rosenfeld 2007). Sometimes, in order to reach personal goals, an individual will go against the norms of society, this contributes to “normlessness” or anomie in society (Messner and Rosenfeld 2007). The third value is universalism. Universalism is the idea that everyone wants to achieve the same level of success and everyone has the same fears of failure (Messner and Rosenfeld 2007). Every individual in society is expected to desire achievement. The anomic pressure that comes with a universal expectation of achievement effects the entire social structure (Messner and Rosenfeld 2007). The fourth and final cultural value is, fetishism of money. Success in American society is measured by the amount of money an individual has (Messner and Rosenfeld 2007). This is not necessarily due to materialism, but more as a status symbol showcasing level of achievement (Messner and Rosenfeld 2007). The American Dream requires “never-ending achievement
because an individual can always make more money as individuals are universally trying to achieve more levels of success (Messner and Rosenfeld 2007:70).

**Institutional anomie: institutional structures**

Social institutions provide for individual’s basic social needs (Messner and Rosenfeld 2007). There are three basic needs that institutions employ. These basic needs include, how to “(1) adapt to the environment (2) mobilize and deploy resources for the achievement of collective goals and (3) socialize members to accept the society’s fundamental normative patterns (Messner and Rosenfeld 2007: 72)”. Each institution is responsible for providing these needs to the members of society (Messner Rosenfeld 2007). Messner and Rosenfeld further distinguish between economic and non-economic institutions. Two of the major non-economic social institutions are the family and education.

The family has several important responsibilities. The family “bears primary responsibility for the regulation of sexual activity and for the replacement of members of society (Messner and Rosenfeld 2007: 72).” Ultimately the family, is responsible for socializing future citizens by transferring societal norms, values, and beliefs on to children, so they will begin to develop an understanding of what is and is not acceptable in society in terms (Messner and Rosenfeld 2007). The family is also responsible for being emotionally supportive to their members, in a sense, protecting them from dark parts of society (Messner and Rosenfeld 2007). The social institution of education shares similar responsibilities as the family for socialization. They are responsible for, teaching cultural norms onto children, similar to the familial institution (Messner and Rosenfeld 2007). Different from the family though, educational institutions are supposed to teach about adult life, including appropriate roles and occupations (Messner and
Rosenfeld 2007). In addition, educational institutions are supposed to inform about knowledge, culture, personal growth, and advancing one’s self (Messner and Rosenfeld 2007).

Institutions and the cultural values they promote may play a role in crime when the ideas of the American Dream at the cultural level, weaken the norms of society, creating anomie (Messner and Rosenfeld 2007). The pressure of success at all costs may have some groups turning to criminal behaviors in order to succeed (Messner and Rosenfeld 2007). Drug dealing, for example, is a criminal behavior that would lead an individual to financial success, which is consistent with the American Dream ideal, but he is creating this success by resorting to an illegal behavior (Messner and Rosenfeld 2007). This goes against the cultural norms social institutions are supposed to enforce onto their members. There are other aspects of the culture of society that can help counterbalance the anomic pressures that come from the American Dream (Messner and Rosenfeld 2007).

Due to the dominance of the economy over noneconomic social institutions, the normative control and external control within these institutions become weak (Messner and Rosenfeld 2007). Cultural institutions struggle to socialize their members because the pressure of the cultural ideals of the “American Dream: competitive, individualistic, and materialistic (Messner and Rosenfeld 2007: 85).” With the American Dream dominating the conventional values of society, the dominant agents of socialization in cultural institutions become devalued and disempowered (Messner and Rosenfeld 2007). Dominant figures like parents and teachers in social institutions sanction punishments, and rewards to enforce social order (Messner and Rosenfeld 2007). These would be considered external restraints, meaning these restraints occur outside of the social institution, becoming more prevalent and associated with the social structure
With too many external restraints being put on an individual, they may become detached from social institutions that are required for socializing and employing the norms of society on to its members (Messner and Rosenfeld 2007). This is what would happen if the American Dream dominates society.

Thus, as individuals become detached from non-economic institutions, they become more attached to economic institutions (Messner and Rosenfeld 2007). This is due to the economy being an institution that employs less restraint on individuals (Messner and Rosenfeld 2007). In turn, this reflects society. With strong attachment to the economy, the lack of control at the institutional level mirrors and adds to lack of control on the cultural level due to social norms (Messner and Rosenfeld 2007). The lack of internal and external control over social institutions, making them weak, can lead to an anomic society. Anomic societies make it difficult to exert external control over the members of society (Messner and Rosenfeld 2007). Members of society feel free to do whatever they want because the American Dream tells them to do so, creating a version of society where individual success dominates over all other normative values that would normally, restrain individuals.

Institutional anomie and the opioid epidemic

Thus, the cultural values promoted by the American Dream, can influence crime, specifically motivations for crime, which may lead to anomie (Messner and Rosenfeld 2007). Applying this idea to perceptions of the opioid epidemic and perceptions of users of the epidemic, in communities where residents feel like it is possible to achieve the American Dream through the appropriate cultural values, and where residents are properly socialized in family and educational institutions, less anomie would be present. This would result in more negative
perceptions of opioid use and users. Residents may not be understanding towards those who did not have the same success in achieving the American Dream, or did not have the same upbringing because institutions did not teach them the norms of society. On the other hand, in communities where residents feel as though the American Dream is unattainable, or is not important to them, and where residents were not conventionally socialized in family and educational institutions, more anomie would be present. With more anomie being present, individuals may have less negative, or even positive, perceptions towards opioid use and users. This may be able to identify and empathize with these users’ lack of attachment to conventional values.

Another effect of institutional anomie on perceptions of opioid use could be that, in a community where cultural values associated with the American Dream are high, family and educational institutions effectively teach conventional social norms to youth in the community, so local anomie would be low. With levels of anomie being low, perceptions towards opioid use in that community would be expected to be negative because opioid use is not consistent with the American Dream, and thus drug use is not a norm taught by familial and educational institutions. Opioid users would be looked down upon because they were not taught conventional values and their behaviors are perceived as being incompatible with the American Dream. To this point, the societal level of anomie may be directly correlated to perceptions of opioid use in the community. In communities with low levels of anomie and strong awareness of and commitment to conventional norms and rules of society, one would expect negative perceptions of opioid use in the community (Bjarnason 2009). Conversely if a community has high societal anomie, perceptions towards drugs in the community would be positive (Bjarnason 2009).
Local anomie and disorganization at the community level

In addition to examining institutional anomie at the societal level, “local” anomie will be examined at the community level using a social disorganization framework to see if local community characteristics effect perceptions of opioid use within the community. Local anomie will consist of a lack of collective efficacy, legal cynicism, lack of faith in the police, and lack of awareness of conventional values. The structure of the community, the amount of disorder in the community, along with the factors that make up local anomie, may also influence perceptions of opioid use on a community level. Social disorganization theory relates to local anomie because the structural factors that create social disorganization essentially foster temporary anomie, which then, influences crime and deviant activities to occur. If a community is perceived as disorganized by residents, they will perceive that their community does not care about what goes on. Thus, in terms of the opioid epidemic, residents will perceive that opioid use occurs because of the anomic disorganized conditions of the community that they see and perceive happening. Opioid use and perceived opioid use may be more tolerated in disorganized communities based off of the other factors that influence disorganization.

Robert Sampson and Dawn Jeglum Bartusch (1998) developed empirical scales of tolerance of deviance, legal cynicism, and satisfaction with the police which will also be utilized to assess local anomie and its impact on community attitudes about opioids. Sampson and Bartusch were interested in, “local perceptions of normlessness” or anomie (Sampson and Bartusch 1998: 782). When measuring tolerance of deviance, Sampson and Bartusch, measured it with questions regarding what types of deviant acts respondents would consider “wrong” for thirteen through nineteen-year old to do (Sampson and Bartusch 1998). Their legal cynicism
scale was a modified version of Srole’s anomie scale (1956), but was more about respondents’ personal beliefs about the law and social norms (Sampson and Bartusch 1998). Their final scale, satisfaction with the police, respondents’ attitudes about the police and their response, and if they treat the neighborhood fairly and effectively (Sampson and Bartusch 1998). Sampson and Bartusch used these scales strictly for urban communities. Their three scales will be used/modified in this study to look at all communities instead of just urban communities and will be adapted to tailor more towards the opioid epidemic.

Social disorganization and local anomie certainly affect residents’ perceptions of deviant activity, which can lead residents to believe that their community tolerates misbehavior, even when they may not (Warner and Burchfield 2011). If a community has strong social ties and strong values that almost everyone shares, crime and drug use may collectively be seen as unacceptable (Warner 2003). On the other hand, in the absence of strong social ties and conventional values, deviant behaviors may flourish, or at least be perceived to do so. Often, residents underestimate the traditional and conventional values of the community (Warner and Burchfield 2011). If community members have the perception that their community has an opioid problem based on what they have seen occur in the community, they may have the perception that opioid use is tolerated. However, it may be that few members use opioids resulting in a misperception of values of the community (Warner & Burchfield 2011). A majority of the residents may be opposed to the use of opioids in the community, but since they see it as a recurring event, they become accustomed to it and have the attitude that it is something that happens here.
Prior research combining institutional anomie with local anomie has been applied to examine rates of rural crime. Deller and Deller (2012) built off classic social disorganization theory by blending institutional anomie into their empirical model and found that the ways in which institutional anomie and social disorganization significantly influences the connected impact between rural larceny and burglary (Deller and Deller 2012). The connection between larceny and burglary was measured with variables that consisted of rates and changes in poverty and economic inequality, as well as measures of local institutions (Deller and Deller 2012).

Social disorganization theory discusses disorder and conflict in the community partially due to the lack of social norms and control of the community. Institutional anomie, looks at how economic and noneconomic institutions can influence the way an individual act (Deller and Deller 2012). The similarity between classic social disorganization theory and institutional anomie helps explain crime patterns, so these two theories together shows the willingness of an individual to engage in crime in their rural community (Deller and Deller 2012). In my research, by blending the two theories, institutional anomie on the societal level, and local anomie on the community level, I hope to show how perceptions of societal institutions and local social norms can influence perceptions of crime, specifically opioid use.
CHAPTER FOUR
METHODOLOGY

The methodological approach used to collect the data will be an online survey. Since I want to survey individuals from rural, suburban, and urban communities, an online survey will allow me to target respondents from all three communities. I plan on recruiting participants through Amazon’s Mechanical Turk. Mechanical Turk gives researchers and different businesses, known as recruiters on Mechanical Turk, opportunities to put different jobs, known as HIT’s (Human Intelligence Tasks) online for workers to complete for minimal compensation (Amazon Mechanical Turk 2019). Various tasks include surveys, identifying certain objects in images, writing product descriptions, and many more (Mechanical Turk 2019). Since Mechanical Turk has many different demographics of workers completing task’s, using Mechanical Turk will give me an opportunity to receive a wide variety of responses.

Participants

Every survey respondent will be over the age of eighteen, which will be clearly stated on the consent form. If a respondent clicks that they are under the age of eighteen, they will automatically be exited from the survey. Mechanical Turk also required that all workers must be over the age of eighteen to complete any HIT’s (Mechanical Turk 2019). Since I will be putting my survey on Mechanical Turk, I will use convenience sampling to target as many individuals as I can. Each individual that fully completes the survey, will receive a compensation of twenty-five cents that will be added to their Mechanical Turk account.
Survey Design

The questions in this survey are intended to examine general feelings of institutional anomie correlates along with perceptions of opioid use and users on a national level; I will also ask questions about the type of local community, disorganization of that community, and measures of local anomie along with perceptions of opioid use and users on a community level. To best measure this, the survey will consist of four main sections. Before leading into the first section of the survey, two questions will be asked. The first question asks the respondent to describe the type of community they live in. The responses being, rural, suburban, urban, and do not know. I am defining these community types by population size, and how geographically and socially close residents are with one another. A write in option will be the next question asking the zip-code the respondent lives in. I am asking these two specific questions because I want to see if the use of opioids is more prominent in one community over the other two. I am asking the Zip-code the respondent lives in, so the respondent knows that the following questions will pertain to their specific community. Also, if by chance I receive multiple respondents from the same zip-code I could compare responses and see if they are similar or different.

The first section of the survey will consist of questions directly involving the community that the respondent lives in. Respondents will be prompted to answer the questions in this section in reference to the zip-code they gave for question number two. This way, respondents will know that these questions are pertaining to the community that they live in. The structure of the questions for this section was taken from Felton J. Earls, Jeanne Brooks-Gunn, Stephen W. Raudenbush, and Robert J. Sampson’s Project on Human Development in Chicago Neighborhoods: Community Survey (PHDCN). Borrowing from these researchers’ design, there
will be one leading statement and then sub-questions that relate back to that statement. The main statement asks, “in terms of the community that you live in…” and then sub-questions discuss drug treatment programs in the community, community knowledge about opioids in the community, relationships with the police and neighbors, community watch groups, and neighborhood associations or council. I chose to design the section of the survey this way because it will optimize convivence, clarity, and conciseness.

In addition to having questions in the described format, I have additional questions in the more basic survey format, with one question and one answer. These questions will be examining what kind of involvement residents would like to see in the community in terms of the opioid epidemic, what the anticipated benefits of programs devoted to opioid addiction would be, the frequency of opioids being used and sold in the community, and questions surrounding relationships with neighbors and their reactions if they saw them using an opioid. Additionally, I have a couple more questions examining the police in the community, types of opioids in the community, more about relationships with neighbors, and community politicians. This section will consist of the local anomie questions.

The second section of the survey will consist of questions regarding characteristics and demographics of the community the participant lives in, similar to section one. The structure of this question is like it is in the PHDCN. The main question is, “in terms of characteristics of the community…” do you consider litter being a problem, do you consider graffiti a problem, are they many vacant/deserted homes in the neighborhoods, are there teenagers just “hanging” out on the streets, are the residents frequently moving in and out of the community, do you think there are community members whose sole income comes from selling opioids, are you afraid to
go outside at night in your neighborhood? Do you think that there are areas of the community where everyone knows trouble is expected? Do you think that there is a hot spot in your community where drug dealing takes place? I am using this question directly from the PHDCN survey because I am interested in how characteristics of the community plays a role in perceptions of opioid use as well as perceptions of opioid addicts. The community drug disorder scale comes out of these variables. The two questions include, “do you think there are community members whose sole income comes from selling opioids?” and “Do you think that there is a hot spot in your community where drug dealing takes place?” The demographic questions I have for this section include, the primary race/ethnicity of your community and the average income of the community. This section will consist of the disorganization questions.

The third section of the survey include the theory-driven questions. To measure institutional anomie, I am drawing from Lisa Muftic’s (2007) institutional anomie scale, adapted from Messner and Rosenfeld (2001). I will be testing how general feelings of institutional anomie correlates with perceptions of opioid use. The scales used to measure institutional anomie are, individualism, achievement, universalism, and fetishism for cultural values. For the institutional values I will be using family, education, and religion. The cultural values used help lay the foundational aspect of the American Dream idea (Messner and Rosenfeld 2001).

Questions asked in the individualism scale have to do with success. Questions will consist of, “being successful is more important than being happy.” “I intend to do whatever it takes to have some of the really expensive things in life”. “I expect to make as many sacrifices as are necessary in order to advance my work/career”. “I expect to devote whatever time and energy it takes to move up in my job/career”. “Being happy is more important than being successful”. For
achievement, questions asked will deal with again, success and elements of sacrifice. Questions will be, “I will sacrifice a lot of things to have a lot of money”. “I don’t need help from others to succeed.” “Success is measured by the amount of money a person makes”. “Getting an education is/was expected from my friends”. “Getting an education is/was expected by my parents”.

For universalism, Questions asked will include, “Anyone that works hard enough can be successful”. “You only have yourself to blame for your failures in life”. For fetishism of money, questions pertain to the value one has on money. Questions include, “having lots of money is one of my major goals in life”. “Having an education can get you a good job”. “Getting an education can make you more money”. For the institutional questions, family, educational, and religious institutions will be examined. For family, questions will include how important the opinion various family members have about you. For example, “how important to you is the opinion of your mother?” The other family members will include, father, siblings, and friends. For education, questions will include ways that a college degree impacts the individual. Questions will include, “Getting an education will make me a better person”, “getting an education will make me a better spouse/parent”, “getting an education will allow me to learn about different cultures”, and “getting an education will make me a better citizen”. For religion, questions will ask, “regularly attending a religious service is important to me”, “being involved in a religious organization is important to me”, “having a religious faith that you follow can make you a better person”, and “believing in a religious figure can make your life better.”

To measure tolerance of deviance, legal cynicism, and satisfaction with the police, the scales uses to measure local anomie, I am modifying Robert J. Sampson and Dawn Jeglum Bartusch’s scales. For tolerance of deviance, various deviant acts will be listed and participants
will select, yes, sometimes, no, and unsure for their attitudes towards the acts. Deviant acts will include, injecting heroin, taking prescription pills illegally, smoking marijuana, and engaging in physical violence. For the legal cynicism scale, questions will include, “drug laws are okay to be broken.” “It is okay to do anything you want.” “It is okay to make money selling opioids.” “Whether you decide to do opioids or not is no one else’s business.” “A person has to live for today.” Response categories will be yes, sometimes, no, and unsure. For the satisfaction with the police, participants will be responding with yes, sometimes, no, and unsure for questions including, responsive to opioid related incidents, good job dealing with criminal matters, not doing a good job preventing crime, good job responding to victims, and not able to maintain order in the community.

To measure community values and collective efficacy, questions were taken directly out of the PHDCN. For community values, the main question is, “in terms of residents in your community, do you think that residents… and the sub questions include, “don’t share the same values?” and “don’t share the same values about opioids?” For collective efficacy, questions again, were taken out of the PHDCN. The main question is, “in terms of residents in your community, do you think that residents… and the sub questions include, “are close-knit?” “Are willing to help each other out?” “Have many relatives or in-laws that live in their community?” and “Have many friends that live in their community?” The response categories are, yes, maybe, and no.

The fourth and final section of the survey will consist of respondents’ perceptions of the opioid epidemic nationally. In addition, this will be the section where I will be testing general feelings of institutional anomie and if it correlates with perceptions of opioid use. I am interested
in seeing if the participants are genuinely concerned about the epidemic at a national level, or do they not care about it at all. Questions will consist of, if the respondent feels helpless with the current epidemic, if they think the epidemic will ever end, if the presidential administration should do more to tackle the epidemic, if the problem with the epidemic is with opioids or overdoses, and feelings toward the use of Naloxone. Additionally, demographic questions will be asked in this section. The demographic and control variables I will be using are individual, race/ethnicity, gender, highest level of education, and political party affiliation; census-level, primary race/ethnicity of the community and average income of the community. All being self-reported.
CHAPTER FIVE
FINDINGS/ ANALYSIS

Sample

The anticipated number of respondents expected to complete the survey was 800. Eight hundred and eighty-six respondents had clicked on, or completed the survey on Mechanical Turk. After eliminating respondents who completed less than 90% of the survey, or stated in the question asking about their zip-code that they live outside of the United States, the sample used for analysis became 758. I chose not to include respondents from outside the United States even if they fully completed the survey because I am looking for responses from participants who are living specifically through the United States opioid epidemic.

Dependent Variable

The dependent variable used in both models was, “do you think that your community has an opioid problem?” the coding is, 1= Yes and 0= No. Respondents who selected maybe or don’t know, were coded as missing.

Independent Variables

National Level

The independent variables used on the national level were scales and they included, individualism (α= .574), achievement (α=. 598), universalism (α=. 652), and fetishism of money (α= .537) serving as the cultural values. Family (α= .820), education (α= .847), and religion (α= .912) were scales representing institutional values. Each question in the institutional anomie scales were reverse coded as 1= disagree, 2= somewhat disagree, 3= somewhat agree, and
4=agree. Respondents who selected don’t know were coded as missing. Although, the cultural value scales have low alphas which may indicate low reliability, these are validated scales drawn from Lisa Muftic’s (2007) institutional anomie scales, adapted from Messner and Rosenfeld (2001). They are kept in the analysis because they are central to the argument, because they do show a relationship with the dependent variable, and because this is one of the first times that these scales have been applied at the institutional level. Reverse coding was used for better interpretation of the model and to ensure that all scale items were coded consistently.

Community Level

The model at the community level consisted of disorganization scales of- tolerance of deviance (α=.652), legal cynicism (α=.774), police satisfaction (α=.919), community drug disorder (α=.746), community values (α=.744), and collective efficacy (α=.670).

Tolerance of deviance was reverse coded as 1= no, 2= maybe, and 3= yes. Don’t know was coded as missing. Legal cynicism was reverse coded as 1= disagree, 2= somewhat disagree, 3= somewhat agree, and 4= agree. Don’t know was coded as missing. Police satisfaction was reverse coded as, 1= dissatisfied, 2= somewhat dissatisfied, 3= somewhat satisfied, and 4= satisfied. Don’t know was coded as missing. Community drug disorder was reverse coded as 1= no, 2= maybe, and 3= yes. Don’t know was coded as missing. Community values was reverse coded as 3= no, 2= maybe, 1= yes. Don’t know was coded as missing. Collective efficacy was reverse coded as 3= no, 2= maybe, and 1= yes. Don’t know was recoded as missing. Similar to on the national level, tolerance of deviance and collective efficacy are validated scales from Robert J. Sampson and Dawn Jeglum Bartusch (1998). they are important to the argument and
still show a relationship with the dependent variable. Additionally, the scales are reverse coded like on the national level for better interpretation and to keep all scales coded the same way.

Control Variables

The variables, white, black, male, employed full-time, high school graduate, rural community, suburban community, and republican were coded as dummy variables. The coding being, 1= the variable and 0= everything else. White, Black, and Latinx, were the dummy variables used out of the race/ethnicity variable. Latinx is used as the reference. Male was the dummy created out of the gender variable. Employed full-time was the dummy created out of the employment status variable. High school graduate was the dummy created out of the highest level of education variable. Rural, suburban, and urban were dummy variables created out of the how would you describe the area that you live in variable. Urban community was used as the reference. Lastly, republican was the last dummy variable created out of the political party affiliation variable. These control variables were included in both models.

Analysis Strategy

The procedure used for statistical analysis is to first compute and examine descriptive statistics, then bivariate correlations, and t-tests, and finally a logistic regression. On the national-level, there is one model. The dependent variable for this equation is, “do you think your community has an opioid problem?” The independent variables being the scales of, individualism, achievement, universalism, fetishism of money, family, education, and religion as the institutional anomie theory being the predictor variables in the model. White, Black, male, employed, high school graduate, rural community, suburban community, and republican will serve as the dummy, control, predictor variables. Since, these independent variable scales are
broader, and not community focused, general feelings of institutional anomie will be tested to see if these feelings predict perceptions of opioid use.

On the community-level, there is one model. The dependent variable is the same as on the national-level, “do you think your community has an opioid problem?” The independent variables are, tolerance of deviance in the community, legal cynicism in the community, community police satisfaction, community drug disorder, community values, and collective efficacy at the community disorder scales. The control dummy variables will be the same as on the national level. Those being, White, Black, male, employed, high school graduate, rural community, suburban community, and republican. Using a social disorganization framework, it will be examined to see if local community characteristics effect perceptions of opioid use within the community.

Descriptive Statistics

In Table one, 72.1% of individuals perceive their community as having an opioid problem and 27.9% perceive that their community does not have an opioid problem. For race, 72.4% are White and 7.8% identified as being Black. In terms of gender, 44.2% of respondents were male and 55.8% were female. For education, 18.7% stated that a high school diploma is their highest level of education and 81.3% have either more than a high school education, or less than. For employment status, 64.1% are employed full-time and 35.9% are not employed full-time. In terms of type of community, 23.2% live in a rural community and 49.5% live in a suburban community. For political party affiliation, 24.4% state that they are republican and 75.6% identify under a different political party affiliation.
Table 1 Descriptive Statistics: Control Variables (N= 758)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you think your community has an opioid problem?</td>
<td>.721</td>
<td>.449</td>
</tr>
<tr>
<td></td>
<td>1= Yes 0= No</td>
<td></td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1= White 0= Non-White</td>
<td>.724</td>
<td>.447</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1= Black 0= Non-Black</td>
<td>.078</td>
<td>.268</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1= Male 0= Non-Male</td>
<td>.442</td>
<td>.497</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1= High School Diploma 0= Non-high school diploma</td>
<td>.187</td>
<td>.390</td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1= Employed full-time 0= Not employed full-time</td>
<td>.641</td>
<td>.479</td>
</tr>
<tr>
<td>Live in a rural community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1= Yes 0= No</td>
<td>.232</td>
<td>.500</td>
</tr>
<tr>
<td>Live in a suburban community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1= Yes 0= No</td>
<td>.494</td>
<td>.500</td>
</tr>
<tr>
<td>Republican</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1= Yes 0= No</td>
<td>.244</td>
<td>.429</td>
</tr>
</tbody>
</table>

In Table 2, for the theory variables on the national level, the mean for individualism was 2.28 showing that respondents on average somewhat disagreed with the questions about individualism. Achievement= 1.91 showing that on average respondents disagreed-somewhat disagreed about the questions about achievement. Fetishism of money= 2.83 showing that on average respondents somewhat disagreed- somewhat agreed with the questions. Universalism= 2.65 showing that on average respondents somewhat disagree-somewhat agreed with the questions about Universalism. Family= 3.07 showing that on average respondents somewhat agreed with the questions about family values. Education= 2.87 showing that on average
respondents somewhat disagreed- somewhat agreed to the questions about education. Religion= 2.32 showing that respondents on average somewhat disagreed with the questions about religion.

Table 2: National Level (N= 758)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individualism</td>
<td>2.2866</td>
<td>.62340</td>
</tr>
<tr>
<td>Achievement</td>
<td>1.19197</td>
<td>.76922</td>
</tr>
<tr>
<td>Fetishism of Money</td>
<td>2.8358</td>
<td>.72361</td>
</tr>
<tr>
<td>Universalism</td>
<td>2.6528</td>
<td>.91108</td>
</tr>
<tr>
<td>Family</td>
<td>3.0706</td>
<td>.85843</td>
</tr>
<tr>
<td>Education</td>
<td>2.8781</td>
<td>.85444</td>
</tr>
<tr>
<td>Religion</td>
<td>2.3288</td>
<td>1.08192</td>
</tr>
</tbody>
</table>

In Table 3, the community level, the mean for tolerance of deviance= 1.63 showing that on average respondents are not-maybe tolerable of certain deviant acts in their community. Legal cynicism= 1.85 showing that respondents on average disagree- somewhat disagree to the legal cynicism questions. Police satisfaction= 2.79 showing that on average respondents are somewhat dissatisfied to somewhat satisfied with their community police officers. Community values= 1.81 show that community members on average think that no-maybe that respondents do not share the same values. Collective efficacy= 2.14 showing that respondents on average maybe perceive a sense of collective efficacy in their community. Community drug disorder= 2.09 showing that respondents on average maybe perceive their community in having drug disorder.
Table 3: Descriptive Statistics: Community Level (N= 758)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tolerance of Deviance</td>
<td>1.6360</td>
<td>.49616</td>
</tr>
<tr>
<td>Legal Cynicism</td>
<td>1.8594</td>
<td>.73684</td>
</tr>
<tr>
<td>Police Satisfaction</td>
<td>2.7993</td>
<td>.95145</td>
</tr>
<tr>
<td>Community Values</td>
<td>1.8108</td>
<td>.68046</td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>2.1476</td>
<td>.55988</td>
</tr>
<tr>
<td>Community Drug Disorder</td>
<td>2.0979</td>
<td>.73679</td>
</tr>
</tbody>
</table>

**Bivariate Analysis**

**National Level**

Table 4 shows that there is a statistically significant difference in individualism for those who perceive their community has an opioid problem (N= 336, M= 2.3269, SD= .62483) versus those who do not (N= 127, M= 2.1843, SD= .62319). The effect size, $\eta^2 = 0.010$ shows a small effect. Only 1% of the variance in individualism is explained by perceptions of community opioid use on the national level. Additionally, there is a statistically significant difference in religion for those who perceive their community has an opioid problem (N= 336, M= 2.3318, SD= 1.04232) versus those who do not (N= 126, M= 2.1448, SD= 1.10263). The effect size, $\eta^2 = .0061$ shows an extremely small effect. Only 0.61% of variance in religion is explained by perceptions of community opioid use on the national level.
Table 4 Bivariate Analysis: National Level

<table>
<thead>
<tr>
<th></th>
<th>f</th>
<th>sig</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individualism</td>
<td>.007</td>
<td>.933</td>
<td>-2.194</td>
<td>461</td>
<td>.029**</td>
</tr>
<tr>
<td>Achievement</td>
<td>2.012</td>
<td>.157</td>
<td>-.538</td>
<td>460</td>
<td>.591</td>
</tr>
<tr>
<td>Fetishism of Money</td>
<td>5.931</td>
<td>.015</td>
<td>.403</td>
<td>263.400</td>
<td>.687</td>
</tr>
<tr>
<td>Universalism</td>
<td>2.873</td>
<td>.091</td>
<td>.002</td>
<td>456</td>
<td>.998</td>
</tr>
<tr>
<td>Family</td>
<td>.038</td>
<td>.846</td>
<td>-.578</td>
<td>459</td>
<td>.564</td>
</tr>
<tr>
<td>Education</td>
<td>1.659</td>
<td>.198</td>
<td>-1.307</td>
<td>457</td>
<td>.192</td>
</tr>
<tr>
<td>Religion</td>
<td>.961</td>
<td>.328</td>
<td>-1.690</td>
<td>460</td>
<td>.092*</td>
</tr>
</tbody>
</table>

**P<.05 *P<.1

When looking at achievement, there is no statistically significant difference in achievement for those who perceive that their community has an opioid problem (N= 335, M= 1.9493, SD= .79455) versus those who do not (N= 127, M= 1.9055, SD= .74049). The effect size η² = .000628 shows an extremely small effect. Only .062% of variance in achievement is explained by perceptions of community opioid use on the national level. There is no statistically significant difference in fetishism of money for those who perceive that their community has an opioid problem. (N= 335, M= 2.8234, SD= .75029) versus those who do not (N= 127, M= 2.8517, SD= .64249) The effect size η² = .00035 showing an extremely small relationship. Only .035% of variance in fetishism of money is explained by community opioid use on the national level. Lastly, there is no statistically significant difference in universalism for those who perceive that their community has an opioid problem (N= 332, M= 2.6506, SD= .92949) versus those that do not (N= 126, M= 2.6508, SD= .84916). The effect size η² = .00000000086 shows an
extremely small effect. There is an extremely small percentage of variance in universalism that is explained by community opioid use on the national level.

There is no statistically significant difference in family for those who perceive that their community has an opioid problem (N= 336, M= 3.0667, SD= .84729) versus those that do not (N= 125, M= 3.0147, SD= .89240). The effect size is $\eta^2= .00072$. Only .072% of variance in family is explained by perceptions of community opioid use on the national level. For education, there is no statistically significant difference in education for those who perceive that their community has an opioid problem (N= 336, M= 2.3318, SD= 1.04232) versus those that do not (N= 126, M= 2.1448, SD= 1.10263). The effect size is $\eta^2 = .0037$. Only 0.37% of variance in education is explained by perceptions of community opioid use on the national level.

**Community Level**

Table 5 shows that there is a statistically significant difference in tolerance of deviance for those who perceive that their community has an opioid problem (N= 334, M= 1.6991, SD= .51381) versus those who do not (N= 127, M= 1.5374, SD= .47960). The effect size $\eta^2 = 0.020$, showing a small effect. Only 2% of variance in tolerance of deviance is explained by perceptions of community opioid use on the community level. There is a statistically significant difference in police satisfaction for those who perceive that their community has an opioid problem (N= 326, M= 2.5576, SD= .97909) versus those who do not (N= 119, M= 3.1305, SD= .90380). The effect size $\eta^2=.070$ showing a moderate effect. Only 7% of variance in police satisfaction is explained by perceptions of community opioid use on the community level.
Table 5 Bivariate Analysis: Community Level

<table>
<thead>
<tr>
<th></th>
<th>Independent Sample T-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
</tr>
<tr>
<td>Tolerance of Deviance</td>
<td>1.720</td>
</tr>
<tr>
<td>Legal Cynicism</td>
<td>.009</td>
</tr>
<tr>
<td>Police Satisfaction</td>
<td>4.485</td>
</tr>
<tr>
<td>Community Values</td>
<td>2.744</td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>.905</td>
</tr>
<tr>
<td>Community Drug Disorder</td>
<td>2.907</td>
</tr>
</tbody>
</table>

***P<.001 **P<.01

There is statistically significant difference in community values for those who perceive that their community has an opioid problem (N= 304, M= 1.8997, SD= .71682) versus those that do not (N= 118, M= 1.6102, SD= .62749). The effect size is $\eta^2 = .034$ showing a small effect. Only 3.4% of variance in community values is explained by perceived community opioid use on the community level. There is a statistically significant difference in community drug disorder for those that perceive that their community has an opioid problem (N= 334, M= 2.4311, SD= .69045) versus those that do not (N= 124, M= 1.6048, SD= .69045). The effect size is $\eta^2 = 0.239$ showing a small relationship. Only 23.99% of variance in community drug disorder is explained by perceived community opioid use on the community level.

There is no statistically significant difference in legal cynicism for those who perceive that their community has an opioid problem (N= 334, M= 1.8801, SD= .74502) versus those that do not (N= 127, M= 1.8269, SD= .75739). The effect size is $\eta^2 = .001$ showing an extremely
small relationship. Only 0.1% of variance in legal cynicism is explained by perceptions of community opioid use. There is no statistically significant difference in collective efficacy for those that perceive that their community has an opioid problem (N= 334, M= 2.1537, SD= .55307) versus those that do not (N= 127, M= 2.1076, SD= .59160). The effect size is $\eta^2 = .001$ showing an extremely weak relationship. Only 0.1% of variance in collective efficacy is explained by perceptions of community opioid use on the community level.

**Logistic Regression**

**National Level**

In model one, Table 6, individualism is positively and significantly associated with perceiving that a community has an opioid problem ($\beta=.490; \ P< .05$). For every unit increase on the individualism scale, the odds of perceiving that your community has an opioid problem increase by 63.3%. Thus, the more individualistic a community member is, meaning, achieving success on their own, the more likely they are to perceive that their community has an opioid problem. Religion is positively and significantly associated with perceiving that your community has an opioid problem ($\beta=.229; \ P<.05$). For every unit increase on the religion scale, the odds of perceiving that your community has an opioid problem increase by 25.7%. So, the more religious a community member is, the more likely they are to perceive that their community has an opioid problem.

Being White is positively and significantly associated with perceiving that your community has an opioid problem ($\beta=.573; \ P<.05$). For every unit increase in being White, the odds of perceiving your community in having an opioid problem increase by 77.3%. Living in a suburban community is inversely and significantly associated with perceiving that your community has an opioid problem.
community has an opioid problem ($\beta = -.506; P<.1$). For every unit increase in living in a suburban community, the odds of perceiving that your community has an opioid problem decrease by 39.7%. Thus, suburban residents are less likely to perceive that their community has an opioid problem.

Table 6. Binary Logistic Regression Model 1 predicting Perceptions of Community Opioid Use on the National Level

<table>
<thead>
<tr>
<th>PREDICTOR</th>
<th>B</th>
<th>SIGNIFICANCE</th>
<th>EXP(B)</th>
<th>PREDICTOR</th>
<th>EXP%</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDIVIDUALISM</td>
<td>.490</td>
<td>.024***</td>
<td>1.633</td>
<td>0.63 (63.3%)</td>
<td></td>
</tr>
<tr>
<td>ACHIEVEMENT</td>
<td>-.051</td>
<td>.769</td>
<td>.950</td>
<td>0.05 (5%)</td>
<td></td>
</tr>
<tr>
<td>UNIVERSALISM</td>
<td>-.031</td>
<td>.819</td>
<td>.970</td>
<td>0.03 (3%)</td>
<td></td>
</tr>
<tr>
<td>FETISHISM OF MONEY</td>
<td>-.277</td>
<td>.127</td>
<td>.758</td>
<td>0.24 (24.2%)</td>
<td></td>
</tr>
<tr>
<td>FAMILY</td>
<td>-.112</td>
<td>.440</td>
<td>.894</td>
<td>0.106 (10.6%)</td>
<td></td>
</tr>
<tr>
<td>EDUCATION</td>
<td>.203</td>
<td>.150</td>
<td>1.225</td>
<td>0.23 (22.5%)</td>
<td></td>
</tr>
<tr>
<td>RELIGION</td>
<td>.229</td>
<td>.050*</td>
<td>1.257</td>
<td>0.257 (25.7%)</td>
<td></td>
</tr>
<tr>
<td>BEING WHITE</td>
<td>.573</td>
<td>.046**</td>
<td>1.773</td>
<td>0.773 (77.3%)</td>
<td></td>
</tr>
<tr>
<td>BEING BLACK</td>
<td>-.371</td>
<td>.435</td>
<td>.690</td>
<td>0.31 (31%)</td>
<td></td>
</tr>
<tr>
<td>BEING MALE</td>
<td>-.100</td>
<td>.664</td>
<td>.905</td>
<td>0.095 (9.5%)</td>
<td></td>
</tr>
<tr>
<td>BEING EMPLOYED FULL-TIME</td>
<td>.007</td>
<td>.978</td>
<td>1.007</td>
<td>0.007 (7%)</td>
<td></td>
</tr>
<tr>
<td>BEING A HIGH SCHOOL GRADUATE</td>
<td>.294</td>
<td>.313</td>
<td>1.341</td>
<td>0.341 (34%)</td>
<td></td>
</tr>
<tr>
<td>LIVING IN A RURAL COMMUNITY</td>
<td>-.180</td>
<td>.583</td>
<td>.835</td>
<td>0.165 (16.5%)</td>
<td></td>
</tr>
<tr>
<td>LIVING IN A SUBURBAN COMMUNITY</td>
<td>-.506</td>
<td>.072*</td>
<td>.603</td>
<td>0.397 (39.7%)</td>
<td></td>
</tr>
<tr>
<td>BEING REPUBLICAN</td>
<td>-.044</td>
<td>.873</td>
<td>.957</td>
<td>0.043 (4%)</td>
<td></td>
</tr>
<tr>
<td>CONSTANT</td>
<td>.016</td>
<td>.983</td>
<td>1.016</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**P<.05  *P<.1  

For the remaining variables, Achievement, is inversely and insignificantly associated with perceiving that your community has an opioid problem ($\beta = -.051; P>.1$). For every unit increase on the achievement scale, the odds of perceiving that your community has an opioid
problem decrease by 5%. The more an individual values achievement, like achieving success, even if that means partaking in illegal means to do so, the less likely they are to perceive their community in having an opioid problem. Universalism, is inversely and insignificantly associated with perceiving that your community has an opioid problem ($\beta = -0.031; P > .1$). For every unit increase on the universalism scale, the odds of perceiving that your community has an opioid problem decrease by 3%. The more a community member values the same vales of achievement, the less likely they are to perceive their community in having an opioid problem.

Fetishism of money is negatively and insignificantly associated with perceiving that your community has an opioid problem ($\beta = -0.277; P > .1$). For every unit increase on the fetishism of money scale, the odds of perceiving that your community has an opioid problem decrease by 24.2%. The more a community member strongly values money, the less likely they are to perceive their community in having an opioid problem. Family is inversely and insignificantly associated with perceiving that your community has an opioid problem ($\beta = -0.112; P > .1$). For every unit increase on the family scale, the odds of perceiving that your community has an opioid problem decrease by 10.6%. The more a community member values their family’s opinion, the less likely they are to perceive their community in having an opioid problem.

Education is positively and insignificantly associated with perceiving that your community has an opioid problem ($\beta = 0.203; P > .1$). For every unit increase on the education scale, the odds of a community member perceiving that their community has an opioid problem increase by 22.5%. The more a community member values education, the more likely they are to perceive their community in having an opioid problem.
For the remaining control variables, being Black is negatively and insignificantly associated with perceiving that your community has an opioid problem ($\beta = -0.371; P > .1$). For every unit increase in being Black, the odds in perceiving that your community has an opioid problem decrease by 31%. Being Black decreases the likelihood of a community member perceiving that their community has an opioid problem. Being male is negatively and insignificantly associated with perceiving that your community has an opioid problem ($\beta = -0.100; P > .1$). For every unit increase in being male, the odds in a community member perceiving that their community has an opioid problem decrease by 9.5%. Men are less likely to perceive that their community has an opioid problem.

Being employed full-time is positively and insignificantly associated with perceiving that your community has an opioid problem ($\beta = 0.007; P > .1$). For every unit increase in being employed, the odds in a community member perceiving that their community has an opioid problem increase by 7%. Being employed full-time increases the likelihood of perceiving your community in having an opioid problem. Being a high school graduate positively and insignificantly associates with perceiving that your community has an opioid problem ($\beta = 0.294; P > .1$). For every unit increase in being a high school graduate, the odds in perceiving that your community has an opioid problem increase by 34%. Being a high school graduate increases the likelihood of a community member perceiving that their community has an opioid problem.

Living in a rural community is inversely and insignificantly associated with perceiving that your community has an opioid problem ($\beta = -0.180; P > .1$). For every unit increase in living in a rural community, the odds in perceiving that your community has an opioid problem decrease by 16.5%. Living in a rural community decreases the likelihood in a community member
perceiving that their community has an opioid problem. Being Republican is negatively and insignificantly associated with perceiving that your community has an opioid problem ($\beta = -0.044; P > .1$). For every unit increase in being Republican, the odds in perceiving that your community has an opioid problem decrease by 4%. Being Republican decreases the likelihood in a community member perceiving that their community has an opioid problem.

**Community Level**

In model 2, Table 7, tolerance of deviance is positively and significantly associated with perceiving that your community has an opioid problem ($\beta = 0.835; P < .05$). For every unit increase on the tolerance of deviance scale, the odds in perceiving that your community has an opioid problem increase by 130.5%. The more a community member perceives their community as being accepting of deviant acts in the community, the more likely they are going to perceive that their community in having an opioid problem. Police satisfaction is inversely, but significantly associated with perceiving that your community has an opioid problem ($\beta = -0.461; P < .05$). For every unit increase on the police satisfaction scale, the odds of perceiving that your community has an opioid problem decrease by 36.9% The more a community member is satisfied with the local police, the less likely they are to perceive their community in having an opioid problem.

Community drug disorder is the last theory variable that was statistically significant. Community drug disorder is positively and significantly associated with perceiving that your community has an opioid problem ($\beta = 1.611; P < .05$). For every unit increase on the community drug disorder scale, the odds of perceiving that your community has an opioid problem increase by 400.8%. The more a community member perceives their community in having a drug problem, the more likely they are to perceive their community in having an opioid problem.
Being Black was the only control variable that was statistically significant. Being Black is inversely, but significantly associated with perceiving that your community has an opioid problem ($\beta= -1.412; P< .05$).

Table 7. Binary Logistic Regression Model 2 Predicting Perceptions of Community Opioid Use on the Community Level

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SIGNIFICANCE</th>
<th>EX(B)</th>
<th>PREDICTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLERANCE OF DEVIANCE IN THE COMMUNITY</td>
<td>.835</td>
<td>.020*</td>
<td>2.305</td>
<td>1.305 (130.5%)</td>
</tr>
<tr>
<td>LEGAL CYNICISM IN THE COMMUNITY</td>
<td>-.106</td>
<td>.670</td>
<td>.899</td>
<td>0.101 (10.1%)</td>
</tr>
<tr>
<td>COMMUNITY POLICE SATISFACTION</td>
<td>-.461</td>
<td>.007**</td>
<td>.631</td>
<td>0.369 (36.9%)</td>
</tr>
<tr>
<td>COMMUNITY DRUG DISORDER</td>
<td>1.611</td>
<td>.000***</td>
<td>5.008</td>
<td>4.008 (400.8%)</td>
</tr>
<tr>
<td>COMMUNITY VALUES</td>
<td>.231</td>
<td>.304</td>
<td>1.260</td>
<td>0.26 (26%)</td>
</tr>
<tr>
<td>COLLECTIVE EFFICACY</td>
<td>.178</td>
<td>.512</td>
<td>1.195</td>
<td>0.195 (19.5%)</td>
</tr>
<tr>
<td>BEING WHITE</td>
<td>.284</td>
<td>.424</td>
<td>1.328</td>
<td>0.328 (32.8%)</td>
</tr>
<tr>
<td>BEING BLACK</td>
<td>-1.412</td>
<td>.017*</td>
<td>.244</td>
<td>0.756 (75.6%)</td>
</tr>
<tr>
<td>BEING MALE</td>
<td>-.197</td>
<td>.509</td>
<td>.821</td>
<td>0.179 (17.9%)</td>
</tr>
<tr>
<td>BEING EMPLOYED FULL-TIME</td>
<td>.247</td>
<td>.427</td>
<td>1.280</td>
<td>0.28 (28%)</td>
</tr>
<tr>
<td>BEING A HIGH SCHOOL GRADUATE</td>
<td>.330</td>
<td>.404</td>
<td>1.392</td>
<td>0.392 (39.2%)</td>
</tr>
<tr>
<td>LIVING IN A RURAL COMMUNITY</td>
<td>.241</td>
<td>.562</td>
<td>1.272</td>
<td>0.272 (27.2%)</td>
</tr>
<tr>
<td>LIVING IN A SUBURBAN COMMUNITY</td>
<td>-.193</td>
<td>.575</td>
<td>.824</td>
<td>0.176 (17.6%)</td>
</tr>
<tr>
<td>BEING REPUBLICAN</td>
<td>.065</td>
<td>.842</td>
<td>1.067</td>
<td>0.067 (6.7%)</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>-3.094</td>
<td>.003</td>
<td>.045</td>
<td></td>
</tr>
</tbody>
</table>

***P<.001 **P<.01 *P<.05

Being Black is inversely, but significantly associated with perceiving that your community has an opioid problem ($\beta= -1.412; P< .05$). For every unit increase in being Black, the odds in perceiving that your community has an opioid problem decrease by 75.6%. Being Black decreases the likelihood of a community member perceiving that their community has an opioid problem.
Legal cynicism is inversely and insignificantly associated with perceiving that a community has an opioid problem ($\beta = -0.106; P > .1$). For every unit increase on the legal cynicism scale, the odds in perceiving that your community has an opioid problem decrease by 10.1%. Being legally cynical decreases the likelihood of a community member perceiving that their community has an opioid problem. Community values is positively and insignificantly associated with perceiving that a community has an opioid problem ($\beta = 0.231; P > .1$). For every unit increase on the community values scale, the odds in perceiving that your community has an opioid problem increase by 26%. The more an individual perceives members of the community not sharing the same values as them, decreases the likelihood of a community member perceiving that their community has an opioid problem. Collective efficacy is positively and insignificantly associated with perceiving that a community has an opioid problem ($\beta = 0.178; P > .1$). For every unit increase on the collective efficacy scale, the odds in perceiving that your community has an opioid problem increases by 19.5%. The more collective efficacy an individual perceives in their community, the more likely they are to perceive that their community has an opioid problem.

For the rest of the control variables, being White is positively, but insignificantly associated with perceiving that a community has an opioid problem ($\beta = 0.284; P > .1$). For every unit increase in being White, the odds in perceiving that your community has an opioid problem increase by 32.8%. Being White increases the likelihood of a community member perceiving that their community has an opioid problem. Being male is negatively and insignificantly associated with perceiving that a community has an opioid problem ($\beta = -1.412; P > .1$). For every unit increase in being male, the odds in perceiving that your community has an opioid problem
decrease by 17.9%. Being male decreases the likelihood of a community member perceiving that their community has an opioid problem. Being employed full-time is positively and insignificantly associated with perceiving that a community has an opioid problem ($\beta = .247; P > .1$). For every unit increase in being employed full-time, the odds in perceiving that your community has an opioid problem increase by 28%. Being employed full-time increases the likelihood of a community member perceiving that their community has an opioid problem.

Being a high school graduate is positively, but insignificantly associated with perceiving that your community has an opioid problem ($\beta = .330; P > .1$). For every unit increase in being a high school graduate, the odds in perceiving that your community has an opioid problem increase by 39.2%. Being a high school graduate increases the likelihood of a community member perceiving that their community has an opioid problem. Being republican is positively and insignificantly associated with perceiving that your community has an opioid problem ($\beta = .065; P > .1$). For every unit increase in being republican, the odds in perceiving that your community has an opioid problem increase by 6.7%. Being republican increases the likelihood of a community member perceiving that their community has an opioid problem.

Living in a rural community is positively and insignificantly associated with perceiving that your community has an opioid problem ($\beta = .241; P > .1$). For every unit increase in living in a rural community, the odds in perceiving that your community has an opioid problem increase by 27.2%. Living in a rural community increases the likelihood of a community member perceiving that their community has an opioid problem. Living in a suburban community is negatively and insignificantly associated with perceiving that your community has an opioid problem ($\beta = -.193; P > .1$). For every unit increase in living in a suburban community, the odds in
perceiving that your community has an opioid problem decrease by 17.6%. Living in a suburban community decreases the likelihood of a community member perceiving that their community has an opioid problem.
CHAPTER SIX

DISCUSSION

The research question asks, what are the perceptions rural, suburban, and urban community members have towards opioid use within their community? More specifically, does institutional anomie on the national level, and social disorganization on the community level, influence perceptions of opioid use? Overall, there is evidence in the results that support this question. Starting with the fact that a vast majority of respondents perceive their community in having an opioid problem. Similar to Stanekzai et al. (2012), residents are aware and perceive that their community has an opioid problem. The two models, one on the national level and the other on the community level, help explain what in communities are influencing community perceptions.

National Level

On the national level, the results show that in terms of the institutional anomie scales, for cultural values, individualism was the only value shown as a significant predictor of community perceptions of the opioid epidemic. A significant predictor meaning that the more individualistic a community member is, meaning, achieving success on their own, the more likely they are to perceive that their community has an opioid problem. For the institutional structures, religion was the only institution shown to be a significant predictor to community perceptions of the opioid epidemic. For the controls, being White and living in a suburban community were significant predictors of community member perceptions of the opioid epidemic.
A few different reasons may explain why individualism was the only cultural value to be significant out of the three other values. An individualistic attitude influences whether or not someone cares about what is going on in their community. Community members who are highly individualistic may just be cynical. Cynical in the sense of other community members deviancy leading to success. Community members who have worked hard on their own to reach the level of success that they possess, may be cynical towards those who have reached success through illegitimate means. Influencing perceptions that the community has an opioid problem.

Occasionally, an individual, on their own has to go against the norms of society to reach the goal that they desire. This may bring anomie to society (Messner and Rosenfeld 2007). Anomie in this sense, being an opioid problem in the community. Similar with this idea, those who are individualistic may understand that you have to go against the norms of society to reach personal goals. So, they may perceive normlessness in their community. In turn, influencing perceptions that the community has an opioid problem. They may not be okay with the epidemic occurring in the community, but they understand why it is occurring and why their community has a perceived problem.

Religion was significant, so the more religious an individual is, the more likely they are to perceive that their community has an opioid problem. This could be due to the fact that these religious members of the community are so well-socialized into the religious institutions that their belief in the power of an ultimate moral authority like God shapes their perceptions of other in the community, and they may believe that the epidemic is happening due to no on attending a church service, or believing in a religious figure to help solve life problems, due to anomie. Thus, they may believe that individuals are turning to opioids.
For the control variables, being White came out as a significant predictor in perceiving that your community has an opioid problem. With all the news and attention surrounding the national epidemic, much of the news coming out has to deal with the epidemic affecting more White individuals. It would make sense that White individuals could therefore perceive their community as having a problem, based on what the media is telling them. This goes along with suburban communities being a significant predictor in perceiving if your community has an opioid problem. The media, and past research like, Cicero et al. (2014), state that the epidemic is now targeting primarily White, suburban, and rural communities. With this message being nationally being showcased, White and suburban community members may be now more in tuned as to what is going on in their community. These community members may observe their community as having an opioid problem based on what the national news and research is telling them.

Achievement, universalism, and fetishism of money were insignificant cultural values in predicting perceptions of community opioid use. There are a few reasons as to why these values are insignificant. Achievement may lower the odds of community perceptions because individuals set goals and expect themselves to reach these goals to ultimately achieve success. Even if that means doing whatever it takes to reach success (Messner and Rosenfeld 2007). If constantly striving to reach goals, community members may not be as aware of what is going on in their community. Community members are focused on achieving their goals that they are essentially, ignoring the anomie that is present around them. In this instance, anomie being the opioid epidemic.
Universalism may lower the odds of community perceptions because community members may feel as though everyone in the community wants the same goals. If everyone wants the same goals, then the anomic pressure in society would not be as forthcoming. Resulting in negative perceptions about the epidemic. If everyone has the same goals, then everyone should not want the opioid epidemic being present in their community? Fetishism of money may lower the odds of community perception because if a community member perceives their community as having a lot of money, the wealth, success, and achievement is being showcased throughout the community (Messner and Rosenfeld 2007). This would lead to community members perceiving that their community does not have an opioid problem because community members do not want to tarnish the image of success and achievement that their community has to offer.

Family and education were insignificant institutional values in predicting perceptions of a community having an opioid problem. The more you value the opinions of your family, the less likely to perceive your community in having an opioid problem. This may be that the more socialized you are in the family institution, the less likely you are to do non-conforming things because you do not want to disappoint your family. The family is supposed to teach about adult life (Messner and Rosenfeld 2007). The family may have socialized an individual to the point where they may be naïve to what is going on around them. Being socialized into seeing that deviant activities like, opioid use is not a part of adult life. The socialized individual may be oblivious to signs of opioid use in their community, perceiving their community to not have a problem.
For education, the more positive an individual feel about the benefits of education, the more likely they are to perceive their community as having an opioid problem. Although not significant, an increase in the benefits of an education can make an individual more educated and aware about what is going on around them in the world. Being educationally socialized, can help you perceive more in what is happening, by understanding what is happening in the world. Therefore, understanding that the country is in an opioid epidemic, these individuals may be more likely to perceive it happening in their community.

With research showcasing that the epidemic is becoming widespread in rural communities, it is surprising that on the national level, it did not come up as significant. Instead, it was found that if you live in a rural community, the less likely you are to think that your community has an opioid problem. This may be that rural community members do not believe that their community is having an opioid problem. They may see it played out on the news, but if they are not directly seeing it, or thinking that, “that could never happen here” they may perceive it as not happening. Rural community members may be close with one another, so residents feel as though they know what is happening with their neighbors and in their town. If residents do not directly see the epidemic affecting themselves, their neighbors, or their community, they would not see their community as having a problem.

**Community Level**

On the community level, for the social disorganization framework scales, tolerance of deviance, police satisfaction, and community drug disorder were significant predictors in terms of perceptions of a community having an opioid problem. Being Black was the only control
variable to be a significant predictor in terms of perceptions of a community having an opioid problem.

Tolerance of deviance may have influenced perceptions of community opioid use for several reasons: community members who are more tolerant about deviant activities happening in their community, are more likely to perceive that their community has an opioid problem. Just because community members may tolerate certain drugs, or deviant non-drug related activities in their community, does not necessarily mean that they do not perceive it as being a problem in their community. Community members, may have strong, negative attitudes about opioids in their community. Since, they see other community members accepting and tolerating opioid use, they decide to do the same. Collectively, as a community resident may believe that opioid use is wrong, but since seeing others tolerating it, they do as well.

Police satisfaction could be significant because if you are satisfied with the way the police handle opioids and general problems in the community, then you are less likely to think that your community has an opioid problem. Community members may be satisfied with the police in their community for handling opioid related incidents, and non-opioid related incidents. On the other hand, community members may not be hearing about their community’s police handing opioid related incidents. In turn, this may result in community members perceiving that their community does not have an opioid problem because they do not hear about it in their community.

Lastly, Community disorder involving drugs may be a significant predictor for a few different reasons. First, community members may be more aware of general drug dealing taking place in their community causing disorder. With the rise of the opioid epidemic, residents may
be more inclined to feel that with the drug dealing taking place in their community, a lot of the
drug dealing may be opioid related. Therefore, influencing residents to perceive that their
community has an opioid problem. Community members may hear from the word of mouth from
other community members that there are “hot spots” throughout the community where drug
dealing takes place. If there are community members selling throughout the community, these
residents are therefore, making an income off of selling drugs. Possibly opioids? This could then
play a role in what kind of drugs are being sold in the community. Community residents may be
aware by seeing it themselves, or hearing about it from other residents that heroin and
prescription pills are easily attainable in their community. This may lead to the perception that
their community has an opioid problem.

Although not significant in the model, legal cynicism possibly did not come up as
significant because the more cynical you are, the more likely you are to perceive that your
community has an opioid problem. If a community member thinks that it is okay to break the
law, or that they can do anything they want, then opioids could very well exist in the community.
Being legally cynical, could then cause opioids to be perceived as not a problem in the
community. Especially if majority of residents believe these legal values. If everyone believes
that they can do whatever they want, deviant activity would be widely present in the community.
In a way, this shows that an individual does not care about the community. Resulting in
perceptions that it is a problem in the community. Even if you are contributing to the problem.

For community values, if community members perceive that members of the community
do not share the same values as them, residents are more likely to perceive that their community
has an opioid problem. This makes sense. If members of the community do not see eye to eye
about different issues in the community, specifically, opioids a community member would perceive their community as having a problem. If, a community member is aware that one of their neighbors partakes in opioid either use or selling, and you are against that, you would be more inclined to perceive that your community does in fact have an opioid problem due to the differing of values causing conflict in the community.

The lack of values also plays a role in collective efficacy of the community. Although it isn't significant, the positive effect of collective efficacy on perceptions of the opioid problem might be due to residents' strong investments in the community, and thus greater knowledge about opioids in the local community.

Being Black was a significant predictor in perceiving if a community has an opioid problem. This may be due to the fact that Black individuals may have different ideas of what they perceive as being considered a problem in their community. Opioids may not be what they find as being a significant problem. Similar to McDermott and Garofalo (1996), With residents possibly not being aware of their community having an opioid problem, this may be because opioids are not seen to be a prominent concern for Black individuals in their communities. Other drugs may be more prominent, or other community matters may be more important. Again, previous research has shown that the opioid epidemic is not as much targeting Black individuals, but more so White individuals (Cicero et al. 2014). This can lead into the type of community an individual lives in. Type of community the respondent lives in was not significant in the model, but individuals who live in a rural community are more likely to perceive their community as having an opioid problem. This is different than what we see on the national level, where
suburban community members are more likely to perceive their community as having an opioid problem.

When narrowing in on the local community that the individual lives in, rural community members may be more likely to report that yes, in their community, they view opioids as being a problem. The epidemic is targeting these communities more and more, so it makes sense that on the community level, rural community members would state that their community has an opioid problem. Similar to Keyes et al. (2014), Residents of a rural community will most likely be smaller, and residents may have stronger social bonds with each other. Therefore, they become aware as to what is going on in the community. The results are reverse for those who live in a suburban community. Those who live in a suburban community are less likely to perceive their community as having an opioid problem. This may have to do with the fact that individuals who live in a suburban community are not as invested in their community because they have other things going on like, work and other obligations. Another reason could be that community members may think that the opioid epidemic is not something that could happen in their community, so are more likely to perceive it as not occurring. When they likely may be ignoring the fact that it is happening, due to not wanting it to occur in their community. Whether this be consciously or subconsciously.

Policy Implications

The results have shown that community members are aware of the opioid epidemic as being a problem within their local communities. A few policy implications could be put into place to raise awareness about how serious the opioid epidemic is becoming in rural, suburban, and urban communities. The first suggestion would be to raise more community awareness about
the attainability of opioids in communities. If community members are perceiving that their community has a problem, then this may mean that heroin and prescription pills are becoming easily attainable in their communities. There needs to be more public awareness campaigns devoted to the issue of opioid attainability. There may be ideas that these that heroin and prescription pills are two completely different types of drugs, when in reality, they are similar in composition (Compton and Volkow 2006). Additionally, there are ideas that heroin cannot be an opioid found in more upper-class suburban communities, and prescription pills cannot be found in more rural communities. The reality is that both types of opioids can be found in all types of communities regardless of community income and demographics (Netherland and Hansen 2016). Leaders of the community like, mayors and city council members need to be held more accountable for what the opioid epidemic is doing to their communities, especially communities that are getting hit hard by the epidemic. And they need to be the gatekeepers of information about access, use, and attitudes about opioid use in these communities.

With this in mind, community educational programs should be put in place for community members for more awareness of the issue. There overall, needs to be more community involvement. This could be, informal meet-ups with addicts and non-addicts, monthly meetings with police officers discussing the use of community opioid use for that month, educational, anti-opioids- organizational meetings, and possibly informal mentoring between an opioid addict and a community member. More educational programs available in the community could provide more community integration, more information about the severity of the epidemic, provide more information about opioids, and more information on typical user’s patterns and information about overdoses. All positive programs that could be implemented in
communities. Even more specifically, communities that are being hit the hardest with the epidemic. Alternatively, by implementing programs into communities who may not be getting hit as hard with the epidemic, more programs may help stop the epidemic from spreading in their community. More knowledge about opioids may help stop the spread of it.

Limitations

There are a few limitations to this study. One of the larger limitations of the study is that Mechanical Turk was the main method used to collect data. Although, Mechanical Turk is a great way to collect a large amount of data in a short amount of time, it ultimately is not a true random sample. I used convenience sampling as my recruitment procedure to try and target as many individuals I can because everyone lives in a community. With the survey being on Mechanical Turk and not being a true random sample, generalizability will be hard to establish in the findings.

A second limitation additionally has to deal with Mechanical Turk, and that being that I only used Mechanical Turk. By only having the survey on Mechanical Turk, I lose out on responses from those who are not active on the website. There are most likely individuals from all three types of communities who are not active on the site and have their own perceptions of the epidemic, and may live in a community that is plagued by the epidemic as well. Additionally, the epidemic is a national issue that majority of individuals are aware of, but there may be a risk of Mechanical Turk users not being as in tuned with the epidemic in their community compared to individuals that are not on Mechanical Turk. Lastly, in the survey, there was no question about media consumption. Having a question like this on either the national, or community level could
have possibly been an interesting question about predicted awareness about the epidemic. Considering that the epidemic is widely talked about in the media.

*Future Research*

If sticking with a quantitative approach, surveying each type of community (rural, suburban, and urban) individually may yield interesting results. Comparing the problems each community have regarding the epidemic may be what policy makers need to determine what needs to be done about the epidemic in each specific community. There may not be one magic solution for every community. Each Community is different, with different needs to be met. Additionally, a qualitative method like, interviews may be another way to go. By administering structured interviews with residents from all communities, specifically communities that have been hit hard with the epidemic, this may be an interesting way to find out what residents of the community believe to be causing the epidemic in a narrative than compared to statistics.

The findings qualitatively, have the potential to be more robust compared to a quantitative survey approach. Sticking to a qualitative approach, interviews with community members who deal directly with the opioid epidemic like, emergency responders, police officers, emergency department staff, social workers, and community council members, may be interesting route to go. Responses from these individuals could then be compared to general members of the community.

Overall, Social Disorganization framework is a dynamic model that needs longitudinal data. Data needs to be collected overtime, whether it be quantitative or qualitative. If continuing looking at perceptions of opioid use in communities, it will need to be in a longitudinal matter. By looking at the question at hand longitudinally, you will be able to see the next phase of
organization in the community of interest. Since communities change overtime, it is important to see if disorganization of a community that occurred at one point, still occur months, or years later in order to make an accurate claim.
CHAPTER SEVEN
CONCLUSION

The hope of this study is to shed light on the most recent opioid epidemic. Previous research has shown that the face of opioid addiction is changing, and the epidemic is affecting all communities. By examining rural, urban, and suburban residents’ perceptions about the use of opioids, it can bring insight into other issues within the community that may be influencing the perceptions residents have towards the epidemic nationally and locally. By examining perceptions of the epidemic by using a contemporary anomie framework, on the national level individualism and religion are societal and institutional factors perpetuating the American Dream ideal that influence perceptions of American opioid use. On the community level, the tolerance of deviant activities in the community, satisfaction with community police officers, and community disorder involving drugs influence the perceptions residents have about their community, including the presence of opioids.

If community attachment, cohesion, social bonds, cultural values, and social institutions influence attitudes about drug abuse, then that might be an important point of intervention to encourage residents’ action against the opioid epidemic. Understanding the roots of these community variables shows how it perpetuates opioid use in communities. In addition, it may influence future research to use different methodologies like, ethnographies and interviews to study perceptions community residents have on both levels. Finally, this study could potentially influence change in social policy. Public awareness of and perceptions of the opioid epidemic might encourage law makers to better regulate “legal” drugs and communities to encourage more educational programs and community awareness about opioids and the current epidemic.
REFERENCES


APPENDIX A

CORRELATION MATRIX: NATIONAL LEVEL
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APPENDIX B

CORRELATION MATRIX: COMMUNITY LEVEL
### Appendix B: Correlation Matrix: Community Level

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APPENDIX C

SURVEY INSTRUMENT
1. How would you describe the area that you live?
   A) Rural
   B) Suburban
   C) Urban
   D) Don’t Know

2. What is your zip-code?
   -write in

   Referring to the zip-code you gave in #3…

3. Do you think your community has an opioid problem?
   A) Yes
   B) Maybe
   C) No
   D) Don’t know

4. Do you think that opioids are a big problem in your community?
   A) Yes
   B) Maybe
   C) No
   D) Don’t know

5. Do you think that opioids are not a big problem in your community?
   A) Yes
   B) Maybe
   C) No
D) Don’t know

6. In terms of the community you live in… (Yes, no, maybe, don’t know)
   A) Think that your community has enough treatment programs
   B) Think your community needs more drug treatment programs
   C) Think there should be programs available for community members to learn about opioid addiction?

7. What kind of involvement would you like to see in your community to help with the opioid epidemic? (Choose all that apply)
   A) Informal meet-ups with addicts and non-addicts
   B) Monthly meetings with police officers discussing the use of opioids during that month
   C) Educational, organized, anti-opioids, organizational meeting
   D) Informal mentoring between an opioid addict and community member
   E) I would like to see no community involvement

8. If your community had more programs devoted to education about opioid addiction, what would the benefits be? (Choose all that apply)
   A) Provide community integration
   B) Provide information about the severity of the epidemic
   C) Provide more information on opioids
   D) Provide information on typical user’s patterns and information of overdoses
   E) Don’t know
   F) I would not like to see any educational programs about opioid addiction in my city
9. Do you think that opioids are frequently used by residents in your community?
   A) Yes
   B) Maybe
   C) No
   D) Don’t know

10. Do you think that opioids are not frequently used by residents in your community?
    A) Yes
    B) Maybe
    C) No
    D) Don’t know

11. Do you think that opioids are sold in your community?
    A) Yes
    B) Maybe
    C) No
    D) Don’t know

12. In your community, do you think that… (Yes, maybe, no, don’t know)
    A) Heroin is easily attainable
    B) Prescription pills are easily attainable (illegally)
    C) Your community has a drug problem

13. In terms of “neighborhood watch” groups in your community… (Yes, Maybe, No, Don’t know, my neighborhood does not have a “neighborhood watch” group)
    A) Does your neighborhood have one?
B) Are you a member?

C) Is your watch group actively involved in the neighborhood?

14. Do you have a good relationship with your neighbors?

A) Yes

B) Maybe

C) No

D) Don’t know

15. Regarding relationships with your neighbors…. (As a criminal, as an addict, as both, neither, don’t know)

A) If you found out that a friend in your neighborhood was addicted to an opioid, how would you view them?

B) If you found out that a resident of your neighborhood was addicted to an opioid, how would you view them?

C) If you found out that a friend in your neighborhood was selling opioids, how would you view them?

D) If you found out that a resident in your neighborhood was selling opioids, how would you view them?

16. Would you call the police if you saw in your community…? (Yes, Maybe, No, Don’t know)

A) Someone you knew injecting heroin

B) Someone you knew illegally taking prescription pills

C) Someone you did not know injecting heroin
D) Someone you did not know illegally taking prescription pills

17. If you saw someone in your community injecting or ingesting an opioid, would you confront them?
   A) Yes
   B) Maybe
   C) No
   D) Don’t know
   E) Depends on the relationship with the individual

18. If you saw someone in your community injecting or injecting an opioid, would you leave them alone?
   A) Yes
   B) Maybe
   C) No
   D) Don’t know

19. In regards to residents of your community, do you think that residents… (Yes, Maybe, No, Unsure)
   A) Are close-Knit
   B) Are willing to help each other out
   C) Don’t share the same values
   D) Don’t share the same values about opioids
   E) Have many relatives or in-laws that live in their community
   F) Have many friends that live in their community
20. In terms of your local politician(s)... (Yes, Maybe, No, don’t know)

A) If you thought that your neighborhood had an opioid problem, would you talk to a local politician about it?

B) If your neighborhood does have an opioid problem, do you think that a local politician could do something about the issue?

C) Does your local politician(s) make himself known to the community?

21. In terms of your community association or council... (Yes, Maybe, No, don’t know, my community does not have a community association or council)

A) Does your community have one?

B) Are you a member?

C) Have you ever attended a meeting?

D) Has the topic of opioids ever been brought up at meetings?

22. In terms of characteristics of your community... (Yes, Maybe, No, Don’t know)

A) Do you consider litter being a problem?

B) Do you consider graffiti to be a problem?

C) Are there many vacant or deserted homes?

D) Are there teenagers just “hanging out” on the streets?

E) Are residents frequently moving in and out of the community?

F) Do you think there are residents who make an income from selling drugs?

G) Are you afraid to go outside at night in your community?

H) Do you think there are areas of your community where everyone knows “trouble is expected”?
I) Do you think there is a hotspot in your community where drug dealing takes place?

23. Do you feel safe in your community?
   A) Yes
   B) Maybe
   C) No
   D) Don’t know

24. What is the primary race/ethnicity of your community?
   A) White/Caucasian
   B) Black or African-American
   C) Spanish, Hispanic, or Latino
   D) Asian or Pacific Islander
   E) American Indian
   F) Other
   G) Unsure

25. What is the average income of your community?
   A) $10,000 and below
   B) $10,001-$30,000
   C) $30,001-$50,000
   D) $50,001-$70,000
   E) $70,001-$99,999
   F) $100,000+
   G) Don’t know
26. Are you tolerable of someone in your community… (yes, maybe, no, don’t know)

   A) Injecting heroin
   B) Taking prescription pills illegally
   C) Smoking marijuana
   D) Drinking alcohol
   E) Engaging in physical violence

27. Do you agree or disagree with the following statements? (Agree, somewhat agree, disagree, somewhat disagree, don’t know)

   A) Drug laws are okay to be broken?
   B) It is okay to do anything you want?
   C) It is okay to make money selling drugs
   D) Whether you decide to do drugs is no one else’s business
   E) A person has to live for today

28. Are you satisfied or dissatisfied with your community’s police… (satisfied, somewhat satisfied, dissatisfied, somewhat dissatisfied, don’t know)

   A) Responsiveness to opioid related incidents
   B) Dealing with general community problems
   C) Preventing crime
   D) Responding to victims
   E) Able to maintain order in the community
29. Do you agree or disagree with the following statements? (agree, somewhat agree, disagree, somewhat disagree, don’t know)

   A) Being successful is more important than being happy
   B) I intend to do whatever it takes to have some of the really expensive things in life
   C) I expect to make as many sacrifices as necessary in order to advance my work/career
   D) I expect to devote whatever time and energy it takes to move up in my job/career
   E) Being happy is more important than being successful

30. How do you feel about the following statements (agree, somewhat agree, disagree, somewhat disagree, don’t know)

   A) I will sacrifice a lot of other things to have a lot of money
   B) I do not need help from others to succeed
   C) Success is measured by the amount of money a person makes

31. Do you agree or disagree with the following statements (agree, somewhat agree, disagree, somewhat disagree, don’t know)

   A) Anyone that works hard enough can be successful
   B) You only have yourself to blame for your failures in life

32. How do you feel about the following statements (agree, somewhat agree, disagree, somewhat disagree, don’t know)

   A) Having a lot of money is one of my major goals in life
   B) An education can get you a good job
   C) An education can make you more money
33. Do you agree or disagree with the following statements (agree, somewhat agree, disagree, somewhat disagree, don’t know)
   A) Is your mother’s opinion of you important to you?
   B) Is your father’s opinion of you important to you?
   C) Are your siblings’ opinion of you important to you?
   D) Are your friend’s opinions of you important to you?

34. How do you feel about the following statements (agree, somewhat agree, disagree, somewhat disagree, don’t know)
   A) Getting an education will make you a better person
   B) Getting an education will make me a better spouse/parent
   C) Getting a college degree will educate me on different cultures
   D) Getting an education will make me a better citizen

35. Do you agree or disagree with the following statements (agree, somewhat agree, disagree, somewhat disagree, don’t know)
   A) Regularly attending a religious service is important to me
   B) Being involved in a religious organization is important to me
   C) Having a religious faith that you follow can make you a better person
   D) Believing in a religious figure can make your life better

36. What is your race/ethnicity?
   A) White or Caucasian
   B) Black or African-American
   C) Spanish, Hispanic, or Latino
D) Asian or Pacific Islander
E) Other
F) Prefer not to answer

37. What is your gender?
   A) Male
   B) Female
   C) Transgender
   D) Other
   E) Prefer not to answer

38. What is your highest level of education?
   A) Less than high school
   B) High school diploma/GED
   C) Trade school degree?
   D) Associate’s Degree
   E) Bachelor’s Degree
   F) Graduate/Professional Degree
   G) Prefer not to answer

39. What is your employment status?
   A) Employed full-time
   B) Employed part-time
   C) Unemployed looking for work
   D) Unemployed not looking for work
E) Retired
F) Student
G) Disabled
H) Prefer not to answer

40. What is your political party affiliation?
   A) Democrat
   B) Republican
   C) Independent
   D) Green Party
   E) Libertarian
   F) Other
   G) None
   H) Prefer not to answer

41. Do you feel helpless with the national opioid epidemic?
   A) Yes
   B) Maybe
   C) No
   D) Don’t know

42. On a national level, do you think the opioid epidemic will ever end?
   A) Yes
   B) Maybe
   C) No
43. Do you think the current presidential administration should do more to tackle the opioid epidemic?
   A) Yes
   B) Maybe
   C) No
   D) Don’t Know

44. When it comes to opioids do you think the problem is with overdoses or the drug itself?
   A) The overdoses
   B) The drug
   C) Both
   D) Neither

45. Do you think that Naloxone should be administered for an overdose, even if it could potentially be a criminal matter?
   A) Yes
   B) Maybe
   C) No
   D) Unsure