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# Investigating Drug-Related Violence in Indian Country: The Lumbee Tribe of North Carolina

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Investigating Drug-Related Violence in Indian Country: The Lumbee Tribe  
of North Carolina

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## Dedication

The work carried out in this dissertation is dedicated first and foremost to my mother, *Jennifer D. Carter*. It has only been through her 32+ years of ongoing love and support that I have been able to reach this point in my academic career and complete the work carried out in this dissertation. Only she truly understands the day-to-day struggles I faced to accomplish this enormous task. This work is also dedicated to the 37 individuals who took time to share their story. Without each of their voices, this research would not have been possible. This work is also dedicated to *Michael Wayne Chavis* and *William Jerome Williamson*. These individuals tragically lost their lives through the course of this research, however, the brief moments I shared with them before their death profoundly changed my life forever. Finally, this dissertation is dedicated to *Bill* and *Melinda Gates*, the founders of the Gates Millennium Scholars Program. Their generosity and foresight have enabled thousands of disadvantaged, minority youth fulfill their dream of attending college. The Gates Millennium Scholarship Program supported ten years of my academic career. Without the support of this program, I may have not been able to attend college, much less complete the research in this dissertation.

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## **Abstract**

Drug-related violence (DRV) impacts the over-all wellbeing of communities, with disparate health outcomes observable in many poor, minority communities. The purpose of this study was to better understand the multi-level social and environmental factors influencing elevated rates and prevention of DRV within the Lumbee, a southeastern American Indian Tribe. This was accomplished via in-depth, one-on-one interviews with 37 Lumbee Tribal Members and Key Leaders. The findings align with existing research, revealing the influence of such factors as poor socioeconomic conditions, coping strategies, broken family structures, and the influence of federal policy. Of interest was the substantial influence of the local Christian church on the beliefs, attitudes, and practices of the Lumbee community surrounding DRV. The findings of this study indicate that social-environmental factors, seemingly independent of prevention and treatment, play an integral role in the Lumbee community's ability to recover from the long-term consequences of DRV. Identifying these unique barriers to and facilitators of prevention and treatment will be critical to improving the welfare of tribal communities.

## Table of Contents

<b>DEDICATION</b> .....	iii
<b>ACKNOWLEDGEMENTS</b> .....	iv
<b>ABSTRACT</b> .....	v
<b>CHAPTER 1: Introduction</b> .....	1
<b>CHAPTER 2: Background and Significance</b> .....	5
Drug Trafficking and Substance Use in the United States.....	5
Consequences of Drug Trafficking and Substance Use .....	6
Drug-Related Violence.....	8
Underlying Factors .....	11
Drug-Related Violence among American Indian Populations .....	24
Drug-Related Violence among the Lumbee Tribe of North Carolina.....	36
Theoretical Assumptions and Conceptual Framework .....	48
<b>CHAPTER 3: Methods</b> .....	50
Study Overview .....	50
Setting.....	50
Sample .....	51
Recruitment .....	52
Procedure.....	53
Data Analysis and Interpretation .....	55
Strategies to Reduce Bias.....	57

<b>CHAPTER 4: Results</b> .....	59
Summary of Results .....	59
Manuscript 1: Christianity and drug-related violence among a southeastern American Indian Tribe .....	65
Manuscript 2: Investigating Drug-related Violence in a Southeastern American Indian Tribe: Lessons learned and strategies for future research, prevention and treatment .....	114
<b>CHAPTER 5: Summary, Implications and Recommendations</b> .....	142
Synopsis of Findings .....	142
Study Limitations .....	144
Future Research Directions .....	144
Implications for Public Health .....	146
Conclusion .....	146
<b>REFERENCES</b> .....	148
<b>APPENDIX A: IRB Approval Letters</b> .....	160
<b>APPENDIX B: Recruitment Materials</b> .....	166
<b>APPENDIX C: Consent and Enrollment Forms</b> .....	168
<b>APPENDIX D: Interview Guides</b> .....	177
<b>APPENDIX E: Code Book</b> .....	189
<b>APPENDIX F: Defense Presentation Slides</b> .....	202



# Chapter 1

## Introduction

In 1971 the Nixon Administration initiated the *War on Drugs* to combat the illegal drug trade in the United States (U.S.).<sup>1</sup> Today, rising demand for illicit drugs,<sup>2,3</sup> the recent declaration of an opioid crisis,<sup>4</sup> national debates on the legalization of marijuana,<sup>5</sup> and record-setting levels of drug poisoning deaths<sup>6,7</sup> have reinvigorated efforts to resolve the drug problem plaguing the U.S. for more than fifty years. The illegal trafficking and use of narcotics expose U.S. communities to a variety of short and long-term negative consequences decreasing the overall wellbeing of these populations as a whole.<sup>8-11</sup> Violence represents one of these detrimental consequences.<sup>2, 12-18</sup> Although links between drugs and violence are recognized,<sup>9, 19-22</sup> the exact nature of the relationship is still unclear given their complex multi-dimensional structure.<sup>2, 9, 11, 19</sup> Multiple, interacting factors at the individual and systems level have been examined including gender,<sup>13, 17, 23</sup> race,<sup>23-26</sup> age,<sup>3, 8, 24, 27</sup> mental health status,<sup>28, 29</sup> policy and practice,<sup>23, 30-32</sup> economic factors,<sup>9, 27, 33-35</sup> and the physical environment.<sup>36-40</sup> Barriers to further understanding and preventing DRV include minimal efforts to understand the unique contextual factors present within a particular community,<sup>11</sup> limitations surrounding data collection and reporting,<sup>41, 42</sup> and antiquated local and national drug enforcement and crime prevention policies.<sup>43, 44</sup> For minority populations, such as American Indians (AIs), where disparate levels of DRV can be observed,<sup>45-47</sup> research and prevention efforts are further limited.<sup>48</sup>

AIs in the U.S. experience rates of substance use disorders higher than any other racial/ethnic groups<sup>22, 27, 47, 49</sup> and rates of violence among AIs are generally twice the national levels.<sup>50</sup> These same patterns are also evident within the Lumbee Tribe of North Carolina, whose primary residence of Robeson County has been consistently documented as having one of the highest rates of violence<sup>†</sup> in the state.<sup>51-56</sup> Robeson County residents also regularly identify substance use and violence as leading health concerns in the community.<sup>57-59</sup>

Using the Lumbee Tribe as a case study, public health models (i.e., Social-Ecological) embedded in criminological theory (i.e., Social Disorganization Theory) were used to develop a rich understanding of the unique contextual nuances of DRV as perceived by members of the Lumbee Tribe and Key Community Leaders. In-depth, one-on-one interviews were conducted to delve deeper into Lumbee experiences and perceptions of DRV. Although qualitative work has been used in the past to examine DRV,<sup>9, 60, 61</sup> research on the topic among the Lumbee has been primarily quantitative,<sup>59, 62-68</sup> limiting contextual understanding of the issue within this community.

Qualitative methods allow for a thorough exploration and description of a concept, including how the target population perceives and responds to an issue.<sup>69, 70</sup> Utilizing this method will result in rich, descriptive data that cannot be gathered through quantitative approaches. This approach has been shown as an ideal method for obtaining valid data on crime<sup>60</sup> and is necessary given limited information about DRV in AI communities. A qualitative approach is also excellent for understanding context because it allows for a holistic analysis of a system.<sup>71</sup> Semi-structured interviews also offer relatively systematic data collection and the flexibility for emerging topics.<sup>71, 72</sup> Engaging the community in

<sup>†</sup>The Federal Bureau of Investigation warns against making comparisons between agencies and years in the Uniform Crime Report (UCR) due to annual changes in reporting styles.

this manner may also empower participating Lumbee Tribal members and Key Leaders to raise awareness of the issue by discussing the topic more openly within the community.<sup>73</sup> The knowledge gained from this investigation will inform future research on the topic within the Lumbee Tribe and other similar communities.

### **Specific Aims**

With advisement from key academic and community consultants, the **objectives of this research** were to use an ethnographic approach to (1) establish relationships with members of the Lumbee Tribe and Key Leaders in the Lumbee Community who directly interface with DRV; and (2) conduct one-on-one, semi-structured, in-depth, qualitative interviews with selected community contacts. Establishing these relationships allowed for effective and efficient execution of the proposed and future research. Data gathered from in-depth interviews will add to the depth of knowledge on the relationship between drug use, trafficking, and violence in AI communities, as well as inform future research within the Lumbee Tribe. Two central aims drove the research outlined in subsequent chapters.

***Specific Aim 1. Examine perceptions of and experiences with drugs and violence among Lumbee Tribal members and among Key Leaders working within the Lumbee community.*** The goal of Aim 1 was to identify and enhance understanding of how unique contextual issues present within the Lumbee community impact DRV as perceived and experienced by tribal members and Key Leaders working within the Lumbee community. Interviews explored potential contributing or protective factors such as local, state, or federal policy, law enforcement practices, the geography of the county, the culture of the Lumbee people, and economic conditions. Two research questions were developed for Aim 1.

Research Question 1: What are Lumbee Tribal members' perceptions of and experiences with, drugs and violence in their community?

Research Question 2: What are Key Leaders' perceptions of and experiences with, drugs and violence in the Lumbee Tribe?

**Specific Aim 2. Assess perceptions of and experiences with drug and violence prevention and treatment resources among Lumbee Tribal members and Key**

**Leaders working within the Lumbee community.** The goal of Aim 2 was to identify how contextual factors impact prevention and treatment efforts as perceived by tribal members and Key Leaders. Topics explored included participant's knowledge and use of existing resources within the community; existing gaps or barriers in prevention and treatment systems; opportunities for intervention; and institutional accountability. Two research questions, highlighted below, were developed for Aim 2.

Research Question 1: What are Lumbee tribal members' perceptions of, and experiences with, drug and violence prevention and treatment resources in their community?

Research Question 2: What are Key Leaders' perceptions of, and experiences with, drug and violence prevention and treatment resources in the Lumbee community?

In the following chapters, a review of research on the prevalence of DRV, as well as potential contributing mechanisms will be reviewed both nationally and among AIs generally. This will be followed by a description of the methods, results, and a discussion of a study aimed at better understanding the context of DRV among the Lumbee Tribe of North Carolina.

## Chapter 2

### Background and Significance

#### Drug Trafficking and Substance Use in the United States

According to the National Drug Threat Assessment, a report conducted by the U.S. Department of Justice, the trafficking of drugs involves the production, transportation, and wholesale distribution of illicit substances throughout a geographic region.<sup>2</sup> The southwest border of the U.S. is the primary entrance point for many illegal drugs,<sup>6</sup> with volume in this region exceeding all other routes combined.<sup>2, 74, 75</sup> Mexican-based Transnational Criminal Organizations (TCO's) dominate the U.S. market,<sup>6</sup> operating in over 1000 cities nationwide. In many major and midsize U.S. cities, criminal gangs retain control of retail level distribution and are increasingly collaborating with Mexican-based TCO's.<sup>2</sup> In 2009, approximately 1,626 metric tons of illegal drugs were seized across the border indicating TCO's succeed in moving thousands of tons of illegal narcotics across the border annually.<sup>18</sup> Recently, significant increases in the availability of heroin, methamphetamine, and marijuana have been documented.<sup>2, 74-76</sup> Of concern, is the rising threat from controlled prescription drugs (CPD). Drawn by the substantial profit potential, TCO's and other criminal groups are becoming increasingly involved in their transportation and distribution.<sup>74</sup> Given the considerable supply of illegal narcotics regularly transferred into the U.S., the high demand for this commodity is no surprise. Between 2000 and 2010 in the U.S., drug users spent an estimated \$100 billion annually for the purchase of cocaine, marijuana, heroin, and methamphetamine.<sup>77</sup>

The National Survey on Drug Use and Health suggests that 9.4 percent (or 24.6 million) of the U.S. population aged 12 and older are current illicit drug users (i.e. used an illegal drug over the last month), demonstrating a 1.1 percent increase since 2002.<sup>78</sup> Of this population, 8.2% were classified with substance dependence or abuse within the last year. Approximately 54.1% of all new users are under the age of 18, while most users (22.6%) fall between the ages of 18 and 20. Illicit drug use also appears to be increasing among individuals in their fifties and sixties, although this may be a result of the aging baby boomer population who has historically had higher rates of substance use.<sup>78</sup> Marijuana is currently the most commonly used drug, followed closely by CPDs.<sup>6</sup>

### **Consequences of Drug Trafficking and Substance Use**

The trafficking and use of illegal narcotics have numerous consequences. In 2007 illicit drug trafficking and use resulted in an estimated \$193 billion in direct and indirect costs related to crime, health, and productivity. Of this, an estimated \$61 billion dollars contributed to drug-related crime.<sup>2</sup> Drug law violations represent the most common law arrest category<sup>2, 79, 80</sup> and have most likely contributed to 42% of growth in federal prison populations between 1998 and 2010.<sup>81</sup> The majority (99.5%) of these drug offenders are often serving time for drug trafficking, with powder and crack cocaine representing the primary drugs involved in these offenses.<sup>81</sup>

Drug use also has long-term, permanent consequences for users and their families, leading to sickness, disease, and eventually death. An estimated 2 million emergency room visits in 2009 were contributed to drug use or abuse.<sup>2</sup> Over the last 20 years, drug overdoses have been steadily increasing in the U.S., with 27,000 unintentional overdose

deaths occurring in 2007 alone.<sup>82</sup> In 2008 poisonings in the U.S., of which 90% were due to drugs, surpassed motor vehicle crashes as the leading cause of injury death<sup>83</sup> and are currently at their highest recorded level ever.<sup>6</sup> The opioid threat has also reached epidemic levels and use of opioids is linked to more overdoses than any other drug class. In 2013 alone, the economic burden of the opioid epidemic was estimated at \$78.5 billion dollars.<sup>6</sup> The dependents of drug traffickers and users are also detrimentally affected. Between 2002 and 2007 approximately 3 percent (2.1 million) of U.S. children lived with a parent who abused an illicit drug. Because of incarceration or death, these children are also often left in the care of their extended families, sent to foster homes or forced into poverty due to the loss of financial support.<sup>18</sup>

Another destructive and far-reaching consequence of drug trafficking and drug use is the manifestation of violence. Violence is an international problem with thousands of people losing their lives each day. Of all injury-related death, homicide represents one of the three leading causes of injury globally, accounting for 11% of all injury and violence-related deaths. This figure is expected to increase, moving homicide into the top twenty leading causes of death by 2030.<sup>10</sup> In the U.S., violence is so pervasive, it is listed as a key objective in the national initiative, *Healthy People 2020*.<sup>84</sup> Although there has been a downward trend in violent crime in the U.S. since 1994 (1,857,670), an estimated 1,248,185 violent crimes occurred in 2016, an increase of 4.1% from 2015. Of these, 64.3% were aggravated assaults, while 1.4% were murders.<sup>64</sup> Youth in the U.S. also experience and commit violence at higher rates than youth in other developed countries. In fact, U.S. youth are 3 to 40 times more likely to die from homicide than youth in comparable countries.<sup>85</sup> All types of violence can be observed across each phase of drug

production, distribution, retail, consumption, and control, and may represent a significant source of many of the economic and societal costs highlighted above.

### **Drug-Related Violence**

A formal or consistently applied definition of DRV appears to be absent from the literature<sup>86</sup> resulting in varying conclusions about the relationship between the two variables.<sup>87</sup> According to the World Health Organization (WHO) violence is defined as “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation.” The WHO identifies three types of violence including self-directed (e.g. suicide), interpersonal violence (e.g. elder abuse), and collective violence (i.e. violence committed by a larger group).<sup>88</sup> One commonly used measure of violence, the Uniform Crime Report (UCR), compiled by the Federal Bureau of Investigation (FBI), defines violent crime as offenses that involve force or threat of force. The UCR classifies violent crime into four major offenses: (1) murder/non-negligent manslaughter, (2) rape, (3) robbery, and (4) aggravated assault.<sup>64</sup> For the purposes of this research, DRV will be defined as any type of violence (as defined by WHO) directly or indirectly associated with the production, distribution, selling, consumption, or control of illicit drugs.

Much empirical evidence exists which suggests a strong association between drug trafficking, drug use, and violence.<sup>9, 11, 12, 19, 23, 31, 89-94</sup> Individual drug use, for example, has been found to be a significant predictor of drug selling.<sup>95</sup> The exact relationship between these variables, however, still remains uncertain given the complex, multi-dimensional nature of the problem.<sup>13, 19, 61, 87, 92, 96</sup> Methodological challenges including



variable selection, data collection, and reporting, as well as the safety of study participants are a few barriers to better understand and negate the negative consequences of DRV.<sup>13, 17</sup> Currently, DRV is most commonly explicated through a tripartite framework developed by Paul J. Goldstein who identifies three primary dimensions of DRV: psychopharmacological, economic compulsive, and systemic violence.<sup>20</sup>

**Psychopharmacological Violence.** This dimension of DRV represents the cognitive or affective changes to individual behavior brought on by substance use or withdrawal. The biological effect of drugs on the brain can lead to an overall impairment in cognitive abilities, including the loss of emotional control, or reduced inhibitions.<sup>12</sup> Not only does the use of drugs result in physical and emotional damage often leading to sickness and premature death,<sup>18</sup> but the impaired behavior that results from substance use can lead to multiple forms of criminal behavior, including the perpetration of violent crimes such as domestic abuse or assault.<sup>17, 22, 86, 90, 91</sup> Substance use can alter a person's behavior causing them to act violently or it may place them at increased risk for violent victimization.<sup>20, 70</sup> Several studies have been able to establish a direct relationship between drug use and the mental and emotional reactions that lead to violence, while others have been inconclusive.<sup>30</sup> Specific drugs, particularly stimulants and hallucinogens such as methamphetamine, have also been found to have a stronger association with violent behavior.<sup>6, 9, 12, 13, 17, 91-93</sup> Developmental factors such as an aversive environment, lack of parental supervision, history of mental health problems such as aggressive behavior or alcohol abuse, gender, and biological factors are all thought to play important roles in the development of violent behavior.<sup>12, 13</sup>

**Economic Compulsive Violence.** The second dimension of DRV involves violence that arises due to a need to purchase additional drugs for personal use. The primary motivation for acts of violence in this dimension is to obtain money to purchase drugs and includes incidents like robbery or arson. Given their exorbitant costs, heroin and cocaine tend to be most commonly linked with economic compulsive violence.<sup>13, 29, 97</sup> Victims of this form of DRV tend to be those residing in the same neighborhood of offenders and other individuals already engaged in illicit activity such as other drug use, gambling, or prostitution.<sup>20</sup> Generally, research in this area tends to produce inconsistent results, contributing to challenges linking the violent act to a need for drugs.<sup>30</sup> Findings do indicate, however, that the majority of crimes committed with the ultimate goal of purchasing drugs tend to be nonviolent in nature (i.e., theft).<sup>20, 29, 30</sup>

**Systemic Violence.** This dimension of DRV represents patterns of aggressive behavior intrinsic to the purchase and selling of illegal narcotics. Examples of this include rivalry between opposing trafficking organizations competing for territory, retribution for selling bad drugs, or incidents related to law enforcement deterrence activities.<sup>2, 13, 20, 70, 94</sup> Studies have revealed that systemic factors surrounding illicit drug markets are responsible for the majority of DRV.<sup>9, 19, 30</sup> Dealers who frequently carry large sums of cash or drugs are potential targets for robbery, use of weapons for protection, and differential increases in law enforcement disrupting the flow of illegal drugs have been cited as factors perpetuating systemic violence.<sup>30, 70</sup>

Although Goldstein's tripartite framework is an excellent foundation for explicating DRV, the model is not without its limitations and further clarifications are still needed. Some suggestions for improving the model include acknowledging the fact that the three

dimensions are not mutually exclusive. They interact in a variety of ways and at multiple different levels of influence. The framework also fails to acknowledge the impact of contextual nuances such as individual characteristics, physical and social environmental conditions or the experiential connections of drugs and violence. The inclusion of these underlying factors would greatly enhance Goldstein's model.<sup>9, 23, 96, 98-100</sup> Following is a description of several underlying factors known to impact the prevalence of DRV.

### **Underlying Factors**

Existing research suggests that a combination of factors from both the individual and population level influence rates of DRV. Individual-level characteristics such as age and gender represent proximal factors and contribute most directly to biological outcomes such as stress. Research suggests, however, that when these factors are controlled for, distal or population level factors appear to predict a greater proportion of violence, although evidence is still limited.<sup>32, 101</sup> Disorganization of the physical and social environment (i.e., political, economic and physical structures, or cultural and historical experiences) for example, has been identified as key underlying factors contributing to elevated levels of DRV in certain communities.<sup>9, 12, 13, 15, 20, 23, 31-33, 35, 86, 96, 100, 102, 103</sup> This perspective acknowledges that the responsibility of DRV is not solely the fault of the individual, but it is also a byproduct of the environment in which the acts are produced.<sup>32</sup>

Given the complex and sensitive nature of DRV and the limitations associated with social science research, conducting research in this field utilizing true experimental designs is exceedingly challenging. Therefore, ascertaining the interactions or relative importance of specific factors in the drug-violence nexus is still underway.<sup>25</sup> Some

researchers suggest that this results from a limited ability to establish direct correlations, temporal order, or control for a host of internal and external factors.<sup>17</sup> Other researchers attribute this gap to perspective, suggesting the relationship between drugs and violence may, in fact, be nonlinear and levels of influence may be inseparable. This approach suggests that factors contributing to DRV coexist simultaneously and not sequentially and a shift in thinking will be required before the relationship is fully understood.<sup>32</sup> Mounting evidence does seem to suggest, however, that shifting prevention and enforcement efforts from a sole focus on individual-level factors to a systems approach which also targets resources at lessening the impact of systemic, population-level factors will lead to a greater reduction in incidents of DRV and strengthen the overall well-being of communities as a whole.<sup>13, 19, 32, 36, 104</sup> Outlined in detail below are several individual and population-level factors known to perpetuate DRV.

**Individual Factors.** A host of individual-level factors contribute to rates DRV. The impact of each factor and the long-term outcome is also contingent on a variety of additional variables. These include the type of drug used or sold, whether multiple drugs are involved, the route of ingestion, amount consumed, and patterns of use.<sup>13, 17, 98</sup> Given the multitude of potential confounding variables, research attempting to tease out the exact relationship between these factors has been generally inconclusive.

Gender, for example, is thought to play a significant role in DRV.<sup>13, 17, 23</sup> Drug abuse, dependence, and delinquency appear to be generally higher among men than women,<sup>9, 11, 24, 27, 105</sup> although the reverse has also been documented when some variables, such as age, have been modified.<sup>12, 24, 106</sup> Male substance users tend to engage in more violent crime, while their female counterparts often experience higher rates of violent

victimization. Women, however, tend to be more susceptible to addiction than men.<sup>12, 17</sup>

One potential explanation for gender differences is metabolic rates. General variations in the proportion of fatty cells across men and women impact the rate at which drugs are metabolized ultimately influencing pharmacological outcomes.<sup>17</sup>

Race and ethnicity represent another critical social structure impacting rates of DRV at both individual and population-levels. More research is needed, however, to further clarify this relationship, with inconsistent findings to date.<sup>95</sup> Evidence does suggest that the impact of DRV tends to be stronger among minority groups.<sup>23-26</sup> African American communities, for example, are more likely to contain drug markets and manifest higher rates of violence than other areas of the U.S.<sup>15</sup> Downward economic trends and ineffective policy decisions have been contributed to the development of alternative economic and cultural frameworks in these communities.<sup>23</sup> Among AI populations for example, odds of lifetime dependence have been found to be greater when compared to whites.<sup>27</sup> Multiracial populations may also experience greater rates of lifetime substance use and are more likely to engage in violent behavior, a factor potentially contributed to racial identity and their unique minority status.<sup>25</sup> Although findings have been inconclusive, ethnic heterogeneity in communities has also been positively associated with violence. As diversity increases, a loss of cultural ties and social networks may lead to acculturative stress and subsequent negative health behaviors such as substance use or violence.<sup>101</sup>

DRV has also been linked to age. Involvement in violent crime and drug use is thought to initiate early in youth and begin to decline with age.<sup>3, 8, 24, 27</sup> Young adults between the ages of 18-25 demonstrated the highest percentage of use across all drugs

between 2007 and 2012.<sup>74</sup> Although rates of use and dependence among youth age 12-17 have generally shown a decline in recent years,<sup>78</sup> heroine related treatment admissions for adolescents (12-17) and young adults (20-34) have been on the rise since 2007.<sup>74</sup> Frequent drug use and exposure in early adolescence is also tied to later acts of violence.<sup>107</sup> When compared to all other age groups, youth between the ages of 12-19 have the highest rate of violent victimization<sup>107, 108</sup> and homicide represents the 4<sup>th</sup> leading cause of mortality for youth between the ages of 15-29.<sup>10</sup> Youth are more likely to be exposed or live close to potential offenders, as well as be involved in activities making them ideal targets. Youth gangs are one example and contribute overwhelmingly to the level of crime, particularly violent, experienced by a community and the number of gangs in the U.S. has been increasing since 1990. Gang-affiliated youth are thought to commit more crime, especially violent, drug, and weapon-related offenses than youth not affiliated with gangs.<sup>109</sup>

Individual biological and genetic characteristics are also thought to play a key role in the manifestation of DRV, although evidence is limited.<sup>13, 28, 98</sup> An estimated 40-60% of addiction cases are thought to be linked to genetic factors. Adolescent drug use may impact healthy brain development by altering the regulation of hormones in the body which may ultimately affect gene expression.<sup>28</sup> Alterations in the levels of monoamine neurotransmitters due to drug use are known to play a role in violence or aggression by stimulating the limbic system, inhibiting or releasing serotonin (associated with mental illness such as depression and anxiety), dopamine or norepinephrine (associated with behavior regulation). Excess levels of testosterone, variances in metabolic rates, prior

brain injuries, temporal lobe dysfunction, history of pathologic intoxication, and encephalopathy have also been linked to acts of aggression and violent offending.<sup>13, 17</sup>

From the point of conception into early adulthood, individuals are most susceptible to adverse events that may markedly impact development and lead to dramatic shifts in the life course, particularly as it relates to DRV.<sup>110</sup> Prenatal exposure to cocaine, for example, has been linked to later aggression.<sup>17</sup> Subsequently, childhood aggression has been associated with later substance use and deviance.<sup>99</sup> Involvement in and exposure to violent crime and participation in youth gangs have been associated with attitudes more tolerant of delinquent and aggressive behavior, continued participation in illegal activity and higher rates of substance use.<sup>109, 111, 112</sup> Victimization in youth is another critical factor impacting long-term behavior. Child abuse and family violence have been linked with favorable definitions of crime, adult criminality, mental disorders, and drug use.<sup>8, 9</sup> Other developmental influences such as a lack of social bonds, sociodemographic characteristics, lower intelligence, poor school performance, pro-drug environments, and time spent watching television shows or movies that glorify drug use or violent behavior have also been associated with DRV.<sup>9, 20, 93, 107</sup>

Mental illness is another likely factor contributing to rates of DRV, although few studies incorporate all three variables and findings have been inconclusive.<sup>9, 12, 13</sup> Research does suggest however, that risk of addiction is higher among those suffering from mental illness<sup>28</sup> and the presence of a mental disorder will influence how a person will be impacted by a particular drug.<sup>23</sup> In some cases, substance use has predicted violent crime among those with mental illness and it has been suggested that individuals with substance use disorders contribute more to the public health burden of violent

behavior than all other disorders combined.<sup>29</sup> Evidence suggests that the relationship between DRV and mental illness strengthens for specific illnesses such as antisocial personality disorder<sup>12, 93, 99</sup> and schizophrenia, although the severity of the condition and adherence to treatment plays a big role.<sup>113</sup>

**Political Structures.** At the national, state and local levels, law enforcement policy and practice, thought to be an expression of social and moral regulation, has been identified as one facilitator of DRV.<sup>23, 30-32</sup> Increases in DRV in the U.S. are typically associated with policies that increase funding for law enforcement activities focused on reducing the availability and use of illegal drugs. A systematic analysis of the literature reveals that of 15 studies evaluating the impact of drug enforcement on drug market violence, 14 found an adverse effect. In U.S. fiscal year 2010/11, however, an estimated \$10 billion was allocated for drug law enforcement, with enforcement activities frequently taking priority over prevention or treatment-based options.<sup>94</sup>

Increased drug enforcement has been shown to impact drug markets by increasing competition, the overall price of drugs, and the displacement of users and dealers resulting in a redistribution of harm. As dealers are arrested, market shares and territorial arrangements are disrupted creating opportunities for violence as new systems are negotiated.<sup>16, 23, 114, 115</sup> Given an absence of legal recourse for illegal behavior, disputes over drug-related activity are frequently settled via economic reprisal or violence. Retaliation, as an example, is often used as a form of protection or as a means to maintain a reputation and is simply an extension of behaviors associated with running a legitimate business.<sup>9, 19, 70</sup> The use of illegal weapons works to further amplify violent outcomes across all three types of violence.<sup>20</sup> Because the U.S. criminal justice system seeks to



deter offenders primarily through incarceration, mandatory minimum sentencing policies, stronger penalties for certain drugs, and differential law enforcement, substantial disparities in the incarceration rates of certain drug offenders has been created.<sup>23, 32, 36, 94,</sup>  
<sup>95</sup> The growth of the prison population has increased the burden on taxpayers and left a substantial void in the social structure of communities across the U.S.<sup>18, 94, 96</sup> This evidence suggests that violence may be an unavoidable consequence of drug prohibition and a shift in regulatory systems may be required.<sup>94, 116</sup>

**Economic Factors.** Economic deterioration in a community or neighborhood, often measured by female-headed households, welfare dependency, income levels, educational attainment, rates of crime, or employment status, has been linked to violent crime, drug use, and drug trafficking.<sup>9, 27, 33-35</sup> Exposure to a range of the indicators of economic deterioration appears to be more salient at explaining the violence/drug nexus than other individual-level factors, such as race. This range of conditions produces a “concentrated effect” of multiple, interlocking social problems, contributing to an overall all sense of social disorganization<sup>33, 117</sup> which makes populations more vulnerable to harm.<sup>32, 101</sup>

Drug trafficking, for instance, is thought to arise when there is an absence of legitimate economic opportunities. The distribution of illicit drugs often yields a quick turnover with high-profit potentials.<sup>9, 23, 38</sup> This was particularly evident when crack cocaine dominated urban markets during the 1980’s and 1990’s as a result of a decline in the manufacturing industry and deteriorating welfare programs.<sup>9, 32</sup> Conversely, a lack of legitimate economic opportunities may produce a “stress disorder” stemming from an enduring sense of oppression or discrimination. Persistent exposure to stress may lead to psychological and physical harm, including self-blame, a reduced sense of self-worth,

and an increase in risk-taking behaviors. Drug use may then manifest as a coping mechanism or form of self-medication.<sup>32</sup> To support this habit, some economically disadvantaged users may then turn to risky behaviors such as prostitution or theft, which elevates the risk of violent outcomes.<sup>9, 29</sup>

**Social Factors.** Social disorganization or the declining social structure of a community has been identified as a facilitator of drug activity and violence. The exact nature of this relationship is unknown, however, particularly in rural communities.<sup>118</sup> Some indicators thought to signal social disorganization include a lack of community or familial support, declining rates of marriage, residential instability, and ethnic heterogeneity. Family, for example, represents the most critical system influencing development, particularly as it relates to the adoption of favorable attitudes related to DRV.<sup>38, 95, 110</sup> A high rate of residential instability is thought to reduce informal social controls because as residents frequently move in and out of a community, establishing meaningful social bonds becomes more challenging. Weak social ties or low collective efficacy, often present in socially disorganized communities, has been associated with feelings of mistrust leading residents of a community to avoid public space, be leery of strangers, and perhaps no longer intervene for the common good.<sup>25, 33, 96, 101, 118</sup> An environment lacking social controls becomes conducive to the rise of drug markets, further perpetuating the cycle of social disorganization. Residents may no longer cooperate with the police, the existing business may be forced to close, and city officials and private interest may be dissuaded from investing in the area.<sup>15</sup> Violence may then emerge as a substitute for lost informal or formal social controls.<sup>27</sup>

**Cultural Factors.** Culture is comprised of a variety of characteristics that include behaviors, beliefs, skills, knowledge, and norms which are shared by a group of people and transmitted between generations.<sup>110, 119</sup> Culture is thought to be a multidimensional process that is expressed in how individuals perceive and interpret the world. It is an evolving phenomenon that includes teachings about language, food, or religion which are constantly challenged and redefined.<sup>119</sup> Culture represents a critical structure that shapes individual development overtime,<sup>110</sup> yet knowledge of its impact on social challenges like DRV is limited.<sup>25, 120</sup>

Social disadvantage, for example, has been attributed to a culture of attitudes, which normalize violent behavior or substance use.<sup>23, 101</sup> The growth of illicit drug markets, often as a result of economic disadvantage, are thought to give rise to a cultural framework labeled the “Code of the Street.”<sup>121</sup> Once internalized, the code is thought to modify existing norms and values, particularly as it relates to the use of violence for the protection of self and family or the resolution of disputes. Cultural adjustments in a community may then lead to alienation from conventional society because of shame or stigmatization. Subsequently, individuals may deny the legitimacy of other existing social structures furthering their subordination.<sup>23, 32</sup> Acculturation and prejudice or discrimination have also been attributed to problem behaviors in certain populations. A strong racial identity or sense of common heritage within a particular racial group is an aspect of culture which has been found to be protective against negative health consequences including drug use and violence.<sup>110, 122</sup>

Given the significant role cultural structures may play in DRV,<sup>100, 120</sup> deepening the understanding of cultural patterns will improve prevention and treatment efforts.<sup>110</sup>

People of color need to be included in research to a greater degree and cultural nuances within racial categories must be recognized. It is imperative that measures of culture expand beyond simple racial proxies and include other aspects of culture such as religion or class.<sup>119, 120</sup> Knowledge development must also incorporate cultural paradigms by including the voices of racially and ethnically diverse populations.<sup>120</sup>

**Physical Environmental Factors.** The physical environment is comprised of two elements, the built and natural environment. The built environment includes physical components constructed by people such as buildings, transportation systems, or territorial boundaries, while the natural environment includes green space and animals.<sup>36, 37, 112</sup> Research suggests that the physical environment has an extensive impact on both positive and negative health outcomes due to its ability to shape or constrain behavior and represents a mechanism with tremendous potential to facilitate population-level health change.<sup>14, 16, 36-40, 104, 112, 123-126</sup> The field of public health has long recognized the impact of the environment on health; however, limited attention has been given to the impact of environment on DRV. Much greater strides have been made within the field of criminology where crime prevention strategies such as defensible space and crime prevention through environmental design have been developed to modify environmental factors which contribute to elevated rates of crime.<sup>36</sup>

Environmental factors such as physical deterioration, vacant housing, crowding, and exterior lighting play a critical role in opportunities for deviant behavior, including acts of violence and substance use.<sup>38, 40, 112</sup> Vulnerable places or “hot spots” such as specific transportation routes have been associated with drug trafficking, the transmission of HIV, and prostitution due to increased mobility.<sup>16, 36, 123</sup>

The environment can also have positive effects on health outcomes. Increasing mobility within an impoverished community via the addition of a transit system has been associated with declines in violent behavior due to increased social interactions and overall trust.<sup>39</sup> Reductions in mental fatigue (brought on by daily stressors and linked with irritability, decreased control of impulses, and aggression) have been associated with interactions with natural space including wilderness areas, parks, and interior plants. This suggests the geographic distribution of natural space, particularly in poor urban settings where it is most limited, is an important consideration in the reduction of DRV.<sup>112, 126</sup> Given the myriad of challenges associated with identifying environmental determinants of health, including the numerous public health consequences of activities in the public and private sector, a lack of valid and reliable indicators, and the quick pace of population growth, more evidence is needed to support effective planning and policy decisions.<sup>37, 104</sup>

**Historical Factors.** It has been suggested that indigenous populations throughout the world can trace social pathologies to parallel experiences of historical trauma.<sup>127</sup> Historical trauma has been defined as a “cumulative emotional and psychological wounding, over the lifespan and across generations, emanating from massive group trauma experiences.”<sup>128</sup> Historical trauma events are thought to be widespread within a specific group, perpetrated by external members with malicious intent, and results in the development of high levels of collective distress.<sup>129</sup> Reactions to trauma, labeled the historical trauma response (HTR), includes negative health outcomes such as depression, anxiety, anger, low self-esteem, unresolved grief, or self-destructive behaviors such as substance use or suicide.<sup>128</sup>

The reach of a traumatic event is thought to have intergenerational effects, extending beyond the individual who was directly exposed, impacting family dynamics and whole communities.<sup>127-130</sup> Evidence suggests that offspring of those who suffered from a traumatic event are at increased risk for exposure to stressful events and are likely to be more sensitive to daily stressors such as discrimination or experiences related to poverty. Increased exposure and sensitivity is believed to occur via several mechanisms. First, traumatic experiences may result in the sensitization of biological stress systems resulting in exaggerated behavioral and biological responses to stress. Exposure to stressful events may also create epigenetic modifications resulting in the suppression of specific genes. These increased sensitivities and gene modifications may be transmitted prenatally from one generation to the next via germ cells.<sup>129</sup> Secondly, because of the HTR of parents, children may be exposed to elevated rates of substance use, violence, and mental health problems which result in high incidences of death. Frequent exposure to these stressful events represent a daily source of trauma for surviving community members and is a mechanism which serves to perpetuate negative responses to stress enhancing the vulnerability of these populations.<sup>128, 129</sup>

Despite limited empirical evidence and differing conceptualizations,<sup>129</sup> evidence of the impact of historical trauma has been documented within several populations. AIs, for example, have suffered a legacy of abuse and oppression beginning with the colonization of the Americas.<sup>119, 131</sup> The genocide of AI populations followed by processes of displacement and forced assimilation have resulted in the loss of culture and language and the breakdown of kinship ties and social structures. These events have laid the foundation for the persisting intergenerational trauma and overall mistrust of social

institutions present within this population today.<sup>119, 127, 128, 130, 131</sup> Similar patterns have also been documented among survivors of the Holocaust and Japanese Americans illegally incarcerated following the Pearl Harbor attack during World War II. Evidence suggests members of these groups and their offspring experience a greater degree of cumulative lifetime stress, unresolved grief, increased risk of post-traumatic stress disorder (PTSD), elevated mortality and high rates of substance use, sexual abuse, violence, and psychiatric disorders.<sup>127, 128, 132, 133</sup> Older Gay and Lesbian Americans are other groups who may also be impacted by historical trauma. Growing up in an era were violence and hate where the prevailing responses to homosexuality, this population often concealed their identity to survive. Homosexuality was classified as a mental disorder creating fear of institutionalization, organized religion viewed homosexuality as a decline in morality, the military dishonorably discharged soldiers and the federal government fired employees who identified as gay or lesbian. Feelings of isolation and fear of violent victimization have cultivated an exhaustive list of mental health consequences such as depression and PTSD which have increased risk for substance use and other negative health behaviors.<sup>134</sup>

As is evident, a host of coalescent factors at multiple levels of influence drive rates of DRV in communities throughout the world. Although general patterns are understood, the unique contextual nuances present within each individual, situation, and environment substantially challenge efforts to fully understand and intervene in this devastating and unrelenting public health problem. Efforts are further obscured by research limitations, such as the accessibility and quality of data and ethical concerns. This pattern is particularly evident among AI populations who contain hundreds of unique tribal groups;

are geographically distributed throughout the U.S., Mexico, and Canada; are directly impacted by federal, state, and local policy; and are often excluded from research or collapsed into an “other” category in data sets because of population size.

### **Drug-Related Violence among American Indian Populations**

**American Indians Defined.** Historically, the vacillating definition of an AI has been dependent on social, political, and cultural inclinations. Even today, differing criteria for what it means to be an AI can be found at the federal, state, tribal, and individual level.<sup>46</sup> In fact, no single criterion or standard establishes one’s AI identity. From a political and legal perspective, the Bureau of Indian Affairs (BIA) defines an AI as an enrolled member of a federally recognized tribe. A federally recognized tribe possesses inherent rights of sovereignty and is entitled to certain benefits from the federal government. There are currently 573 federally recognized tribal groups in the U.S. The BIA also acknowledges an ethnological definition of an AI which includes knowledge of tribal culture or history, familial ties, and self-identification.<sup>135</sup> The U.S. Census defines an AI based on criteria laid out by the U.S. Office of Management and Budget, who states an AI is “a person having origins in any of the original peoples of North and South America and who maintains tribal affiliation or community attachment.”<sup>136</sup> State and tribal governments frequently utilize a combination of aspects from both definitions to establish AI identity. Many states, for example, have recognized approximately 100 additional tribal groups not recognized by the federal government.<sup>47</sup> The extent with which an AI identifies with traditional tribal cultural values and practices also exists on a continuum, a diversity that can even be found within the context of a single AI community.<sup>46</sup>



The 2010 U.S. census, which relies on self-identification, reported that 5.2 million people in the U.S. (1.7% of the total population) identify as AI or Alaska Native (AN), with 2.3 reporting in combination with other races.<sup>136</sup> This more than half the approximately 1,978,099 enrolled members identified by the BIA.<sup>135</sup> Since 2000, the AI/AN population has experienced substantial growth, increasing by 39%.<sup>136</sup> Regarding geographic distribution, the majority (41%) of AI/ANs reside in the western region of the U.S., followed by the south. Ten U.S. states (California, Oklahoma, Arizona, Texas, New York, New Mexico, Washington, North Carolina, Florida, and Michigan) contain most of the AI population. More than two-thirds of the AI population live in metropolitan areas, away from traditional tribal lands.<sup>47, 136</sup> Given substantial variations in how AIs are defined, acculturative effects, and location, making generalizations about this population as a whole is problematic.<sup>46</sup>

**AIs and Drug-Related Violence.** Despite extensive tribal distinctions, evidence supporting the prevalence of significant disparities associated with drug trafficking, substance use, and violence can be found across AI populations generally.<sup>22, 25, 47, 48, 50, 95, 137-143</sup> AIs have an increased prevalence of health risk behaviors and exposure to violent crimes such as those associated with drug-trafficking.<sup>48, 142</sup> Drug use and trafficking have been found to contribute to most crime in Indian country, which can be five times higher than national averages in some places. Drug arrests have also been on the rise since 2011.<sup>6</sup> AIs are actively involved in the transportation and distribution of illegal drugs within AI communities and the diversion of pharmaceuticals is becoming an increasing concern. Traveling to nearby cities, sometimes at great distances, AI criminal groups purchase illicit drugs from Mexican drug trafficking organizations, their primary supplier

and the largest organizational threat to AI communities. Increased exposure to and established relationships with street gangs have also led to the manifestations of gang culture and behavior in many tribal communities further facilitating illicit drug distribution practices.<sup>22, 79</sup>

Given the presence of drug trafficking in AI communities, it is not surprising that exorbitant levels of substance use have also been documented. Rates of substance use among AI populations rank higher than those for any other racial/ethnic group in the U.S.<sup>22, 47, 82, 95, 137-139, 144</sup> In fact, being AI is associated with favorable attitudes towards substance use and number of substances used.<sup>25</sup> Marijuana has been identified as the primary illicit drug abused throughout Indian Country.<sup>22, 79, 95, 137</sup> Of particular concern, is the impact of drugs on AI youth who are at an increased risk for substance use.<sup>25, 95, 138, 139</sup> AI youth are more likely to have an early onset of substance use and to use multiple types and combinations of substances,<sup>95, 138</sup> a pattern which has been documented among both urban and reservation dwelling AI youth.<sup>95</sup> Violence, associated with drug trafficking and substance use, is also highly prevalent in AI communities.

AIs face rates of violent crime which are also greater than all other racial/ethnic groups in the U.S. Violence rates among AIs (101 violent crimes per 1000 persons) have been reported higher than twice the national rates (41 per 1,000 persons)<sup>22, 50, 145, 146</sup> and includes such crimes as murder, assault, and gang violence.<sup>142, 147</sup> Rates of inter-personal violence including violence against women, children and elders are particularly detrimental in AI communities<sup>46, 131, 145, 148</sup> where AI violent-victimization is twice that of African Americans and two and a half times greater than among whites.<sup>47</sup> Twenty-seven percent of AI women in 2010 for example, reported at least one incidence of rape in their

lifetime, a figure significantly higher than blacks (22%), whites (19%) or Hispanics (15%).<sup>141</sup> A higher percentage of AI youth also report feeling unsafe in school with 8.2% having reported being threatened or injured by a weapon versus 7.4% of youth from all other races combined.<sup>140</sup> A substantial rate of violent crime is also committed by AIs who have the highest rate of incarceration in the U.S.<sup>142</sup> In fact, between 2002 and 2012, AIs had the greatest annual increase in incarceration rates and three-year return-to-prison rate in 2010.<sup>149</sup> In 2001, 55% of AIs entering Federal prisons were sentenced for a violent crime, compared to 13% of Black, 5% of Asian, and 4% of White offenders.<sup>22, 50</sup> In Indian country jails, the pattern is similar with approximately 3 out of 10 inmates being held for a violent offense since 2010.<sup>150</sup>

Although the exact link between drug trafficking, substance use, and violence in AI populations is uncertain, their interrelationship is clear.<sup>151</sup> Law enforcement agencies in Indian Country regularly report most crime is linked to drug trafficking, drug use, and gang activity. Drug traffickers and users for example, often perpetrate personal crime such as threats, violent crime such as murder or assault, and property crime such as theft to facilitate the distribution and use of illicit narcotics. Traffickers in AI communities are also increasingly carrying weapons for protection and intimidation with law enforcement seizures ranging from high powered rifles to handmade clubs.<sup>22</sup> Of all AI violence victims, 71% report a perpetrator under the influence of alcohol or drugs, a rate higher than all other race/ethnicities.<sup>50</sup> Substance use also plays a substantial role in the sexual attacks of AI and Alaska Native women.<sup>152</sup> More than two-thirds (68%) of victims report their attackers had been drinking alcohol and/or taking drugs before an offense.<sup>148</sup>

**Data Limitations.** It is highly likely that reported drug trafficking, substance use and violence statistics in AI communities are considerably underestimated,<sup>131, 147</sup> limiting efforts to fully understand the drug-violence nexus within this population. Limitations in the availability, reliability and specificity of data due to non-reporting, differing collection and reporting methodologies, and conflicting law enforcement jurisdiction represent numerous obstacles.<sup>9, 19, 46, 48, 89, 131, 142</sup> Existing data are drawn primarily from law enforcement, governmental agencies, and health care services each with unique data collection and reporting methodologies which focus on their priorities.<sup>87, 89</sup> The UCR for example does not collect data regarding the relationship between the victim and offender and some tribal law enforcement agencies lack codes for certain offenses.<sup>46</sup> Overlapping and conflicting law enforcement jurisdiction in Indian Country adds to the complexity of data collection and reporting efforts.<sup>46, 131, 142, 153, 154</sup> State reporting requirements often do not extend to tribal lands and tribal officials frequently lack the resources or knowledge to effectively report their own data.

Standard data collection tools are often not ideal for use among AIs.<sup>48</sup> How variables are defined and operationalized is one challenge.<sup>87</sup> Race, for example, is often used in research as a proxy for culture. Many racial groups such as AIs, however, are comprised of hundreds of unique cultural groupings.<sup>119</sup> Racial misclassification is another significant limitation within reported AI data, particularly among non-reservation dwelling AIs. Errors have been found in multiple data sources including Medicare, death certificates, and HIV/AIDs and cancer surveillance systems. Survey designs with racial classifications made based on appearances and AIs fear of reporting race due to potential discrimination are mechanisms leading to the racial misclassification of AIs.<sup>41, 48</sup> In

addition to inaccurate data, these misclassifications may also result in the inequitable distribution of resources.<sup>41</sup> A general lack of reporting of AI data at the tribal level represents another substantial barrier to prevention efforts. AIs are frequently collapsed into an “other” category or are omitted from analysis entirely because of insufficient sample size.<sup>48, 146</sup> AI drug use disorders, for example, were not reported in national surveys until 2001<sup>27</sup> and of the 573 federally recognized tribes in the U.S., only 12 reported to the UCR in 2008. A large percentage of crime among AIs, particularly intimate partner violence (50%), also goes unreported to any law enforcement agency creating a substantial discrepancy in reported crime rates.<sup>46</sup>

These characteristics of AI data severely limits capacity to draw conclusions or recognize patterns across cases, as well as understand the multidimensional consequences of DRV.<sup>22, 131, 137, 141</sup> Efforts are being made to remedy these limitations, however. For the first time in 2009, the UCR disaggregated tribal level data. In 2010, the Tribal Law and Order Act also became the first policy requiring the Bureau of Justice Services (BJS) to support the implementation of a tribal data collection system.<sup>155</sup> Since this time tribal participation in the UCR has increased to 158 tribes in 2013<sup>156</sup> and 95 tribal groups who reported violent crime data in 2016.<sup>80</sup> In 2016, the BJS established a tribal justice and law enforcement panel which included tribal and justice agencies and research institutions. In 2017, the BJS developed and piloted two new survey instruments focused on law enforcement and prosecutors serving tribal land.<sup>157</sup> Recently, a database of missing and murdered indigenous women, covering cases from the U.S. to Canada since 1900 was also compiled.<sup>158</sup>

**Underlying Factors in AI Communities.** Despite barriers associated with data collection and reporting, research efforts have identified several underlying factors contributing to high rates of DRV within AI populations. In fact, many of these risk factors (i.e., age, gender, marital status, social isolation) are not unique to AI tribal groups, however, they are often more prevalent.<sup>141</sup> Socio-economic conditions represent one example.<sup>46, 48, 122, 137, 138, 142, 159, 160</sup>

**Socioeconomic Conditions.** Unemployment and poverty rates in Indian Country are more than twice the national rate.<sup>22, 47, 48, 138, 148, 161</sup> In 2015, 28.3% of single-race AI/ANs lived in poverty (compared to 15.5% for the nation as a whole)<sup>136</sup> and in certain states, rates exceeded 30%.<sup>142</sup> Educational attainment is also significantly lower,<sup>48, 136</sup> with AI students displaying higher rates of cognitive and developmental limitations, absenteeism, and decreased access to computers at home.<sup>138</sup> Socio-economic disadvantage contributes to AI susceptibility to substance abuse and immersion in drug trafficking.<sup>22</sup> Under times of financial distress, drug trafficking may substitute for legitimate employment opportunities, while the stress of poverty or lack of social attachments may increase use of drugs as a coping mechanism.<sup>95, 141, 162</sup>

**Policy.** Policy decisions are another key factor driving rates of DRV in Indian Country. Beginning with colonization, outsiders have consistently determined the needs of AI populations.<sup>119</sup> Paternalism by the federal government in particular, has detrimentally reduced freedom of choice for tribal groups.<sup>159</sup> This pattern is markedly evident in the field of law enforcement, where tribal sovereignty rights have been severely eroded by multiple legislative decisions. The Major Crimes Act of 1885 for example, gave the federal government jurisdiction over any major crimes, such as murder

or rape, committed by an AI and has been amended to expand federal jurisdiction on multiple occasions. In certain states, the passage of Public Law 280 in 1953 transferred jurisdiction of major crimes to state governments, without the consent of state or tribal authorities. The Indian Civil Rights Act (ICRA) of 1968 required tribal governments to adhere to the Bill of Rights by providing the same constitutional rights (i.e., trial by jury) to criminal offenders guaranteed in American courts. This same legislation also imposed a maximum sentencing policy on tribal courts of 6 months of incarceration or a \$500 fine. Less than 20 years later in 1986, this was amended to 1 year and a \$5,000 fine.<sup>46, 131, 145, 147, 153, 154</sup> Further, the ICRA has also been interpreted by federal courts as to deny tribal officials jurisdiction over non-AI offenders who are known to perpetrate 70% of violent crime against AIs.<sup>50, 131, 141, 147, 148, 154</sup>

This overly complex jurisdictional system has resulted in a lack of clarity regarding jurisdiction, insufficient law enforcement personnel, funding, resources, training, high turnover rates, and a significant hindrance to prosecution efforts.<sup>46, 131, 148</sup> The Tribal Law and Order Act of 2010 represents the most recent legislative efforts to address law enforcement challenges in Indian Country, promising to further clarify jurisdictional relationships; increase coordination between federal, state, and tribal agencies; increase access to resources such as funding for training and youth education programs; and reduce the prevalence of violent crime, drug trafficking, and substance use in Indian Country.<sup>155</sup> Although the act may substantially improve law enforcement efforts, it is not without its limitations. The act adds another layer to an already complex system and gives more investigative authority to the federal government further limiting tribal sovereignty.<sup>131, 163</sup>

**Geography.** Substantial portions of AI communities are in rural areas of the United States. The isolated nature of Indian Country is another factor contributing to social problems, such as DRV, experienced by AIs.<sup>142</sup> The remoteness of many communities hinders the delivery and quality of needed public services such as law enforcement, health services, education, or employment counseling.<sup>22, 67, 138, 148</sup> The location of an AI school, for example, may serve as a barrier to teacher recruitment and retention. Schools may also have to allocate a greater portion of their budget to transportation given the significant distances students must travel.<sup>138</sup> Isolation can also limit the ability of law enforcement to provide a timely response to victims.<sup>46</sup> Given federal jurisdiction, seeking justice for a violent crime may also be a burden for AI victims in rural communities due to the distance required to travel to federal courts.<sup>46, 131</sup> Rural communities are also known to play a large role in the distribution of illicit drugs, including the production of marijuana and synthetic drugs such as methamphetamine. Rural communities offer attractive markets due to lower competition and less vigorous policing, therefore giving rural AIs a unique opportunity for the distribution of illegal drugs.<sup>95</sup> The isolation of AI communities also impacts the ability to obtain accurate data resulting in extensive underreporting.<sup>137</sup> Scholarship into rural drug issues, particularly among AIs, is also limited, with most research focusing on drug use.<sup>95</sup>

**Racism and Oppression.** Racism and oppression represent continuous, unpredictable, and uncontrollable stressors exacerbating health inequities among AIs.<sup>122, 127, 162, 164</sup> AIs are discriminated against at rates that equal and sometimes exceed other racial/ethnic groups in the U.S. This historical and ongoing social, political, and economic marginalization exposes AIs to a greater risk for victimization.<sup>127, 128, 148, 161</sup>



Although AIs make up 1% of the U.S. population, they represent 2% of racially motivated hate crimes.<sup>142</sup> Legal segregation and discrimination have also been linked to disparities in health care and the delivery of justice in AI communities.<sup>137, 142</sup> Within the healthcare delivery system, segregation may limit access to quality health care, while discrimination in the healthcare setting may undermine the patient-provider relationship resulting in negative health outcomes.<sup>164</sup> In the justice system, discrimination may also result in racial profiling or racially biased sentencing which is typically a result of cultural incompetence.<sup>142</sup> Some AI victims may believe non-native officers may hold racial prejudice or negative stereotypes, discouraging them from accessing these resources. These same prejudices may also result in harsher punishments for AI offenders.<sup>46</sup> Micro-aggression, a manifestation of cultural incompetence, is another mechanism by which discriminatory practices may perpetuate and negatively impact AIs.

Micro-aggression, described as “the frequent, subtle (often unconscious) indignities expressed in relation to one’s gender, race, sexual orientation, or otherwise-marginalized social position,” experienced by AIs are also prominent and less understood within this population.<sup>164</sup> Micro-aggressions take on many forms, are often invisible to the perpetrator, and occur in a variety of settings. Micro-aggressions should also not be viewed in isolation but as a general pattern of discrimination and oppression that may trigger reminders of other traumatic events.<sup>164</sup> The rise of “New Age” imitations of traditional AI cultural practices is one example and has also been viewed as a new form of genocide. Often, non-Indian “healers” misrepresent and attempt to profit from stereotypic distortions of traditional ceremonies, reminiscent of entitlement and subsequent aggressive actions inherent in the doctrine of manifest destiny.<sup>127</sup> The

portrayal of AIs in U.S. media, from television and film, to the stereotypical mascots of sports teams, is inherently racist and has been linked to negative psychological consequences in AIs.<sup>142, 165</sup> In the clinical setting, minimizing racial issues or overly identifying with the cultural background of a patient is another form of micro-aggression.<sup>164</sup>

***Biology and Genetics.*** Although heavily debated, biological and genetic factors have been theorized to play a key role in rates of AI substance use.<sup>138, 139, 166</sup> Research with families, twins, and adoptions in the general population and within a few AI tribes have suggested that initiation into drug use and eventual dependency may have an inheritable genetic component, although environmental risk factors likely play a significant role. Alcohol response has also been found to predict the future development of alcohol-related problems among AIs and lowered sensitivity to substances has been linked to an inheritable trait increasing substance use risk.<sup>138, 139</sup>

***American Indian Culture.*** Today there are more than 660 federal and state recognized tribal groups in the U.S., each with their own distinct cultural traditions and beliefs.<sup>167, 168</sup> Within the context of each tribe, adherence to traditional cultural values also exists on a continuum from extremely traditional to fully assimilated within mainstream society.<sup>166</sup> These distinctions may create unique patterns of risk for susceptibility to disease and access to treatment resources.<sup>48</sup> The significant loss or suppression of culture experienced by many AI groups as a result of genocide and forced assimilation, has been related to the many social and political ills endured by AIs such as substance use, although direct evidence is limited.<sup>130, 139, 162</sup> It was not until the Indian Civil Rights Act of 1968 and the American Indian Religious Freedom Act of 1978, that

AIs were restored full rights to openly practice traditional forms of living.<sup>166</sup> Despite the passage of this legislation, AIs still live in a world where they must learn to navigate two, often conflicting, social and cultural systems (i.e., their culture and mainstream American culture). This constant regulation of behavior serves as another cultural stressor for AIs.<sup>122</sup> When seeking law enforcement or health care services, for example, language or reluctance to leave tribal lands may be a barrier for some AIs. Imposed practices of western law enforcement, which focus on deterrence and punishment of individuals, also conflicts with traditional tribal systems centered on restoration within a family or whole community. A lack of respect for traditional tribal values and abuses by professionals has resulted in an overall distrust of the judicial system and medical systems.<sup>46, 162</sup>

Some consistent aspects of AI culture, such as the importance of family and community, are often central components of daily decision making and may serve as a critical source of resilience for AI communities.<sup>122, 142, 161</sup> Recognizing oneself as a part of a community has been found to be a critical component of tribal identity<sup>161</sup> and a return to culture has been integral in addictions recovery.<sup>166</sup> To date, however, cultural competency among AIs has been largely aspirational.<sup>161</sup>

**Trauma.** Beginning with colonialism, experiences of historical and ongoing trauma are likely root factors in perpetuating such disparities as DRV among AIs.<sup>130, 137-140, 151</sup> The post-colonial experiences of genocide, subsequent forced removal from lands and assimilation represent historical experiences of trauma which have manifested in persisting cultural, social, economic, and political deprivation.<sup>46-48, 122, 138, 141, 148</sup> Inequities are found at multiple levels of influence and include the loss of the ability to exercise treaty rights, high rates of poverty, mental illness, and violence or racism within

such institutions as the criminal justice system where AI sovereignty has been progressively diminished.<sup>138-142, 145</sup> These disparities represent ongoing trauma<sup>137</sup> which has created a pathway of increased risk for negative health outcomes and a decreased ability to draw on cultural traditions or familial support.<sup>161</sup> High rates of violence for example, have been linked to the patriarchal authority espoused during colonization, the subsequent erosion of family bonds, and internalized oppression.<sup>46, 161</sup>

Although the circumstances in Indian Country are bleak, knowledge is increasing, and potential solutions are being identified. Enculturation or the interest, participation, and pride in AI culture, for example, have been shown to be protective against violence and other risky behaviors,<sup>140</sup> as well as promote a general sense of resiliency.<sup>122</sup> High self-esteem and sense of self-efficacy have shown to be protective against the negative effects of stress and tendencies to engage in risky behaviors. A supportive parent, family member or other sources of community support represent other protective factors. All of these factors are also within the tribal domain of influence.<sup>122</sup> Although research among AIs is increasingly acknowledging the broad cultural distinctions that exist across tribal groups, making generalizations about the overall AI population is still challenging<sup>138</sup> and may not be possible.

### **Drug-Related Violence among the Lumbee Tribe of North Carolina**

**Background and historical context of the Lumbee Tribe.** The state of North Carolina (NC) is home to 1 federally recognized tribe and 8 state recognized tribes,<sup>169</sup> the largest number in the U.S.<sup>41</sup> (See Figure 2.2). According to the 2010 census, the population of AIs in NC was 122,110. With approximately 55,000 members, the Lumbee Tribe of North Carolina represents the largest AI tribe in the state, the largest tribe east of

the Mississippi River and the 9<sup>th</sup> largest tribe in the nation.<sup>170</sup> Since the mid-1600's the Lumbee Tribe, have resided within the southeastern portion of NC, primarily in Robeson, Hoke, Scotland, and Cumberland counties (See Figure 2.1),<sup>65</sup> although excavations of the area indicate AI occupation since the end of the last ice age.<sup>57</sup>

Robeson County, the heart of the Lumbee Community, is also a part of the 10% of U.S. counties where minorities are the majority. African Americans, AIs, and Latinos comprise 69% of the county's population, with Lumbees representing the largest minority group (38%).<sup>171-173</sup> Although the origins of the Lumbee Tribe have been the subject of much debate, the Lumbee are generally considered a blend of survivors from multiple tribes including the Croatoan, Cheraw, Cherokee, Keyauwee, Waccamaw, and Iroquois, who migrated to the backwaters and swamps of the Lumber River during the early contact period.<sup>62, 174-177</sup> When first discovered by settlers in the early to mid-1700's, the tribe was found speaking English and utilizing traditional European methods of farming.<sup>57</sup> Although the official tribal name has changed four times,<sup>178</sup> the name Lumbee was settled upon in the 1950s after the Lumber River which flows through the tribe's community. Because no single historical name was suitable given members of the tribe descended from multiple different tribal groups, a geographically based name was deemed most appropriate.<sup>177</sup>

Historically, the Lumbee Tribe has been largely ignored by governmental agencies. This was due in part to the geographic isolation of the tribe on land deemed undesirable, as well as the limited threat tribal members posed to non-members. Formal interactions between the tribe and governmental agencies first began to emerge in the 1860's when Lumbee children were denied access to white schools. During this period, the Lumbees

sought political redress from the state of North Carolina.<sup>177</sup> In 1885, the state recognized the tribe as AI and established a separate school system for tribal members. Beginning in 1888, the Lumbee Tribe initiated efforts to obtain recognition from the federal government.<sup>175, 177</sup> Federal recognition establishes a political relationship between a tribe and the federal government, as well as grants a tribe certain privileges and immunities.<sup>175, 177</sup> In 1956, the U.S. Congress recognized the Lumbee as AIs in the Lumbee Act. The act, however, included an exclusionary clause that simultaneously denied the Lumbee full status as a federally recognized Indian Tribe<sup>173, 175, 177, 178</sup> This legislation made the Lumbee Tribe ineligible for aid needed to support educational and medical services, housing and environmental programs, and economic development services provided by the federal government to other federally recognized tribes.<sup>65, 177</sup> The Bureau of Indian Affairs (BIA) has stated that the Lumbee's large population size and cost of serving the tribe are significant barriers to attaining federal recognition.<sup>177</sup> Despite a lack of protection or support from the federal government the Lumbee as a collective have been able to retain a distinct identity and culture, including their own tribal government<sup>65, 175</sup> and religious institutions.<sup>179</sup>

The Lumbee Tribal Government is composed of an executive branch with an elected chairman; a legislative branch with of 21 elected members from 14 districts; and a judicial branch with 5 appointed members. The government manages tribal enrollment and provides various services related to veterans, youth, housing, energy assistance, and vocational rehabilitation. The tribal government manages a cultural center that includes Pow Wow grounds, garden, and an aquatic center. The government also actively pursues full federal recognition for the Lumbee people via the U.S. Congress.<sup>175</sup>

Religious institutions within the Lumbee community are also a critical component of Lumbee culture. Christianity has been a part of the Lumbee community for hundreds of years and has become deeply intertwined within the moral fabric of the community.<sup>180</sup> Knowledge of the Christian tenets can be traced back to a hymn written by a Lumbee ancestor, Priscilla Berry Lowrie prior to 1776<sup>180</sup> while the earliest recorded church in the Lumbee territory was deeded in October of 1792.<sup>180, 181</sup> Today there are 316 religious congregations (24 per 10 thousand people) in Robeson County primarily of the Baptist, Methodist, Pentecostal, and Presbyterian religious denominations. Approximately 44.7% of the counties residents (60,027) are members of a church.<sup>182, 183</sup> Within the AI faith community in the county, there are two major religious institutions. The first is the Native American Cooperative Ministry (NACM), of the North Carolina Conference of the United Methodist Church. Established in 1978, NACM is a cooperative comprised of thirteen Native American United Methodist churches, serving approximately 2,400 AIs and geographically covering Robeson, Cumberland and Sampson counties in NC, as well as Dillon and Marlboro counties in South Carolina.<sup>184</sup> The second institution, the Burnt Swamp Baptist Association, was formally established in 1880 and is comprised of 70 churches with predominantly AI membership (10,000) from 5 distinct tribal groups. Lumbee's represent the majority of the association's membership.<sup>179</sup>

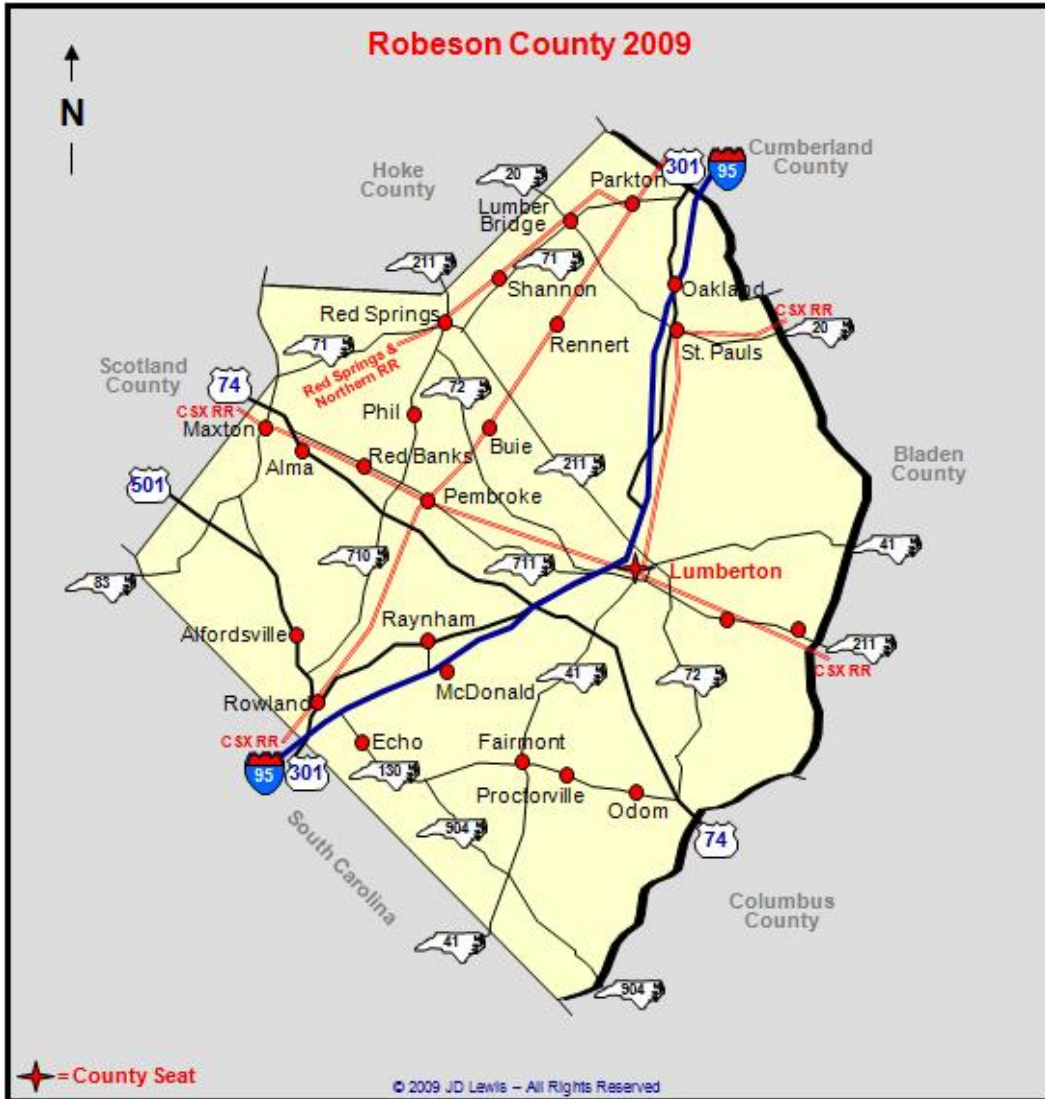
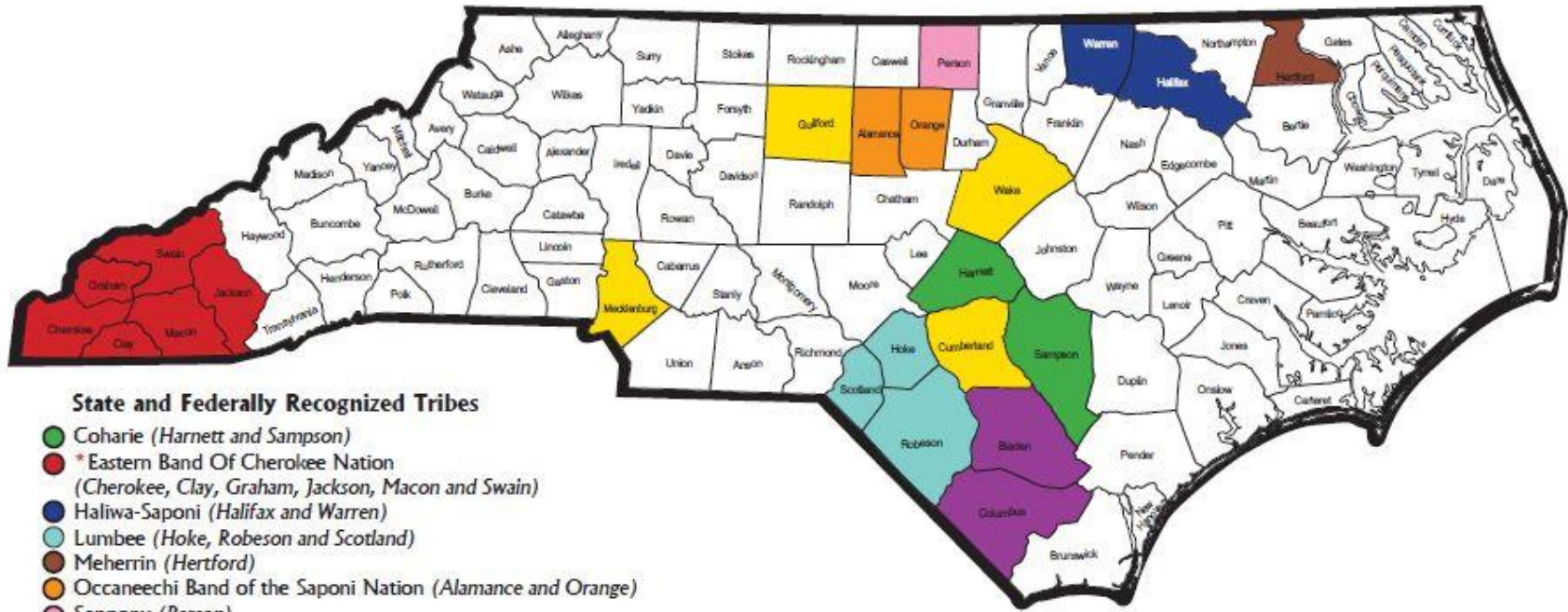


Figure 2.1: Map of Robeson County, North Carolina<sup>185</sup>



# N.C. TRIBAL AND URBAN COMMUNITIES



**State and Federally Recognized Tribes**

- Coharie (*Harnett and Sampson*)
- \* Eastern Band Of Cherokee Nation (*Cherokee, Clay, Graham, Jackson, Macon and Swain*)
- Haliwa-Saponi (*Halifax and Warren*)
- Lumbee (*Hoke, Robeson and Scotland*)
- Meherrin (*Hertford*)
- Occaneechi Band of the Saponi Nation (*Alamance and Orange*)
- Sappony (*Person*)
- Waccamaw Siouan (*Bladen and Columbus*)
- \* Federally Recognized

- **Urban Indian Organizations**  
(*Holding membership on the NC Commission of Indian Affairs*):  
Cumberland County Association for Indian People  
Guilford Native American Association  
Metrolina Native American Association  
Triangle Native American Society

Areas in Color indicate counties where the eight Recognized Tribes of North Carolina reside.

Counties in yellow (Mecklenburg, Guilford, Cumberland and Wake) Location of American Indian Associations

Map published by the North Carolina Commission of Indian Affairs.

2015

Figure 2.2: Map of North Carolina Tribal Groups<sup>169</sup>

**Rates and trends of drug-related violence.**<sup>‡</sup> Similar to patterns recognized among other AIs, Lumbees also experience and have a reputation for high levels of DRV.<sup>186</sup> The heart of the Lumbee community, Robeson County, is often considered the most violent county in the state of NC<sup>172, 176</sup> and tribal violence rates have been documented as significantly higher than overall county rates.<sup>62</sup> According to the Uniform Crime Report, Robeson County (rural-FIPS 155) ranked 1st or 2nd for most incidents of violent crime among the 100 counties of NC from 2010-2012, falling occasionally behind only Cumberland County (urban-FIPS 51).<sup>51-53</sup> From 2011-2015, Robeson County had an annual age-adjusted death rate of 22.0 per 100,000 due to homicide and legal intervention. This compares to the state average of 5.9. During this same time frame, AIs in Robeson County, experienced a death rate of 27.6, a number substantially higher than U.S. rate of 9.4 and North Carolina at 16.<sup>187</sup> Homicide is the 10<sup>th</sup> leading cause of death in Robeson County.<sup>54-56, 58, 59</sup> The county's murder rate is nearly four times the national average at 22.1 per 100,000 between 2004-2011,<sup>56, 172</sup> triple the states average at 23.9 compared to 7.2 from 2004-2008,<sup>173</sup> and 135% above the rate of the capital city Raleigh.<sup>186</sup> In 2014, Robeson County experienced a sharp increase in the incidents of murder (51 in 2014, 10 in 2011, and 30 in 2005), a number which exceeded murder incidents in both Wake (30 incidents) and Mecklenburg(48 incidents) Counties (i.e., geographic region of Raleigh and Charlotte respectively).<sup>188</sup> Between 2003 and 2007 the mortality rate for violent crime in the county was the third highest in the state at 10.3.<sup>173</sup> Area youth are twice as likely to die as other youth prior to age 18<sup>172, 173</sup> and the number of juvenile complaints in the area for violent crime consistently fall within the top ten in

<sup>‡</sup>Given the unique status of state-recognized tribes, tribal specific data is very limited. As such, health concerns for tribal groups are most often estimated using county level statistics available from such agencies as the U.S. census or county health departments (Letourneau and Crump, 2009)

the state.<sup>173</sup> A community opinions survey also revealed homicide and violence are perceived as a leading causes of death in the county for AIs,<sup>59</sup> a general pattern which has been documented for several years.<sup>57, 58, 189</sup>

Drug activity has also been a historical problem among the Lumbee. AI traffickers and independent dealers are predominant retail-level distributors in southeastern AI communities, while Mexican DTO's are the primary suppliers.<sup>22</sup> In Robeson County, this pattern holds true where AIs have been cited as being primarily responsible for distributing illegal narcotics in the community. In the late 1980's, an excess of \$10 million of cocaine was estimated to be moved through the county.<sup>186</sup> The county has also been the center of several national controversies related to the distribution of illegal narcotics,<sup>176</sup> including the murders of several prominent community figures.<sup>176, 186</sup> In Robeson County, substance use, particularly prescription drug use, has been consistently identified as a leading health concern among AIs and a priority area for prevention efforts in the county.<sup>54-59, 189</sup> Powder and crack cocaine have been identified as the most abused illicit drugs among AIs in this region and pharmaceutical use has been on the rise since 2002.<sup>166</sup> Between 2003 and 2012 unintentional overdoses were higher for AIs (59 of 100 deaths) than any other racial/ethnic group in the county. Of the total overdoses in Robeson County during this period, 66% were due to narcotics or hallucinogens such as cocaine, Lysergic acid diethylamide (LSD), morphine, or heroin.<sup>56</sup>

**Probable mechanisms facilitating drug-related violence among the Lumbee Tribe.** Research concerning DRV among the Lumbee Tribe appears to be absent from the literature. Despite the unique historical and contextual experiences of this population, however, several assumptions of facilitating mechanisms may be posited given parallel

trends documented among the larger U.S. population and other AI tribes. As with other communities, geographic location appears to play a considerable role in DRV among the Lumbee Tribe.

**Geography.** At 951 square miles (2 of which are water), Robeson County is the largest county in the state of NC.<sup>58, 136</sup> The average Robesonian must travel 4.1 minutes longer each day than other North Carolinians.<sup>57</sup> The sizeable geography of this rural county and relative isolation of its residents (i.e., average 35 fewer persons per square mile than state) may contribute to delayed law enforcement response time or decreased reporting. Interstate 95 (I-95), which links several major cities on the east coast, also runs through the heart of Robeson County for 39 miles and has 12 exits throughout the county. In fact, the county is centrally located between Miami and New York City. South of Lumberton (the county seat), US Highway 74, the only major road connecting Charlotte to the east coast, intersects I-95 and is a notorious drug trafficking crossroad (See Figure 2.2).<sup>57, 186</sup> This intersection of major highways is ideal for the exchange of goods, both legal and illegal.<sup>57</sup> Of the primary highways used by distributors from 2008-2010, Robeson County falls within close proximity to a primary distribution channel for cocaine, secondary routes for heroin and marijuana, and tertiary routes for MDMA (also known as ecstasy) and methamphetamine.<sup>2</sup>

**Poverty.** Poverty, as demonstrated earlier, increases susceptibility to involvement in drug trafficking, substance use, and subsequent violence. Robeson County is ranked as the poorest mid-sized county in the U.S., with over 30% of its population living in poverty.<sup>59, 136, 172, 173</sup> The county has been considered an area of persistent poverty (i.e., 20% or more of the population has been living in poverty over the last 30 years) by the

United States Department of Agriculture.<sup>67</sup> The weakening of the tobacco market (once the counties cash crop) and the loss of major industry resulted in massive job loss and a 44% increase in poverty from 2000 to 2005.<sup>57, 173, 190</sup> Although the service industry along I-95 has seen substantial growth and provides employment, low-income levels often leave many dependent on social welfare to survive. As the top employer in the county, the service industry is also highly susceptible to economic downturns.<sup>57, 190</sup>

***History, Oppression, Policy, and Cultural Evolution.*** Like other AI tribes, experiences of historical and ongoing trauma and oppression likely contribute to high rates of DRV within the Lumbee community.<sup>151</sup> In particular, enduring challenges to Lumbee identity have played a pivotal role in the development of the tribe that exists today.<sup>174, 176, 178</sup> Repeated efforts to seek full federal recognition (a process considered by some as a mechanism to maintain white supremacy that does not account for colonialism or the evolution of human relations), have compelled Lumbees to transform what it means to be a Lumbee both within and outside of the community. For the Lumbee, connections to place and family are integral components of identity. To abide by what was acceptable by federal standards, Lumbee identity has evolved to include concepts of ancestry, race, blood quantum and politics. This evolution can be observed through the four formal name changes experienced by the tribe which was a product of changing criteria in the federal recognition process.<sup>178</sup> In the “Jim Crow” south, multi-level challenges to culture and civil rights resulted in threefold segregationist policies, with separate facilities for Whites, Blacks, and AIs. During this period, Indian identity became shaped by how well AIs distanced themselves from Blacks. The Lumbee adapted and

capitalized on these divisions by creating their own unique social and political systems which served to protect their identity and preserve their civil rights.<sup>174</sup>

Ongoing challenges to identity and continued oppression resulted in irreversible changes to the overall culture of the Lumbee Tribe and its individual members. The strengthening of kinship ties is one example. Since the beginning of Colonialism, strong familial and community ties have been distinct among the Lumbee, providing a place of refuge for disease, warfare, and slavery.<sup>174</sup> Over time, the sense of belonging created through kinship ties has also served as a buffer to outside threats to Lumbee identity, including alienation and rejection from the larger society. Today, Lumbee families are multi-generational, often including unrelated members. Connections can extend throughout the Lumbee community and often thread between regions. This network provides a sense of emotional, physical, and financial support for Lumbees living within and outside of the community.<sup>65, 151</sup> Despite the overwhelmingly positive aspects of family among the Lumbee, kinship ties may also serve to facilitate drug-trafficking and substance use within the community. Given the mobility of tribal members, ties may stretch throughout the U.S. and globally, facilitating opportunities for drug distribution. Large networks may also increase access to illicit substances.

Arguably, historical and ongoing threats to culture, identity, and civil rights have produced a cultural pattern centered on an action orientation<sup>62</sup> which may predispose Lumbees toward aggressive or self-destructive behavior.<sup>63</sup> Aggression is expected and viewed as a means to counter acculturative pressure.<sup>65</sup> This attitude is coupled with a sense of personal sensitivity, honor, and courage, demonstrated through fighting.<sup>62</sup> The Lumbee have a historical legacy of aggression and rebellion in response to violations of

their rights.<sup>174</sup> The 10 year Lowrie War, the routing of the Ku Klux Klan, and the era of Julian Pierce are some prominent examples.<sup>176</sup>

Despite extensive research of the drug/violence nexus, many aspects of this relationship have gone unexplored or are extremely limited.<sup>19, 70, 100</sup> A better understanding of the context of substance use and violence, for example, is often cited as essential to fully explicating DRV.<sup>9, 11, 25, 61, 96, 123</sup> Investigations into aspects of rural communities<sup>67, 70, 108, 118</sup> and the unique cultural attributes of certain populations such as AIs<sup>65, 127, 128, 141, 166</sup> have been cited as two critical components of context requiring further exploration.

Because the ability to understand a particular phenomenon and/or implement effective interventions and policy is dependent upon an understanding of the contextual environment in which it occurs,<sup>9, 69, 87, 168</sup> discerning the effect of context on DRV among the Lumbee Tribe is the principal goal of the proposed research. The community of the Lumbee Tribe has faced a legacy of violence, drug trafficking, and substance use. Situated in a rural environment, with distinct cultural characteristics, the Lumbee Tribe and community represent an invaluable opportunity to enrich understanding of the drug/violence nexus. Moreover, the research carried out in this proposal aims to allude certain data and research limitations by moving beyond racial classifications via an emphasis on cultural characteristics, as well as utilizing primary data collected directly from Lumbee Tribal members and key community leaders via one-on-one interviews. This approach will allow for an enhanced understanding of how members of the Lumbee Tribe experience, perceive and respond to DRV and the knowledge gained may inform

future research, policy, and programs geared towards reducing the impact of DRV in the Lumbee community.

### **Theoretical Assumptions and Conceptual Framework**

Integrating criminological and public health theory, a framework for the enhanced understanding of DRV among the Lumbee Tribe was developed to guide this research.

The framework in Figure 2.3 focuses on multilevel, interacting, contextual factors which may substantially influence the extent and prevalence of drug-related behaviors, allowing for a better understanding of the primary barriers to and opportunities for addressing

DRV in a particular community.<sup>104</sup> The framework also links directly to Social Disorganization Theory which assumes a person's physical and social environment influences their behavioral choices, including increases in crime and delinquency.<sup>102, 146</sup>

This model was adapted from three existing frameworks identified in the literature. First, the tripartite framework by Goldstein which suggests DRV can be understood through three primary dimensions: 1) psychopharmacological, describing the effects of substances on individual behavior; 2) economic compulsive, including violence arising due to a need to purchase drugs for personal use; and 3) systemic, violence intrinsic to the purchase and selling of illegal narcotics.<sup>20</sup> Second, the factors identified within the triangle (i.e., economic) were adapted from a conceptual scheme of the National Institute on Drug Abuse.<sup>9</sup> The third framework, the socio-ecological model, assumes identified factors interact to influence behavior at multiple levels (i.e., the hierarchical nature of the triangle).<sup>191</sup> This framework was utilized to guide the research study, informing the approach selected, development of the interview guides, recruitment and a guide for the interpretation of data.



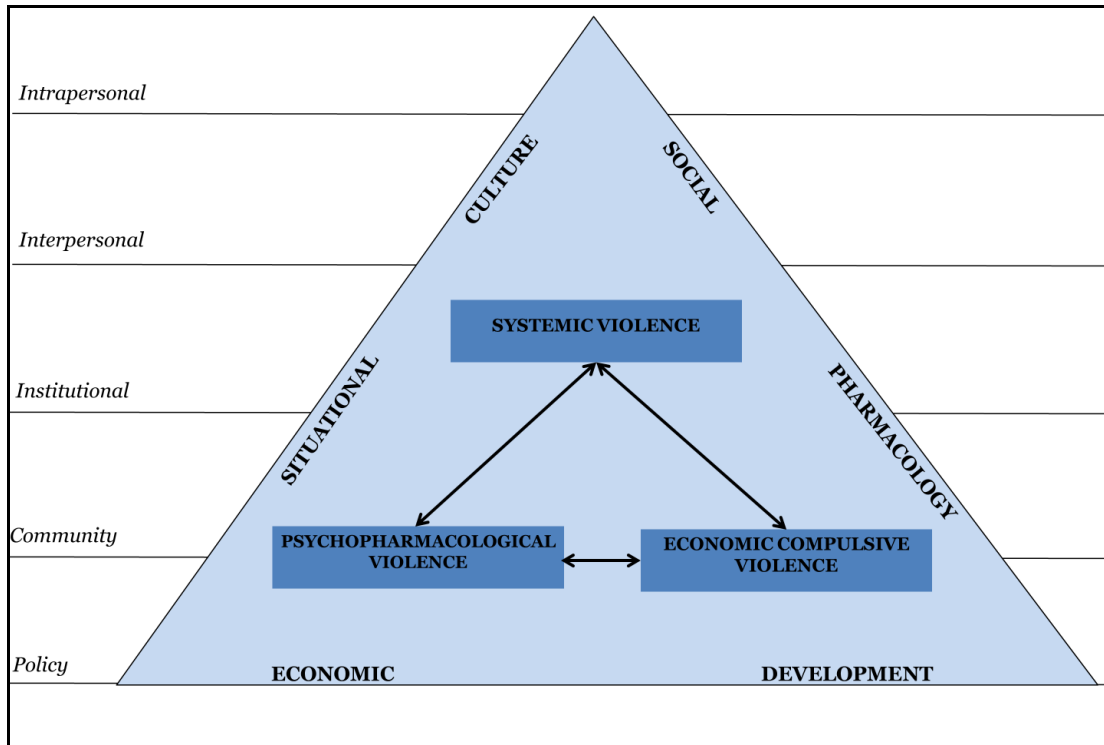


Figure 2.3: Multi-Level, Social & Physical Environmental Factors Impacting Types of DRV

## Chapter 3

### Methods

#### Study Overview

Using purposeful and theoretical sampling approaches, 17 Key Leaders and 20 enrolled members of the Lumbee Tribe were recruited to complete one-on-one, semi-structured, in-depth interviews about their perceptions and experiences of DRV in the Lumbee community. All study activities were reviewed and approved by Institutional Review Boards at the University of South Carolina, the Lumbee Tribe of North Carolina, and the North Carolina Department of Public Safety for the rights of human participants in research. A copy of approval letters can be found in Appendix A.

#### Setting

This study was conducted primarily in Robeson County, North Carolina and the surrounding counties. Robeson County is the epicenter of the Lumbee Tribe and home to the Lumbee Tribal Government. Lumbee's represent the largest minority group in the county, accounting for 37% of the population.<sup>59, 171</sup> The recruitment area also extended to surrounding counties where a large percentage of tribal members reside including Scotland, Hoke, Cumberland, Bladen, and Columbus.<sup>170</sup>

## Sample

The total study sample included 37 participants, comprising two subsamples: 17 Key Leaders and 20 Lumbee Tribal members. The total sample size was determined based on the qualitative research principles of saturation and sufficiency. Saturation is achieved when no new data, themes, and coding have been identified and when the depth of data is considered both rich (i.e. detailed, intricate) and thick (i.e. quantity of interview data). Strategies incorporated to ensure saturation was achieved included utilizing the same questions, interviewing participants who were not experts in the topic area and incorporating data triangulation strategies across the application of theory, approach, and analysis.<sup>192</sup> Achieving saturation at a sample size of 37 is in line with previous research.<sup>160, 193-196</sup>

**Key Leaders.** The “Key Leaders” who participated in this study were defined as individuals holding leadership positions within the Lumbee community who directly interact with DRV via their organization of employment (i.e., administrative, managerial or general leadership roles) or through volunteer activities. These positions included police chiefs, church pastors, tribal council members, and mental health experts. Given their experience, Key Leaders are information-rich, making their perspectives critical to understanding the context of DRV as it is experienced by the Lumbee and offering insight on social, economic, and situational factors influencing elevated levels of DRV in the community. All Key Leaders were aged 22 and older, worked in the community for at least two years and were familiar with the community and its assets. Key Leaders were not required to be Lumbee. A total of 17 Key Leaders were recruited to participate in the study.

**Members of the Lumbee Tribe.** Participants in this group included enrolled Lumbee tribal members aged 22 and older and were purposively selected to vary across characteristics such as gender, residence, family composition, religious affiliation, socioeconomic status, and experiences with DRV to achieve maximum variation within the sample. Ensuring diversity across participant characteristics was critical for capturing a broad perspective of DRV within the Lumbee Tribal community. A total of 20 Lumbee Tribal Members were recruited to participate in the study.

### **Recruitment**

This study employed purposeful and theoretical sampling procedures<sup>197</sup> for data collection at the individual level to attain diverse perspectives<sup>72, 198</sup> from both Key Leaders and the members of the Lumbee tribe. A copy of all recruitment materials including the study flyer and participant enrollment form can be found in Appendix B.

**Key Leaders.** Key Leaders were sampled in two phases utilizing a combination of criterion, snowball, and theoretical sampling. In Phase 1, criterion sampling was used to identify organizations in the Lumbee Community who directly interface with DRV. These included local Police Departments, Probation Offices, Alcohol, Tobacco, and Other Drug Abuse Specialists, the Board of Education, hospitals, AI Churches, and the Lumbee Tribal Government. Within these organizations, individuals meeting the inclusion criteria were contacted to participate. Key Leaders were initially recruited through contact information attained from a professional organization or through networking at local community events. Key Leaders were asked in person or were sent invitations via email to verify eligibility and elicit their participation in interviews. In Phase 2, a combination of snowball and theoretical sampling was used to identify new

participants. Additional participants were recruited via referrals from existing participants, while others were identified by reviewing gaps in the existing sample and findings from preliminary reviews of the data. Recruitment continued until theoretical saturation was attained.

**Members of the Lumbee Tribe.** Lumbee Tribal members were also recruited in two phases. Maximum Variation Sampling was utilized to recruit participants who varied across characteristics such as age, gender, residence, family composition, religious affiliation, socioeconomic status, and experience with DRV. In Phase 1, convenience sampling was used to identify participants via flyers distributed throughout the community and announcements made at local events. In Phase 2, snowball and theoretical sampling strategies were used to identify new participants via referrals and findings from preliminary reviews of the data. Additional participants were selected based on principles of maximum variation and theoretical saturation. Eligibility for participation was confirmed at the initial point of contact via email, phone, or face-to-face.

## **Procedure**

**Interview Guide.** Two semi-structured interview guides, tailored to each subgroup, were developed for this study utilizing items adapted from a project with Lumbee gatekeepers,<sup>193</sup> a key leader study on teen pregnancy,<sup>199</sup> and the U.S. Department of Justice's Exposure to Violence Survey.<sup>200</sup> The sample instruments provided insight into specific topics to focus questions on, approaches for framing questions, and overall structure for the interview guide. Some items were also adapted for this study. For example, when assessing participants day-to-day exposure to and experiences with

violence, an item from the Exposure to Violence Survey such as “Are you afraid you might be hurt by violence at school or work?” was adapted to, “Are you afraid you might be hurt by violence?” to allow for a more flexible discussion of exposure led by the participant. Similarly, the item “How common do you think suicidal behaviors are among Lumbee youth?” from the Lumbee gatekeeper study was adapted to, “How common do you think violence is within the Lumbee community today?”

Semi-structured interviews offer relatively systematic data collection and the flexibility for emerging topics.<sup>71, 72</sup> The reflexive nature of the interview guide allowed for free-flowing dialogue, an approach that is less invasive and more culturally appropriate for indigenous population.<sup>201, 202</sup> Interview guides were piloted with three members of the target population prior to initiating data collection, resulting in substantial revisions. As the study progressed and certain key topics emerged during analysis, such as the importance of the church, items were discarded, added to, or emphasized in the guide. A copy of the final interview guide can be found in Appendix D.

**Data Collection.** All study data was collected by the primary investigator (PI) via semi-structured, in-depth, one-on-one interviews. Interviews were scheduled over the phone, via email, or in person at a location convenient and safe for the participant and investigator. Interview locations varied by participant and included: participant’s home, place of business, the local university, church meeting spaces, and a local recreational facility. Each participant was first given a brief overview of the project and verbal consent was obtained prior to the start of the interview. A copy of the consent forms can be found in Appendix C.

Given the sensitive nature of the study topic, building participant rapport was also a critical step.<sup>72</sup> To accomplish this, all interviews followed a funnel pattern;<sup>71, 203</sup> opening with a general discussion on prominent historical events about DRV in the Lumbee community. Interviews then transitioned to dialogue regarding personal perceptions of, and experiences with, violence, drugs, and related prevention and treatment resources within the Lumbee community. Interviews lasted between thirty minutes and two hours, were audio recorded and later transcribed verbatim for analysis. Upon completion of each interview, participants were given a \$20 honorarium. Interviews occurred over a 21-month period between February 2016 and November 2017.

### **Data Analysis and Interpretation**

All interviews were transcribed verbatim via the PI and a professional transcriptionist hired from the community. Each transcript was reviewed and compared to audio recordings for quality control. The Lumbee Tribe has a unique vernacular which can sometimes be challenging to understand, particularly for those not familiar with the community. In instances where audio transcripts were in-audible or terminology was used the investigator did not understand, a member of the community was consulted. In most cases, this individual was able to understand the audio commentary and provide explanations for colloquialisms. To maintain participant anonymity, any identifying information present in transcripts, such as names or job titles, was removed and replaced by pseudonyms, as necessary, to minimize violations of confidentiality. All transcribed interviews were imported into Nvivo 11 for analysis.

Data analysis and interpretation occurred concurrently with data collection and were carried out in four phases following the principles of grounded theory,<sup>198</sup> with

systematic emergent coding initiating shortly after the completion of each interview. This is an approach successfully employed in AI populations and allows the AI perspective to guide the direction of subsequent interviews and analysis.<sup>201</sup> Data gathered from subsamples were initially treated as individual data sets, with an identical analysis occurring for each group to allow for later comparisons.

Without preconceived codes, in Phase 1 of analysis the PI and another investigator independently open-coded meaningful segments of one transcript for general categories and subcategories. The investigators met to compare generated codes and following an inductive approach, early themes or patterns were utilized to develop a codebook that was employed throughout the analysis of all subsequent transcripts. The codebook provided structure to the analysis and was refined as new topics emerged. After open coding, the PI initiated axial coding in Phase 2 by re-reading transcripts with a more specific focus based on the codes generated in Phase 1. In this step of the analysis categories and subcategories were refined and related for the identification of patterns. In Phase 3 of analysis, selective coding was conducted to unify categories into central themes or core codes based on the conceptual framework (Figure 2.3) and study aims<sup>198</sup>. Themes were assessed for potential linkages and/or hierarchies, as well as alignment with conceptual and theoretical underpinnings. At this stage, an outside investigator reviewed the interview transcripts and analysis for consistency. Finally, in Phase 4 of analysis, the PI compared the core themes from each subsample. Throughout this process the PI identified few discrepancies across the perspectives of both Key Leaders and Lumbee Tribal Members and therefore made the decision to merge the data into a single file.



## Strategies to Reduce Bias

Multiple strategies were also employed to enhance data trustworthiness. First triangulation occurred across multiple levels of the study. At the theoretical level, public health and criminological theory were merged to gain a more comprehensive framework to guide the study design. Data collection and analysis were informed from both interview and observational data. The analysis of data also contained input from both peers and participants (member checks) to verify conclusions drawn and to seek additional guidance on interpretation of data.<sup>204, 205</sup> Member-checking is viewed as a key strategy for establishing data trustworthiness, offering a check on researcher bias<sup>201, 206</sup> and is important in tribal communities where misinterpretations often occur.<sup>141</sup> To accomplish this, two questions in the enrollment form gauged participant interest in a follow-up from the PI. Those indicating that they were interested in the study findings were provided summaries of the data and drafts of manuscripts following Phase 4 of the analysis. Feedback was requested via email and hardcopy. Twelve participants provided feedback on the data electronically or verbally and this feedback was used to revise conclusions and manuscripts. Throughout the analysis process, constant comparisons and the identification of negative-cases further reduced investigator-imposed bias, leading to increased consistency and overall trustworthiness of the data. Using theoretical memos and the codebook, the PI compared the treatment of codes in each new transcript to previously coded transcripts to ensure the consistent application of codes. This technique ensured the achievement of data redundancy or saturation, given key insights may emerge over the course of research causing a shift in focus.

Second, the investigator also attempted to eliminate or reduce power differentials within the context of the interview setting, whether it was by adjusting the type of language used or type of clothing.<sup>206</sup> The investigator also limited sharing personal experiences and opinions to avoid biasing the direction of the conversation.<sup>204</sup> Finally, across all steps of the research process, the investigator practiced reflexivity<sup>71, 72, 205, 207</sup> to limit the influence of personal biases. As a member of the Lumbee Tribe, the PI consistently acknowledged her own personal assumptions regarding the Lumbee culture and community to avoid shaping participants response. These verification strategies enhanced the overall trustworthiness of data collection, analysis, and interpretation.<sup>71, 160</sup>

## Chapter 4

### Results

Chapter four contains a summary of the findings from a study which assessed the multi-level, physical and social environmental factors that influence DRV among the Lumbee Tribe of North Carolina. Also contained in Chapter four are two self-contained manuscripts formatted for peer reviewed journals. The first manuscript focuses on participants perspective of the local Christian church and its role in facilitating and preventing DRV in the community. This manuscript addresses both study aims one and two. This manuscript has been prepared for submission to the *Journal of Health Care for the Poor and Underserved*. To increase the collection of accurate, culturally appropriate data among AI tribal groups the second manuscript provides a detailed overview of the methods employed in the study, challenges faced, and recommendations for future qualitative research in AI communities. This manuscript has been prepared for submission to *Qualitative Health Research*. Following is a brief summary of key study findings.

#### Summary of Results

In total, 37 Key Leaders (17) and Lumbee Tribal Members (20) participated in this study. The results gleaned from an analysis of in-depth, one-on-one, interview data yielded key insights into the multilevel systemic factors influencing DRV within the Lumbee Tribal community. The qualitative results presented in this research align with existing quantitative data which suggests a disparate impact of drug use and

violence within this community. This summary does not include a discussion of the role of the Christian church, as it is discussed in detail in the first manuscript, entitled *Christianity and drug-related violence among a southeastern American Indian Tribe*.

**Impact.** More than half (27) of participants in the study indicated they were directly impacted by DRV. Four participants stated they had lost a family member or friend because of drug-related murder, five identified as current or prior drug sellers, six identified as current or prior drug users, and 18 mentioned having a family or friend who was an active user. The most common type of DRV discussed by participants was psychopharmacological, defined as acts of violence committed under the influence of drugs or alcohol, and included domestic violence, suicide, and accidents due to driving under the influence. Participants felt drugs were easily accessible within the community and the drugs cited as being most frequently used in the community were prescription pills and marijuana (for example quotes see Appendix E: Code 3-Drug Use). Participants also felt DRV tended to be concentrated in certain areas. Areas with subsidized housing and local businesses, particularly rural convenience stores, were identified as hotspots for these types of activities. Most participants felt that violence, drug use, and drug trafficking in the community was on the rise (see Appendix E: Code 2-Frequency of Trafficking, Code 3-Frequency of Drug Use, and Code 4-Violence Changes over the Last Few Years). Many participants also expressed a personal fear of being hurt by DRV (see Appendix E: Code 2-Fear of Being Hurt by Drug Trafficking).

**Mechanisms Facilitating DRV.** Participants described a host of factors which facilitate DRV within the Lumbee Tribal Community. Following is a brief description of the most recurrent themes identified in the analysis. For examples of the data please refer

to Appendix E: Code 7-Mechanisms Facilitating DRV. Participants most frequently referenced poverty or the poor socioeconomic conditions of the county in which the Lumbee reside, as a key mechanism contributing to DRV in the community. Many tribal members, including the elderly, were cited as selling drugs to ease their financial burden. In fact, more than half (23) the sample stated they knew an individual who currently sold drugs. Another frequently cited mechanism was the sense of hopelessness experienced by many Tribal members. Participants stated that some Tribal members cannot see alternative means to escape their current circumstances and have resulted to relying on federal and state programs or participating in illicit activities such as selling drugs to meet their day-to-day needs. Participants also described that drug use, drug trafficking, and violence have become normalized within the context of the community. The behavior is often overlooked and in many cases is even glorified because of the sense power or financial security it affords.

A poor home environment was also identified by participants as a contributing factor. Participants highlighted a breakdown in the traditional family structure which has impacted how children are being brought up. Additionally, youth are often exposed to drug use or other illicit behavior within the context of the home, sending the message to children that these are acceptable behaviors. When substance use or drug trafficking occurs within the context of the home this also increases opportunities for children to be victimized or exposed to a traumatic incident which may have long-term mental health consequences.

A lack of federal recognition was another frequently cited factor contributing to DRV in the tribal community. Federal recognition affords access to numerous resources,

such as a funding for health care and education, which could enhance prevention efforts in the community. Participants also associated a lack of federal recognition with challenges surrounding identity, particularly those who had spent time living outside of the community. Participants described feeling unworthy or lesser than because of the lack of recognition. Many participants also discussed historical and intergenerational trauma directly linked to Lumbee identity and experiences. Participants described a long history of drug use, violence, and loss of culture, which can ultimately be traced back to the point of European contact. Traumas, such as the loss of traditional cultures and languages, experienced throughout the history of the Lumbee people have been passed down through generations and are still playing out in the community today.

Finally, participants also stated that many Tribal members use drugs as a means for coping. Tribal members may use to cope with the impact of living in extreme poverty, such as the inability to provide basic needs for their families. Tribal members may use to cope with the traumas they face within the context of their home or community, such as exposure to the violent murder of their family or friend. Participants may also use to cope with mental health issues, such as low self-esteem created because of challenges to their identity as AI. As evidenced by the list of mechanisms identified by participants in this study, DRV is an inherent component of the culture and history of the Lumbee people that has been shaped by actions extending from the individual to the national level of influence.

**Preventing DRV.** A discussion on preventing DRV was a key component of each interview and a central aim of the study. Participants discussed both barriers to and opportunities for preventing DRV in the community. Both cost and transportation were

identified as two key barriers to not only preventing individuals from seeking treatment but also making progress in other areas of their recovery such as maintaining employment. Given the small, tight-knit community, reputation and lack of confidentiality were also cited as factors preventing tribal members from seeking treatment. Tribal members fear they may lose their job or suffer the consequences of a damaged reputation if someone were to find out they have a drug or alcohol problem. Corruption within local institutions was also cited as a critical barrier to prevention in the community. Local institutions within the community have been publicly accused of illicit conduct or the misappropriation of funds and many Tribal members have lost trust in local organizations including law enforcement and the tribal government. Examples of the data referring to these themes can be found in Appendix E: Code 6-Barriers to Prevention.

Participants also identified many potential solutions to preventing DRV. Most participants felt that for an individual to recover from a substance use disorder they had to make the decision to do so themselves. Given that, most participants felt prevention efforts should center around educating youth and providing them with recreational activities, such as cultural classes, to prevent them from being involved in illicit behavior generally. Participants also tended to favor large-scale policy changes such as decriminalizing drug use and treatment over jail time. Participants also stressed the desire for a local long-term treatment program that included programs culturally relevant to AIs, something that does not currently exist within the community. Finally, when asked who they thought was most responsible for addressing these issues related to DRV, participants stated that it would require a united effort from the community at large.

Local churches, the Lumbee Tribe, parents and schools were cited most often as playing critical roles in prevention efforts. Examples of the data referring to these themes can be found in Appendix E: Code 8-Preventing Drug-Related Violence.



Christianity and drug-related violence among a southeastern American Indian Tribe\*

\*Revels AA, Valois RF, Bell RA, Spencer SM, Farber, NB. To be submitted to *Journal of Health Care for the Poor and Underserved*

**Abstract:** Drug-related violence (DRV) impacts the over-all wellbeing of communities, with disparate outcomes observable in many poor, minority communities. The purpose of this study was to better understand the multi-level social and environmental factors influencing elevated rates and prevention of DRV within the Lumbee, a southeastern American Indian Tribe. This was accomplished via in-depth, one-on-one interviews with 37 Lumbee Tribal Members and Key Leaders. The results revealed a substantial influence of the local Christian church on the beliefs, attitudes and practices of the Lumbee community surrounding DRV. The findings of this study indicate that social-environmental factors, seemingly independent of prevention and treatment, play an integral role in the Lumbee community's ability to recover from the long-term consequences of DRV. Identifying these unique barriers to and facilitators of prevention and treatment will be critical to improve the welfare of tribal communities.

**Keywords:** Drug-Related Violence, American Indian, Lumbee, Christianity, Social Environment

### **Introduction**

Increased demand for illicit drugs,<sup>1,2</sup> national debates on the legalization of marijuana,<sup>3</sup> the recent declaration of an opioid crisis<sup>4</sup> and record-setting levels of drug poisoning deaths<sup>5,6</sup> have strengthened efforts to resolve the drug problem plaguing the United States. The trafficking and use of legal and illegal narcotics expose U.S. communities to a variety of short and long-term consequences.<sup>1,5,7,8</sup> One particularly detrimental consequence of trafficking and illegal use of narcotics is drug-related violence (DRV) which can be defined as any type of violence directly or indirectly

associated with the production, distribution, selling, consumption, or control of illicit drugs.

Researchers have identified multiple, interacting factors at the individual and systems levels that contribute to DRV including gender,<sup>9, 10</sup> race,<sup>11</sup> age,<sup>12</sup> mental health status,<sup>13</sup> immigration status,<sup>14</sup> policy,<sup>15</sup> economic factors,<sup>16</sup> and the physical environment.<sup>17, 18</sup> Barriers to further understanding and preventing DRV include minimal efforts to understand unique contextual factors present within a particular community,<sup>19</sup> limitations surrounding data collection and reporting,<sup>20</sup> and antiquated U.S. local and national drug enforcement and crime prevention policies.<sup>21, 22</sup> For minority populations, such as American Indians (AIs), where disparate levels of DRV can be observed,<sup>23-26</sup> research and prevention efforts are further limited.<sup>27</sup>

For one AI tribal group, the Lumbee Tribe of North Carolina (NC), DRV is particularly problematic. With nearly 55,000 members, the Lumbee Tribe represents the largest minority group (38%) in Robeson County, NC<sup>28</sup> and the 9<sup>th</sup> largest tribe in the nation.<sup>29</sup> The Lumbee epicenter, Robeson County, has been consistently documented as having high rates of violence, drug trafficking and substance use.<sup>24, 30-32</sup> In fact, Robeson County, is often considered the most violent county in the state of NC.<sup>33</sup> From 2011-2015, Robeson County had an annual age-adjusted death rate of 22.0 per 100,000 due to homicide and legal intervention. This compares to the NC state average of 5.9. During this same time frame, AIs in Robeson County, experienced an overall death rate of 27.6, a number substantially higher than U.S. rate of 9.4 and North Carolina at 16.<sup>34</sup>

Drug activity has also been a historical problem among the Lumbee, with AI traffickers and independent dealers cited as the predominant retail-level distributors in

southeastern AI communities, with an estimated \$10 million of cocaine moved through the county in the late 1980's alone.<sup>24, 35</sup> The county has also been the site of national controversies related to drug trafficking,<sup>36</sup> including the murders of several prominent community figures.<sup>35, 36</sup> Substance use has been consistently identified as a leading health concern among AIs and a priority area for prevention efforts in the county.<sup>32, 37</sup> Between 2003 and 2012, unintentional overdoses were higher for AIs (59 of 100 deaths) than any other racial/ethnic group in the county. Of the total overdoses in Robeson county during this period, 66% were due to narcotics or hallucinogens such as cocaine, Lysergic acid diethylamide (LSD), morphine, or heroin.<sup>31</sup> Given the disparate rates of violence and drug use among the Lumbee, this population became the primary focus of this research.

### **Purpose**

The primary goals of this research were to (1) better understand the unique contextual issues impacting DRV within the Lumbee Tribe and (2) understand how these contextual issues impact prevention and treatment efforts within the community. This was accomplished via in-depth, one-on-one interviews with Lumbee Tribal members and Key Community Leaders, which delved deeply into Lumbee experiences and perceptions of DRV. Although qualitative work has been generally carried out on DRV,<sup>7, 38, 39</sup> available research of the topic among the Lumbee has been primarily quantitative,<sup>32, 40-46</sup> limiting contextual understanding of the issues within this community. One prominent issue that emerged in the analysis of the data was the influence of the local church institution in the Lumbee community as it relates to DRV. The topic was so common in fact that all 37 participants referenced the church in some form. Further, 85% of Tribal Members (n=17) and 76% of Key Leaders (n=13) self-identified as Christian. The church

has also been shown in other research to play a key role in the prevention, treatment, and facilitation of DRV. Given this, the purpose of this article is to describe the community's perspective of the role of the church in facilitating and preventing DRV within the Lumbee Tribal community.

### **The Lumbee Church and Drug-Related Violence**

Christianity has been a part of the Lumbee community for hundreds of years and has become deeply intertwined within the moral fabric of the community.<sup>47</sup> The earliest recorded church in Lumbee territory was Hammonds Church, later known as Saddletree Church, deeded October of 1792.<sup>47, 48</sup> However, evidence of Christian tenets can be traced back to a hymn written by a Lumbee ancestor, prior to 1776.<sup>47</sup> Today, there are approximately 316 religious congregations (24 per 10 thousand people) in Robeson County primarily of the Baptist, Methodist, Pentecostal, and Presbyterian religious denominations. Approximately 44.7% of the county's residents (60,027) are members of a church.<sup>49, 50</sup> Within the local AI faith community, there are two major religious institutions. The first is the Native American Cooperative Ministry (NACM), a ministry of the North Carolina Conference of the United Methodist Church. NACM was established in 1978 and is a cooperative comprised of thirteen Native American United Methodist churches, serving approximately 2,400 AIs, and geographically covering Robeson, Cumberland and Sampson counties in NC, as well as Dillon and Marlboro counties in South Carolina.<sup>51</sup> The second institution is the Burnt Swamp Baptist Association formally established in 1880. Today the Association is comprised of 70 churches with predominantly AI membership (10,000) from 5 distinct tribal groups. Lumbees represent the majority of the population served by the association.<sup>52</sup>

The church in the Lumbee community today, regardless of denomination, has become a critical component of Lumbee identity, shaping individuals, families, and culture at large. It is also central element of the values passed down from generation to generation. Even today, the church is still growing and changing. Churches of various denominations are beginning to emerge, each built to suit the needs of the family or community that form it.<sup>47</sup> Although Christianity has been a major force of moral integrity in the community, it has also served to stifle change.<sup>48</sup>

**Overview of the Lumbee Church Position as it relates to drug-related violence.** Because Baptist and Methodist represent the primary Christian denominations present in Robeson County and the local AI faith community has established two local organizations under the umbrella of these denominations, this section highlights the doctrines of these two denominations as it relates to DRV.

In Robeson County, the local Southern Baptist Church functions as an autonomous, democratic entity, whose members are associated by a covenant of their delineation<sup>53</sup>. Amongst member churches of the local Burnt Swamp Baptist Association, many covenants include content explicitly stating members should “abstain from all intoxicating beverages.” Today, most covenants make no mention of other drugs or violence.<sup>54</sup> Other tenets of this denomination could be loosely interpreted to apply to DRV, however. The Baptist Faith and Message doctrine, for example, states, “In the spirit of Christ, Christians should oppose racism, every form of greed, selfishness, and vice...,”<sup>53, 55</sup> where vice could be interpreted to include illicit behavior surrounding drug and alcohol use. In 2006, the Southern Baptist Convention also released a resolution outlining its stance on alcohol consumption. Due to biblical warnings of the dangers of

alcohol use and the loss of life, injury, destruction to the family and home, and increased opportunities for addiction associated with alcohol consumption, the Convention has expressed its “total opposition to the manufacturing, advertising, distributing, and consuming of alcoholic beverages.” The resolution further dictates that no individual who consumes alcoholic beverages should serve in a leadership capacity and that Southern Baptist should actively support legislation intended to curb alcohol use and should be actively involved in educating youth and adults about the destructive nature of alcohol.<sup>56</sup> No explicit references to other drugs or violence could be identified, although the Baptist Faith and message counsels, “we should work to provide for the orphaned, the needy, the abused, the aged, the helpless, and the sick” and one of the 7 pillars of ministry states to “embrace unreached and unengaged people groups,”<sup>55</sup> which could be interpreted as groups impacted by DRV.

Unlike Southern Baptist, the United Methodist structure and organization are more centralized, with the General Conference serving as the primary legislative body and voice of the church. The General Conference is where the church’s official stance and policies regarding major social issues are outlined and later detailed in the Book of Disciples (denominations book of law) and the Book of Resolutions (policies on current social issues). According to the United Methodist Social Principals, the principle of the Social Community expressly states, “its support of abstaining from mind-altering substances such as alcohol and other drugs which are often linked to dysfunction at the individual, family and community level.” The church also addresses issues surrounding mental health stating it, “pledges to foster policies that promote compassion, advocate for access to care and eradicate stigma within the church and in communities.” The principal

also states that the church deplors acts of hate or violence committed for any reason, including violence and abuse against women and men. The church also “affirm[s] all persons as equally valuable in the sight of God. [They] therefore work toward societies in which each person’s value is recognized, maintained, and strengthened. [They] support the basic rights of all persons to equal access to housing, education, communication, employment, medical care, legal redress for grievances, and physical protection.”<sup>57</sup> The NACM and one of its member churches have ministries which actively advocate for families and individuals impacted by substance use disorder.

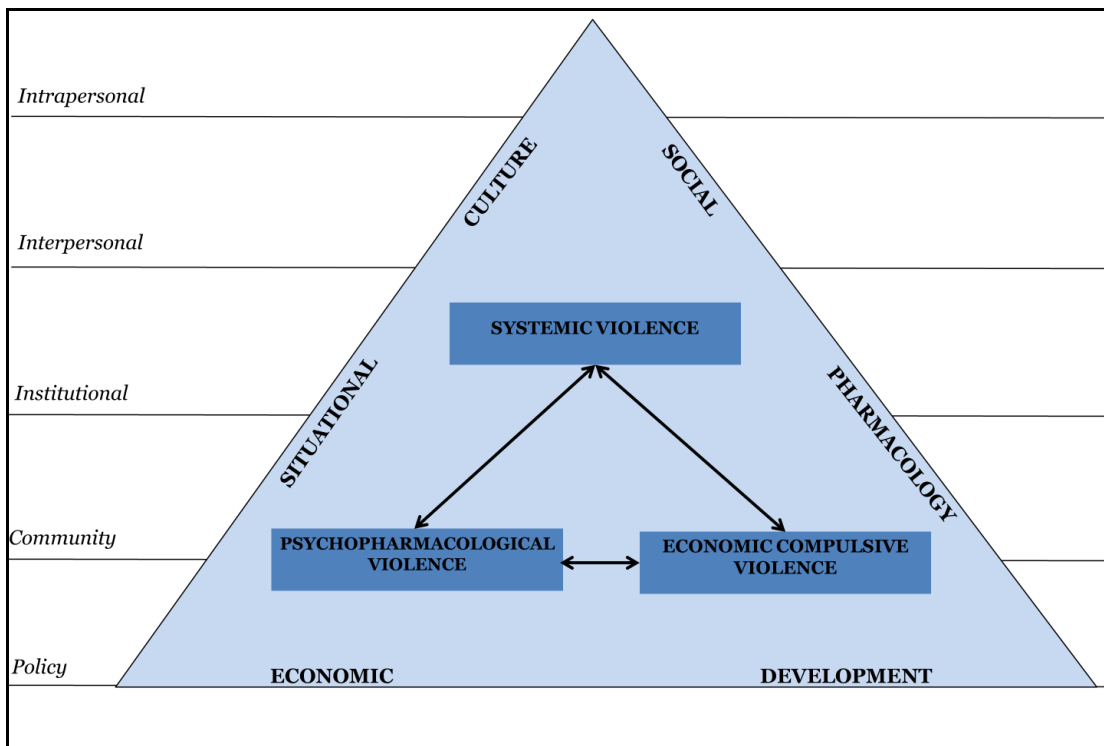
## **Materials and Methods**

### **Theoretical Assumptions and Conceptual Framework**

Integrating criminological and public health theory, a framework (Figure 4.1) for the enhanced understanding of DRV among the Lumbee Tribe was developed. The framework links directly to Social Disorganization Theory which assumes a person’s physical and social environment influences their behavioral choices, including increases in crime and delinquency.<sup>58,59</sup> Figure 1 focuses on multilevel, interacting, contextual factors which may substantially influence the extent and prevalence of drug-related behaviors, allowing for a better understanding of the primary barriers to and opportunities for addressing DRV in a particular community.<sup>60</sup> This model was adapted from three existing frameworks identified in the literature. First, the tripartite framework by Goldstein which suggests DRV can be understood through three primary dimensions: 1) psychopharmacological, describing the effects of substances on individual behavior; 2) economic compulsive, including violence arising due to a need to purchase drugs for personal use; and 3) systemic, violence intrinsic to the purchase and selling of illegal



narcotics.<sup>61</sup> Second, the factors identified within the triangle (i.e., economic) were adapted from a conceptual scheme of the National Institute on Drug Abuse.<sup>7</sup> The third framework, the socio-ecological model, assumes identified factors interact to influence behavior at multiple levels (i.e., the hierarchical nature of the triangle).<sup>62</sup> This framework was used to guide all aspects of the research, including the development of the interview guide, recruitment strategies, and data analysis.



**Figure 4.1: Multi-Level, Social & Physical Environmental Factors Impacting Types of Drug-Related Violence**

### Study Overview

Using purposeful and theoretical sampling approaches, 15 Key Leaders and 20 members of the Lumbee Tribe were recruited to complete one-on-one, semi-structured, in-depth interviews about their perceptions and experiences of DRV in the Lumbee community. All study activities were reviewed and approved by the University of South

Carolinas Institutional Review Board for the rights of human participants in research (00035161), the North Carolina Department of Public Safety (1604-01), and the Lumbee Tribal Government (in a meeting with the Tribal Administrator in February of 2014 and presentation to the Lumbee Tribal Health Committee on April 2016 to approve project and November 2018 to report findings).

### **Setting**

This study was conducted primarily in Robeson County, North Carolina and surrounding counties. Robeson County is the epicenter of the Lumbee Tribe and home to the Lumbee Tribal Government. Lumbee's represent the largest minority group in the county, accounting for 37% of the population<sup>32, 63</sup>. The recruitment area also extended to surrounding counties, where a large percentage of tribal members also reside including Scotland, Hoke, Cumberland, Bladen, and Columbus<sup>29</sup>.

### **Sample**

The total study sample included 37 participants, comprising two subsamples: 17 Key Leaders and 20 Lumbee Tribal Members. The sample size emphasized sampling adequacy and was determined based on qualitative research principles of saturation and sufficiency. Achieving saturation at a sample size of 37 is in line with previous research.<sup>64-66</sup>

**Key Leaders.** Key Leaders (n=17) who participated in this study were defined as individuals holding leadership positions within the Lumbee community who directly interact with DRV via their organization of employment (i.e., administrative, managerial or general leadership roles) or through volunteer activities. Key Leaders are information-rich making their perspectives critical to understanding the context of DRV as it is

experienced by the Lumbee, offering insight on social, economic, and situational factors influencing elevated levels of DRV. All Key Leaders were aged 22 and older, worked in the county for at least two years and were familiar with the community and its assets. Key Leaders were not required to be Lumbee.

**Members of the Lumbee Tribe.** Participants in this group included enrolled Lumbee Tribal Members (n=20), aged 22 and older, who were purposively selected to vary across characteristics such as gender, residence, family composition, religious affiliation, socioeconomic status, and experiences with DRV to achieve maximum variation within the sample. Ensuring diversity across participant characteristics was critical to capturing a broad perspective of DRV within the Lumbee Tribal community.

### **Recruitment**

This study employed purposeful and theoretical sampling procedures<sup>67</sup> for data collection at the individual level to attain diverse perspectives<sup>68, 69</sup> from both Key Leaders and the members of the Lumbee tribe. Recruitment for both sub-samples continued until theoretical saturation was attained.

**Key Leaders.** Key Leaders were sampled in two phases. In Phase 1, criterion sampling was utilized to identify organizations in the Lumbee Community who directly interface with DRV. These included local Police Departments, Probation Offices, Alcohol, Tobacco, and Other Drug Abuse Specialists, the Board of Education, hospitals, AI Churches, and the Lumbee Tribal Government. Within these organizations, individuals meeting the inclusion criteria were contacted to participate. In Phase 2, a combination of snowball and theoretical sampling was used to identify new participants. Additional participants were recruited via referrals from existing participants, while

others were identified by reviewing gaps in the existing sample, and findings from preliminary reviews of the data.

**Members of the Lumbee Tribe.** Lumbee Tribal members were also recruited in two phases. In Phase 1, convenience sampling was used to identify participants via flyers distributed throughout the community and announcements made at local events. In Phase 2, snowball and theoretical sampling were used to identify new participants via referrals and findings from preliminary reviews of the data. Additional participants were selected based on principles of maximum variation and theoretical saturation.

### **Procedure**

**Interview Guide.** Two semi-structured interview guides, tailored to each subgroup, were developed for this study utilizing items adapted from a project with Lumbee gatekeepers,<sup>64</sup> a key leader study on teen pregnancy,<sup>70</sup> and the U.S. Department of Justice's Exposure to Violence Survey.<sup>71</sup> Interview guides were piloted with three members of the target population prior to initiating data collection, resulting in substantial revisions. As the study progressed and certain key topics emerged during analysis, such as the importance of the church, items were discarded, added to, or emphasized in the guide.

**Data Collection.** All study data was collected by the primary investigator (PI) via semi-structured, in-depth, one-on-one interviews. Interviews were scheduled over the phone, via email, or in person at a location convenient and safe for the participant and investigator. Interview locations varied by participant and included: participant's home, place of business, the local university, church meeting spaces, and a local recreational facility. Each participant was first given a brief overview of the project and verbal

consent was obtained prior to the start of the interview. Interviews lasted between thirty minutes and two hours and were audio recorded. Upon completion of each interview, participants were given a \$20 honorarium. Interviews occurred over a 21-month period between February 2016 and November 2017.

**Data Analysis and Interpretation.** All interviews were transcribed verbatim and compared to audio recordings for quality control by the PI. All transcribed interviews were imported into Nvivo 11 for analysis. Data analysis and interpretation occurred concurrently with data collection and were carried out in 4 phases following principles of grounded theory,<sup>69</sup> with systematic emergent coding initiating shortly after the completion of each interview. Data gathered from subsamples were initially treated as individual data sets, with an identical analysis occurring for each group to allow for later comparisons.

Without preconceived codes, in Phase 1 of analysis, meaningful segments of transcripts open coded for general categories and subcategories. Following an inductive approach, early themes or patterns were used to develop a codebook that was employed throughout the analysis of subsequent transcripts. The codebook provided structure to the analysis and was refined as new topics emerged. After open coding, the PI initiated axial coding in Phase 2 by rereading transcripts with a more specific focus on the codes generated in Phase 1. In this step of the analysis, categories and subcategories were refined and related for the identification of patterns. In Phase 3 of the analysis, selective coding was conducted to unify categories into central themes or core codes based on the conceptual framework (Figure 1) and study aims.<sup>69</sup> Themes were assessed for potential linkages and/or hierarchies, as well as alignment with conceptual and theoretical

underpinnings. Finally, in Phase 4 of analysis, the PI compared the core themes from each subpopulation. Throughout this process the researcher identified few discrepancies across the perspectives of Key Leaders and Lumbee Tribal Members and therefore made the decision to merge data into a single file.

**Strategies to Reduce Bias.** Multiple strategies were also employed to enhance data trustworthiness. First, triangulation occurred at multiple levels. At the theoretical level, public health and criminological theories were employed to inform all aspects of the study design. Data collection and analysis were informed by interview and observational data. The analysis of data also contained input from both peers and participants (member checks) to verify conclusions drawn and to seek additional guidance on interpretation of data.<sup>72, 73</sup> Second, throughout the analysis process, constant comparisons and the identification of negative-cases further reduced researcher-imposed bias. Using theoretical memos and the codebook, the PI compared the treatment of codes in each new transcript to previously coded transcripts to ensure the consistent application of codes. This technique ensured the achievement of data redundancy or saturation, given key insights may emerge over the course of research causing a shift in focus. Third, the investigator also attempted to eliminate or reduce power differentials within the context of the interview setting, whether it was by adjusting the type of language used or type of clothing<sup>74</sup>. The investigator also limited sharing personal experiences and opinions to avoid biasing the direction of the conversation.<sup>72</sup> Finally, across all steps of the research process, the investigator practiced reflexivity<sup>68, 73, 75, 76</sup> to limit the influence of personal biases. As a member of the Lumbee Tribe, the PI consistently acknowledged her own personal assumptions regarding the Lumbee culture and community to avoid shaping

participants response. These verification strategies enhanced the overall trustworthiness of data collection, analysis, and interpretation.<sup>65,76</sup> Patterns gleaned from preliminary analysis were also used to inform recruitment strategies and modify interview guides to avoid missing salient information.

## **Results**

### **Overview**

In total, the study sample comprised 37 participants, all of whom provided rich descriptions of their perceptions and experiences of DRV and available prevention and treatment resources. Throughout the analysis process, the church emerged as a critical theme with participants identifying the church as the primary institution responsible for addressing DRV. Because the church is such an influential institution within the Lumbee community and is seen as playing a critical role in prevention, this manuscript highlights the emergent themes centered on the church. Analysis of transcripts also revealed reference to the role of the church in DRV more than 115 times. In fact, a query of the 1000 most commonly referenced words yielded 1,215 references to Christianity with the use of words like church or churches (651 or 0.39%); God, Lord, or Jesus (208 or 0.12%); Christian or Christianity (129 or 0.08%); and other words such as the Bible, pastor, Sunday, or religion (227 or 0.13%). This compares to other frequently cited words such as drugs or drug (2,725 or 1.62%), community (1,168 or 0.69%), or the tribe (364 or 0.17%). Four primary themes surrounding the church emerged from the data and centered on: (1) the perception of the church as a community institution; (2) the churches current role in DRV; (3) aspects of church social practices stalling prevention efforts; and (4) the future role of the church in prevention and control of DRV. A detailed description

of the sample and a summary of the study findings related to the church are presented below.

## **Demographics**

**Lumbee Tribal Members.** Most Lumbee tribal members resided in Robeson County (90%); were female (65%); were an average of 47 years old ( $\pm 15.96$ ); had some college (40%) or were a college graduate (35%); married (35%) or never married (40%); employed (45%); had children (80%); and identified as Christian (85%). Most of the sample had been impacted by DRV, with several having a history of substance use disorder (6); a relative with a history of substance use (15); experience selling drugs (3); a victim of violence (2); or lost a relative to DRV (3). See Table 4.1 below for more details.

**Key Leaders.** All Key Leaders worked in Robeson County; most were male (64.7%); were an average of 50 years old ( $\pm 14.392$ ); were AI (94.12%); were college graduates (88.24%); were married (64.71%); employed (64.71%); had children (88.24%); and identified as Christian (76.47%). All Key Leaders included professionals with experience in the following fields: law enforcement (5), the Lumbee Tribal Government and Council (3), faith leaders (5), political figure (1), employees of the local education system (5), or volunteers and employees of organizations who provide mental health and other health services (4). Several of the Key Leaders identified as retired drug traffickers/sellers (3), members of recovery (3), had relatives with a substance use disorder (6) or had lost a relative to DRV (2). See Table 4.1 below for more details.



**Table 4.1: Lumbee Tribal Members (20) and Key Leaders Demographics (n=17)**

#	Demographic	Level	Lumbee Tribal Members			Key Leaders		
			n	%	Mean ± SD	n	%	Mean ± SD
1	County of Residence	Robeson	18	90.00	-	17	100	-
		Hoke	1	5.00	-	-	-	-
		Scotland	1	5.00	-	-	-	-
2	Gender	Female	13	65.00	-	6	35.29	-
3	Age	-	-	-	47.5± 15.96	-	-	49.82± 14.39
4	Hispanic/Latino	Yes	0	0	-	0	0	-
5	Race	Lumbee	20	100.0	-	16	94.12	-
		Black or African American	-	-	-	1	5.88	-
		Grades 9 through 11 (Some high school)	2	10.00	-	-	-	-
		Grade 12 or GED (High school graduate)	3	15.00	-	-	-	-
		College 1 year to 3 years (Some college or technical school)	8	40.00	-	2	11.76	-
6	Education Level	College 4 years or more (College graduate)	7	35.00	-	15	88.24	-
		Now married or living as married	7	35.00	-	11	64.71	-
		Divorced	3	15.00	-	1	5.88	-
		Widowed	2	10.00	-	2	11.76	-
		Never been married	8	40.00	-	3	17.65	-
7	Relationship Status	Employed for wages	9	45.00	-	11	64.71	-
		Out of work	3	15.00	-	-	-	-
		A Homemaker	1	5.00	-	-	-	-
		Retired	4	20.00	-	5	29.41	-
		Unable to Work	2	10.00	-	-	-	-
		Self Employed	-	-	-	1	5.88	-
8	Employment Status	Employed for wages	9	45.00	-	11	64.71	-
		Out of work	3	15.00	-	-	-	-
9	Children	A Homemaker	1	5.00	-	-	-	-
		Retired	4	20.00	-	5	29.41	-
		Unable to Work	2	10.00	-	-	-	-
		Self Employed	-	-	-	1	5.88	-
		Yes	16	80.00	-	15	88.24	-
10	Religion	Christian: Assembly of God	2	10.00	-	-	-	-
		Christian: Holiness	2	10.00	-	-	-	-
		Native Spirituality	1	5.00	-	-	-	-
		Christian: Southern Baptist	7	35.00	-	3	17.65	-
		Christian: Non-Denominational	3	15.00	-	2	11.76	-
		Christian: Non-Practicing	1	5.00	-	-	-	-
		Spiritual	2	10.00	-	3	17.65	-
		Christian: United Methodist	2	10.00	-	4	23.53	-
		Christian: Pentecostal Holiness	-	-	-	1	5.88	-
		Traditionalist	-	-	-	1	5.88	-

## **Perceptions of the church as a community institution**

The first major theme to emerge from data analysis centered on participants' perceptions of the church as a community institution. This theme can be broken into four primary subthemes which place emphasis on (1) how the church has changed over time; (2) how this change has created opportunities for conflict and division within the community; (3) how religion and morality has declined in the community at large; and (4) how despite change, discord and decline in adherence to religious principles, the church has maintained a reputation as one of the most trustworthy community institutions. Each of these sub-themes are discussed in detail below.

**Change in church culture over time.** Key Leaders (6) and tribal members (2) reflected on the changing role and culture of the church over time. Participants highlighted two subthemes regarding how the church has narrowed its attention from (1) the community to the congregation and (2) general morality to an emphasis on religious doctrine. These two sub-themes are discussed in detail below.

**Loss of Community Orientation.** When discussing the historic role of the church, participants described the institution as having a strong community foundation, particularly as it relates to education. This relationship was so intertwined in fact, it was reflected in the physical structure of the community. One participant stated:

*“The Indian church [was] very community-minded. We built our community schools when the state wouldn't help us educate our kids, we educated them ourselves until the state came along and begin to help us... But it was a focus on the churches to do that...there must have been 25 or more of these little Indian schools. And almost in every location where there was a little Indian school, there was a little Indian church. Either in the same building--one of the others started out of the same building. And over a little bit of time the Indian school house was near the church house was here. You see some relics of that now. Deep Branch, at Ash Pole, at Union Chapel, at Prospect. You see relics of that: schools on that side of the road, churches on this side the road. That's not in every place. It hasn't been maintained, but those*

*relics that you see like that are reminiscent of probably what church and school was a hundred years ago where they both were institutions very much community focused on building up the community.”*

Another participant shared a similar sentiment:

*“It [the church] was a big part of the community when I was a child coming up. I remember when I was baptized I got home that day and we had supper. I said, “Well, mama. I’m a Baptist now, right?” She said, “No.” She said, “You just been baptized...That don’t make you a Baptist.” Our family is spiritual. Baptist is a religion, a denomination. We just attend that church to be with fellow worshippers and family...You see, spirituality is about the creator. Religion is of man. Churches used to be a safe place. You could take your children there and leave ‘em. The church was goin go on a trip, you could send your kids to the trip.”*

Participants described that the once historical emphasis on community has now been replaced with a more narrow focus on congregation. One participant describes the emphasis on congregation saying, *“I can’t say it’s a closed-door policy, but we feed our own kinda mentality...If you’re not associated with the congregation, then you’re not probably gonna get, you know we’re not gonna go to you. I mean you can probably come to us, but we--not necessarily make you look like a beggar, but you gotta really show me you need it buddy.”* Similarly, another participant discussed the lack of community emphasis stating, *“Most of our churches they want to take care of themselves. They don’t see ecumenical ministry as being important. They won’t participate in that... You know us coming together as a religious community and trying to work together to resolve the issues.”* One participant described how even church sermons are not community centered stating, *“some churches have been preaching on the election and the morality of the candidates that’s been running...that’s the morality of our nation and our candidates, but what about the morality of our communities?...we’ve got to realize that our community is important first. If we save our communities, then we save our counties, then we save our state. then we save our nation.”* As the church focused narrowed to the church setting,

the priorities and beliefs of the individual congregation began to take precedent. This included such things as interpretations of the bible. This is discussed in detail in the second sub-theme below.

***Emphasizing Religious Doctrine over Morals.*** Participants also discussed a more narrow focus of the church on religious doctrine over morality, generally. One participant stated, *“Our churches have been typically religious entities that have not made a good connection between spirituality and struggles people are living with.”* Another reiterated this sentiment stating, *“people are going to church to be taught religion not to be taught life. When I was kid church taught you life. How to live. You learned a lot about being a man or woman in church because it taught you what the Bible said, how to walk your path.”* Another participant focuses on the narrow interpretation of the bible saying, *“our understanding of the church in this community is so limited. Its limited to one’s perspective and understanding... I don’t think they are applying the holistic perspective of the gospel. They interpret it very narrowly, and they just only understand--when they come to an understanding and what makes them feel good and comfortable or what is popular or what someone else is doing.”*

Arguably, the loss of community orientation and increasing emphasis on religion over morality has increased opportunities for conflict and division within the church setting. This division may even extend to the community at large. Following, is a description of the conflict or discord present within the context of the church and community. This is the second subtheme within the context of the communities perception of the church.

**Discord within the church.** Several participants described a sense of discord within the church setting across the community at large, often stemming from church leadership. Over time, this discord often leads to divisions within the congregation and community at large. One participant described this saying, “... *the biggest issue that we have is the politics and the policies and procedures playing within the church. And it’s like okay I don’t like you, let’s go build another church.*” Another participant shared the same outlook saying, “*I bet you right now if you go to the same community you were raised in, you’ll find about twice as many churches...people, instead of talking to each other solving a problem, we walk out of the church, and go over here, and start us another church.*” Yet another participant stated, “*I have heard this comment over and over, again and again. ‘Well I don’t want to participate in that church because so and so is there.’ It’s a self-righteous thing or ‘I will not go to that church because of this preacher.’*”

Participants also expressed concerns surrounding the motivation of the leadership. One participant stated, “*I’d say about half your preachers out there now, didn’t go to seminary to spread the word of God. They went to seminary to get a job because it’s an easy job to get a lot of places.*” Similarly, another participant stated, “*you got a lot of churches that’s going just for money now. It’s just--it’s a business too.*” This perception, although limited, likely contributes to divisions within the church setting. Changes in the church orientation and increasing discord with the context of the church setting, have not only contributed to divisions within the community, but have also likely played a key role in what participants describe as a decrease in religiosity within the Lumbee community generally. This is described below.

**Decrease in religion and morals throughout the community at large.** Four

participants (2 Key Leaders and 2 Tribal Members) discussed a third sub-theme centered on a decreasing sense of morality and religiosity in the community overall. This may be attributed to a loss of confidence in the church as an institution. One participant describes this saying:

*“...when I was in grammar school we used to have preachers come and...they'd preach in the school...there was a de-emphasis on that, at least nationally, where it seemed to me that Christianity, in particular, was under attack. And so some of the religious training was taken out of the schools, and you couldn't mention God in school...And so we've become more secular. And so part of that lack of religious training, I think, has affected the society in a negative way...the lack of respect, for example. Young kids. If the kids are training in the home, and school, and - if they go to church - the church, they respect other people...So to me, the lack of training in the home and the school, and to some extent, in the church, has led to this breakdown...”*

Another participant discussed a lack of Christianity among younger generations saying:

*“That's one thing that a lot of Lumbee people around here, they lack. The younger generation lacks Christianity. To me, you can be a good person, but without Christianity, you can only be so good, cause if I don't have that set in my life, then I really don't have to have morals.”* A participant also discussed a decline in church attendance stating, *“... we've got a church almost in every community. Going in those churches today they're not full. When I was growing up, you couldn't hardly get in the doors of a church because religion was the front part of every families' importance.”*

Despite changes to church culture overtime, increasing discord within the church setting, and a general decline in religiosity, many participants still felt the community held the church institution in the highest regard. The final sub-theme of the participants perception of the church is described below.

**The church as a venerated community institution.** Many participants had positive reflections of the church institution. In fact, when asked where participants would go for help in the event of a problem, the church or God was cited as the first place most tribal members (14) would turn to. When asked if they would seek religious

guidance for help with a problem, participants stated, *“I'd have the whole church praying”* or *“I have already.”* One participant stated *“I think the first person I'd go to other than God would be my pastor...I think that'll be the first person I would go to other than God. I'd take it to him first and then I'd go see my pastor.”* Yet another stated, *“I don't know where I could go honestly...I mean except within my church unit.”*

### **The Churches role in DRV**

The second major theme to emerge from the data centered on participants description of the churches current role in DRV. Participants perceptions can be generally organized into three sub-themes: (1) participants felt the church played only a small role in DRV, however, (2) the church generally fears getting involved with DRV, and (3) participants felt that there was much more that the church could do overall.

**Churches do not sponsor formal programs.** The first sub-theme highlighted by four of the Key Leaders discussed how most churches lack formal programming to address issues surrounding mental health issues like substance use disorders. One participant stated, *“As far as having some kind of a physical program, institutional program like AA or NA, or a treatment center, the churches don't sponsor any of those. The churches may, if a community member is in a facility and they have to raise money to stay there, for their fee, churches may contribute to families who need to raise money for that. And this kind of ministry is non-traditional for churches here.”* Another participant reflected on the same sentiment saying, *“I don't know no other church is willing to open their doors to have an AA or NA meeting... Why aren't our churches opening our doors to the broken people of--arguably the worst area in the nation, and they're doing absolutely-- you couldn't have designed it where you could have a worse failure rate.”*

Churches may generally avoid issues associated with DRV for two reasons. Because churches have become congregation centered, the impact of DRV within the context of the church is likely less than that experienced by members of the community overall, negating the need to emphasize this as a critical component of church activities. This is particularly true given the larger religious priority of the church. A second factor may be fear which could be contributed to a lack of knowledge. Participants describe this sentiment below in the second sub-theme on the churches role in DRV.

**Church fears getting involved.** Several participants (3 tribal members and 4 Key Leaders) described a lack of church involvement suggesting it likely stemmed from fear or a lack of knowledge of the issue. One participant commented, *“I think a lot of the reasons the churches don't do as much as they could do is because they're scared and you can't blame them for that.”* This thought was reiterated by another participant who stated. *“Well, I think fear might be a part of it I mean that is an appropriate word. I mean you start messing with that stuff you might bring it inside [the church].”* Another stated, *“fear maybe of retaliation...You're holding this at your church and here I am, I'm a drug dealer, and you're getting in my way of selling...This is the way I live, and you're having this, and if this person decides, "Well, I'm off drugs." That's taking money out of drug dealers' pockets.”* Some fear may be directly linked to a lack of knowledge. One participant highlighted this in a discussion on church pastors saying, *“a lot of pastors will tell you they are not comfortable talking about it. Understand that you haven't had the training behind you but know the resources you can refer your members too.”* Given the churches limited involvement in and fear of DRV, many participants felt that the church needs to increase its efforts to address this issue within the community.



**Churches need to do more.** While most churches do not sponsor formal mental health programming, many attempt to impact the issue indirectly. One participant described this saying, *“there's always been activities within the church for my grandkids and kids to do...and I think you have to keep youth busy.... To me, sometime there's a period in your life if you just keep them busy that would avoid a lot.”* Another described current efforts by the church saying, *“Churches do try to get involved going out doing community outreach...I know the churches do community outreach.”* Another participant stated *“...sometimes we'll go into their community, go to where they're at, take 'em something to eat, just meet their everyday needs. A lot of people-- if we can have something in the county where we can get them somewhere sober long enough to make a decision. Sometimes they're not sober enough to make any decisions. But that's what we're trying to do, trying to just meet their basic, everyday needs. And if we meet some of those needs, then maybe they'll see that we care and they'll hear our message.”*

Most participants (20 tribal members and 12 Key Leaders) however, felt the church needed to increase efforts in this domain. One participant felt the church is completely missing the mark saying:

*“...the church has a role, but they're not doing their job. The church - I hate to say it, but they're one of the big problems. They supposed to go out into communities - talk to people, get 'em to come to church - but they're not doing that. The church now is sitting back on the pews getting fat and lazy...they'll tell you it ain't none of their business. They just too lazy...If that person would turn around - and they had the strength to help em - but that person turn around and wreck and kill a 12-year-old kid, driving, and he goes, "It's just an accident." Then, they'd want to put him in death row. But they had that strength to help him, didn't they?”*

Another participant reflected this sentiment saying, *“The churches want absolutely nothing to do with it. And the churches are probably one of the places where they can have the biggest advocates. The biggest support system...But you know the churches*

*really could do more, but they feel like it's not their job.” Yet another stated, “If the Church would step into the community. The community would get better... The Church, the church could do the community more good than anybody.” Still, another stated, “I feel like you've got some churches that are stepping up to the plate, but it would be nice if all churches would cause that's what they're there for. You've got a lot of families that are hurting because they're the end result of this violence. There's not one church I know in Robeson County that this has not touched.”*

### **Church social practices which stall DRV prevention efforts**

The third major theme emerging from the data centered on social practices within the context of the church that may serve as a barrier to prevention efforts. The practices are likely a manifestation of the changes in the church orientation, lack of knowledge and fear of DRV generally. Participants identified several practices within the context of the church including issues surrounding (1) the punitive orientation of the church; (2) a “Saint or Sinner Mentality;” (3) hypocrisy; and (4) fatalistic attitudes, all of which influence the treatment of populations impacted by DRV in the church setting. Each of these sub-themes are discussed in detail below.

**Punitive Orientation.** Only three participants commented on the punitive orientation of the church. It is important to note, however, that this may be more prominent than indicated in this sample as it directly aligns with the “*Lumbee Culture of Violence*” a prominent theme which is discussed elsewhere. This orientation may also be directly linked to narrow religious focus of the church, highlighted earlier. One participant discusses that the frame with which messages are discussed in church encourages a sense of powerlessness saying, “...if you listen in church to the things that we say, ‘I don’t

*know why I'm not worthy, but he brought me through it.' 'I'm not deserving of his love, but he loves me anyway.' And it all sounds great until you really think about what they're saying. I'm not worthy of love. I'm not worthy of coming through the struggle."* This same participant goes on to reflect on how this perspective is damaging saying, *"we're saying that the person who is pure love or the entity that is pure love, does not--we don't deserve that love...That is because of religion. Religion is just this idealized set of values created by mere men. The bible was written by mere men, and yet we take it, and I think it is a great work, but I also think it is a great metaphorical work. Not to be taken as a literal work."* This sentiment of the literal, punitive, interpretation was discussed by another participant who stated:

*"I think there are lots of folks who are Christian who, interpret...spare the rod and spoil the child as punitive. Instructions to be punitive... I think people see that as culture apart of being Lumbee...I think there's a very unforgiving very stern part of the culture that tends to want to punish and corporal punishment.... On Facebook, so many people have talked about, you know, you have to beat people into submission. And they are and these people happen to be very Christian in their orientation.... So I think the Christianity as practiced here...has a very violent orientation. And very punitive and very like you know the only way you're gonna get somebody to listen to you...And I think the local government, a lot of their policies are steeped in that or based in that. You know, it's like I guess institutionalized. Christianity, but kinda of the worse parts of it. The more punitive, very black and white parts of it."*

Similarly, another participant reflected on the idea of corporal punishment stating, *"...the idea of physical abuse around here even as a child with corporal punishment has been something that probably has traumatized a lot of people including me. I mean even up under the bracket of the church, you know spare the rod you spoil the child."*

**Saint or Sinner Mentality.** Eight participants (4 Tribal members and 4 Key Leaders) commented on a *"...saint or sinner dichotomy..."* which exist within the community in that *"...either you're in the church or you're not in the church"* or it's a *"...state of being, that you have to be perfect to be accepted within the churches or within*

*the relationship of God and if you're not, then you are a failure.*" Other participants made similar comments saying, *"if you take drugs, you're a sinner, you get saved you're a saint and there's like nowhere in between, or no grey area;"* or *"you drink two or three beers a week, your just an acholic."* One participant said this perspective has made it *"difficult to get people, like the churches behind treatment, the churches behind let's help folks. Because its looked at so negatively and looked at if you were saved, you're not goin be doing this. If you are a believer, you can't have these kinds of problems."* This pressure to maintain this unachievable sense of perfection has led many to feel disdain towards the church. One participant describes this saying, *"I feel like a lot of people feel like they're judged by Christians. And it makes them resent that, so-- or it makes them feel less than because they don't go to church all the time, so."* Regarding drug trafficking, another participant commented on the church perspective saying, *"...your way of living is not right. You cannot do this by yourself. You need us. You are uncivilized. You are not worthy and you're not living a good life. We're going to show you the way. The way, the truth and the life, or the light."* As a result, these individuals begin to feel lesser than or unworthy. One participant describes that downward spiral saying, *"people self-sabotage and they say, I don't want to feel this way why not give myself the reason to feel this way...It is unrealistic, and if they're goin be dammed to hell why not go there on a drug train?"* Ultimately this saintly image is unachievable even by the most devout. Again this, practice is likely linked to narrow religious interpretations adopted by many Lumbee Churches. Because the idea of sainthood is so unattainable, most of the congregation fall short of the standards they promote. Often these failures are interpreted as hypocritical by the greater community at large. Participants discuss this in the following sub-theme.

**Hypocrisy in the Church.** Ten participants (6 Tribal Members and 4 Key Leaders) discussed hypocritical practices within the context of the church. Much like the saint or sinner mentality which creates an us or them, this practice further reinforces hierarchies within the community and church. When discussing the influence of church leadership, one participant says, *“It’s hard to fool young people who are on the street that know what’s going on. Because they know preacher so and so’s going with sister so and so. And they know the hypocrisy that may exist in some areas...and so many people I think, many young people, have lost confidence in faith, and the organizations that are supposed to be setting the example and being a model, including home.”* Similarly, other participants discussed the behavior of some church members saying, *“In many ways, our churches are very evangelical, about taking the word out about Jesus and God and so forth and getting people saved. But you know when you look at the number of people who call themselves Christians who are dealing drugs I mean you know it’s like okay, what’s up with this?”* or *“some of ’em think they too high and mighty. Too holier than thou.”* This sense of hypocrisy is even reflected in the way church members are expected to dress. A participant describes this saying, *“it’s like you gotta look a certain way and you can’t wear certain things...I mean you got to take on a new form because you know God only accepts the best.”* Yet another participant shared a similar sentiment saying, *“you have churches that do like faith followers who do not want to be involved with someone like that and run from ’em... But yes, there are people who do not want folks in their church...It’s a lack of understanding of the issue.”* One leader acknowledges that this is not a new sentiment, however, saying, *“...breaking that bad habit that some will*

*have of being judgmental and looking down on you is like an object that the church has been challenged with for centuries.”*

Nevertheless, many participants acknowledge this perspective was wrong saying, *“It's not what you have, it's not the standard, it's not where you live or what you live in that matters. It's what's in your heart that matters. And we're supposed to love everybody. No matter what they do, we're still supposed to love 'em.”* Similarly, another says, *“church is about embracing. It really is about embracing people with problems.”*

Participants also acknowledge that this behavior has turned some away from the church. One stated, *“I've noticed here lately a lot of hypocritical stuff going on in these churches. So, I just, I stopped going a lot... the churches just pushed me away.”* Another reflected that this could be corrected if individuals shift focus internally, saying, *“know that it's your relationship with God and you shouldn't look at nobody else's relationship...let them worry about straightening out their own stuff.”*

**Fatalistic Attitudes.** Seventeen participants (9 Tribal Members and 8 Key Leaders) reflected on the concept of fatalism, particularly as it relates to relying on Jesus, God, or prayer to resolve problems for individuals or the community over taking action to resolve the issue themselves. This practice can also likely be tied back to narrow interpretations of the bible. Throughout interviews, participants echoed this outlook saying, *“prayer covers a multitude of sins...if you're living for the Lord, and you ask him to protect your family and loved ones, even people you don't know, that he'll do it. You know, he'll lead you and guide you if you let him”* or *“Number one God. If we put our trust in God, God can do anything. If we believe, believe in God he can do anything. That's the word of God...God is the onlyest hope for anybody.”* This sentiment is also

reflected directly in ideas surrounding attaining recovery from substance use disorder. One participant stated, *“only way they goin stop, unless they get Jesus. I mean, literally. I mean, cause I knew people that's-- they hit rock bottom. Literally hit rock bottom. And they'll tell you what-- the reason why they're successful today is because they had Jesus.”* Similarly, another participant stated, *“God's goin have to help me wid. Cause man can't help me wid it. They talkin bout going to like counseling and stuff. That can't help me. And I feel like the Lord's my only hope. And that's why I'm going trust in God's goin fix things. You know what I'm saying? But I'm tried mans, I said, I'm tried man's ways. I've tried to listen to em' bout my wife but it's not doin no good.”* Yet another stated, *“If we can get them to see their need for Jesus, I think that-- and some of these addictions, only God can help 'em with.”*

Several participants, however, discussed this perspective as an obstacle to prevention and treatment in the community. One participant stated, *“I think a lot of people would assume that once you become Christian everything would fall and stop, and I think that's another barrier to that is not just because you become a Christian and talk to someone about it, and they think, well, if you just talk to 'em then they'll stop using drugs, or they'll stop abusing alcohol, they'll stop violence.... But I think everybody assumes that if you just get into the church and you accept Christ that it would all of a sudden just stop and go away.”* Reflecting this same sentiment, another stated, *“But the sad thing about what our understanding of the church is in this community is so limited. It's limited to one's perspective and understanding is if you just surrender your life to Jesus that everything else will work out.”* Yet another participant stated, *“...you know there's so many churches who don't believe in any kind of intervention except, going*

*down the altar and being saved. You know that's all you need. You don't need to go to 12 step programs.”* Participants discussed a need to move beyond prayer saying, *“Or their common thing would be like, ‘let’s just pray about it.’ ...Taking it to God instead of what kind of action can we take place. How has God allowed somebody to have the power of a prophet or a counselor or a prince of peace to help me along this journey? I know God has probably educated some hands and feet somewhere that can be a physical form instead of just this idea of imagination.”* Yet another stated, *“They say god will fix it or they need Jesus. Well, I think you should shine your light. You should be a witness.”*

**Treatment of DRV Population in the Church Setting.** Social practices highlighted previously, occurring within the church setting have created an environment unfavorable to supporting the recovery community. Several participants discussed how individuals suffering from substance use disorders are viewed in the church setting or by church members. One participant said, *“my church...don't want addicts in the church. They got holes in their face, the smell bad. Girls come in there dressed like prostitutes.”* Similarly, one participant described their experience:

*“People's goin talk about you. I was talked about...I had people talk to me now that---they would see me at the store. I'd be standing out there, dirty clothes no money, hungry. And I'm talking about some church people...They would stop at the store. A lot of 'em wouldn't speak at me. Been knowing 'em all my life. They just wouldn't speak to me. Now they speak to me every Sunday. Every time I see em now. But, that hurts. I mean I've never said anything about 'em because you know, that's between them and God. But that's a hurtin feeling.”*

Another participant discussed the stigma associated with known dealers who attend church, saying, *“We had one big-time guy around in our community and every time he would come to our church, people would look at him funny. He stopped coming, of course, and I asked him why. He said, "Because everyone knows me there and they know what I do." ...Well, a lot of times we'll turn our noses up. I'm a be honest. Sometimes*



*church folks don't want to be around that kind of crowd, that kind of people. A lot of drug users will never come to the church cause they got more respect than that.”* Several participants described the need for change saying, *“I think that should be our target area to reach. We should welcome them. We should comfort them. Just like we do the person that’s coming to pay a million dollars in tithes. There should be no difference. Because someone needs to be reaching out to them.”* Another stated, *“I think if they set up programs for people like that instead of turning their nose up at 'em... You know, ‘well I don’t want nothing to do with them, they’re drug users.’ And we have that goin on some in churches.”* Yet a path for change is not immediately evident as one participant describes, *“I don't know how we deal, say, with a person who, whenever they see somebody that they know is a drug user, to keep them from looking with such disdain on that person. I don't know how to do that.”* As is evident, social practices within the context of the church play a critical role in the perception, prevention, and management of drug related violence. Overcoming these barriers in the church setting will be critical first step to fulfilling, what the communities perceives, as the churches responsibility to address DRV in the community.

### **Role of the Church in Prevention of DRV**

The final major theme to emerge from data on the church centered on the churches role in prevention and treatment of DRV. Not only did participants feel that the church is responsible for preventing DRV, but participants also identified several strategies churches could employ to address DRV within their communities.

**The Church is Responsible.** Despite changes in the church environment, a lack of focus in DRV programs, and social practices limiting forward mobility, most

participants (17 tribal members and 12 Key Leaders) still felt the Church should play a primary role in prevention and treatment of DRV. One participant describes this saying, *“I would say school systems and I would say churches...Establishing true identity, true cohesion, true connection. I often question those are two establishments that’s in the hearts of these communities that could really merge and make a difference. I just don’t know if they’re gonna do it or how would they do it. But I think they have the capacity to do it.”* Similar perspectives were shared by others who stated, *“But I think it’s the main responsibility to fight that is the church.... I think they’re the only one that has the power and the ability to even make a dent in it”* or *“I would like to see our churches get more involved. The churches could really, really do a lot because a lot of people look to the churches for leadership.”* Participants also felt the church should play a lifelong role in prevention, with one participant stating, *“Now they may be in that religious organization as well in their first 5 years of that life. So, what did that religious organization do with that child, in the first 5 years of their life to prepare them to deal with other personalities when they go to kindergarten?”* One participant even suggested that without participation from the church institution, making a change would be difficult, saying, *“around here you have to get the churches to lead not just as condemning drug use, but really working with how you get from point A to point C and D. Cause the churches wield a lot of power here.”*

Many participants also felt that the mere presence of the church in the community alone has had a large impact. One participant stated, *“I think it’s more of the Christians that’s just keeping a lot of the violence down... and I think it’s more or less of a God-fearing community...I think just the thought of knowing that God is a higher power.”*

Participants also felt the church has played a big role in recovery indirectly. When discussing his wife's journey to recovery, one participant stated, *"Christianity is the key..., she's been to two rehab centers...when she got out, she was worse than what she was when she went in. So that let me know right there Christianity is the onlyest way. Cause usually, when she really gets saved she might go two weeks, perfect. But when she go to drug rehab and get outta drug rehab, the next day she's right back on drugs again."* Another participant shared a similar sentiment saying, *"Honey it sure helps me. If they would listen, if they would participate it would help....Yes it helps. It helps hold you together."*

**Strategies for Prevention and Treatment.** In addition to identifying the church as the primary institution responsible for the prevention and treatment of DRV, many participants (12 Tribal Members and 11 Key Leaders) also identified strategies. Strategies included: (1) appealing to church leadership; (2) increased exposure to religious principles, particularly in treatment, and (3) increased community outreach.

**Church Leadership.** Several participants expressed that church leadership should take an active role in preventing and treating DRV. One participant stated, *"I feel that each pastor should be able to counsel almost any person that walks in their church. If not, they should be at least able to contact somebody to provide help."* Referring to church leadership, another participant stated, *"from the pulpit y'all need to be talking about this more. I said and also y'all need to have resources you can be referring a lot of your members, too."* Some participants felt, however, that church leaders did not know *"the steps to take to get it started"* or that *"they are not comfortable talking about it."* One participant recommended *"the pastors should be trained how to approach an addict."*

*Or if he sees the deacon even falling asleep in church or acting a little abnormal or spending. He should be trained on what to look for, patterns.”*

**Religion in Treatment and Prevention.** Several participants (4 Tribal Members and 1 Key Leader) felt prior exposure to religious beliefs or the incorporation of religion or spirituality into treatment would increase an individual’s success in recovery. One participant highlights how a religious upbringing could increase success in recovery saying:

*“The strengths a lot of times with those individuals have fallen, you know, may have fallen into drugs for whatever reason and say they were brought up in the church and statistically I don’t know. I think--I think there’s a strength there in terms of maybe eventually getting out of it...And I think it’s difficult when those that have also fallen not having had some kind of faith or structure and trying to do things spiritually. Trying to do things by themselves...You know not having something to grasp on to and trying to fight. Sometimes you've fallen there, whether they was abused and trying to forget and not haven something to hang on to.”*

Another participant alludes to this same sentiment saying, *“if they get the right teaching in church at a younger age is to know that it's your relationship with God.... If there was people there to guide the kids on how to think and how to keep to their self and not worry about joining on with everybody else, then it would better everything.”* One participant described the impact religion has on the individual saying, *“If you truly believe, it can help you...I mean, possibility for some people it could. I've seen changes in some people. I have.... I've met a person that was a crack head for a long time, and he got in the church, and he was a better person. Yeah, some people, yes it helps.”* Conversely, a participant identified a lack of spirituality in treatment as a deterrent for some individuals saying, *“...the individual, feeling like the agency or program was not religious enough. Like maybe you’re willing to go outside of church but you felt like that wasn't part of*

*it...but I don't know any that are like church-based or you know that are a bona fide program.*

**Increased Church Outreach.** Several participants (5 Tribal Members and 7 Key Leaders) discussed the need for increased community outreach from the church. One participant, for example, stated, *“we do need a little more outreach, instead of trying to get them to come to the church, we say let’s take the church to them. You know and try to do good deeds and do good things to draw ‘em.”* One participant provides a strategy for this saying:

*“They [the Church] have big roles to me and the community. The more that they outreach, the more they can infect the community with their morals and beliefs...To me, more outreach in your community. Not only in your community but just throughout other communities also. Basically, it could be going door to door, inviting people or having events at your church for the public to come, not to be judged or not to be talked down about, but just to be showed love.”*

Another participant shared a similar remark saying:

*“I think religious leaders, don’t do enough to get out. They have their small-their congregations and that’s where they leave it. I don’t think they get out into the community and go out and chastise people that are drug abusers and drug users. And domestic violence people. I don’t think they get out in their communities and chastise these people publicly...But I think Christianity, there again if they would do more it would probably cut down on the amount of people on drugs.”*

Another suggested the church could focus on the day-to-day needs of the community, saying:

*“But I think what we need to do is-- it's kind of the same thing as entitlements. We help feed ‘em, clothe ‘em, have special days for ‘em to come out to the church or we go out to them. A lot of drug users will never come to the church cause they got more respect than that. But sometimes we'll go into their community, go to where they're at, take ‘em something to eat, just meet their everyday needs.”*

Finally, another participant touched on unique strategy for engaging the community saying, *“Even if you got full-time pastors, they don't have office hours open for the community to come in and sit and just have some kind of consultation.”*

## Field Observations

Prior to the start of data collection, the PI relocated to the research area where she lived and worked throughout the research study. Although field observations were not included as a component of the research design, the PI kept notes on various experiences relevant to the study. The PI also did not regularly attend church, limiting her insider perspective, but she was directly linked to several churches through her familial network. She also worked with a church substance use prevention ministry and the local Baptist Association to educate the community on issues surrounding substance use disorder. Because of these experiences, she was able to observe many of the sentiments expressed by participants in the study. As an outsider looking in, the congregation orientation of the Lumbee Church institution was immediately apparent. Most church events, for example, appeared to be targeted for only church membership. Similarly, those who do not fit the norm of the congregation are often viewed with disdain or apprehension. This is particularly evident for individuals impacted by DRV, who are often met with stigma and shame. Not only is the issue not openly discussed within the context of the church, but it also seems many members feel that attending church alone, will help individuals impacted by DRV. Although the church as an institution frequently aids individuals through monetary donations and prayer, the church also appears to be uninclined to develop formal programming or services related to DRV. In most cases, however, it seems this sentiment can be contributed to a lack of knowledge, resources (particularly manpower) and general fear. Finally, churches seem to exert substantial effort helping communities outside of Robeson county via mission trips to other countries or American Indian reservations or through efforts such as Operation Christmas Child<sup>77</sup> versus

addressing issues internally. Given this, a real focus to change the church environment in this community will be required to effectively implement any community-based programming, including those that focus on DRV.

Despite this, the PI has observed a subtle change in the social environment. Early in the research, community efforts to combat the issue were few and fragmented. However, tragedies occurring within the community sparked some individuals to take a stance, many of whom were backed by a religious institution. Several communities, for example, hosted prayer walks to raise awareness of DRV, while others have begun to host or have opened the door for a discussion of support groups. This change is most apparent within Southern Baptist denominations who, unlike the United Methodist who has established DRV programming, are just beginning to understand their role in prevention and treatment. Regardless of its current role, the church in the Lumbee community is a powerful driving force shaping the perspectives of the community around all social issues, including DRV and their participation will be essential to combating this issue.

### **Discussion**

Early mental health advocacy and service efforts were traditionally spearheaded by religious leaders.<sup>78</sup> Today, some research findings indicate positive associations between religiosity and mental health.<sup>78-80</sup> Religion can be an avenue for coping and for providing meaning, purpose and an optimistic perspective in trying situations. Religious institutions offer a system of support, reducing isolation and loneliness and represent a resource that is available regardless of financial, social, physical, or mental health status<sup>78</sup>. Being part of a faith community is also seen as a critical component of individual recovery<sup>81</sup> with studies demonstrating decreased substance use among the more

religious.<sup>78, 82</sup> Many successful recovery programs such as Celebrate Recovery and Alcoholic Anonymous are also infused with religious or spiritual principles.<sup>83, 84</sup> This is also true for minority populations, like AIs, where spirituality and religious practices have shown to have positive influences on health behavior<sup>78, 85-87</sup> and treatment programs incorporating religion or spirituality are more successful than those without.<sup>78, 85, 88</sup> Some minority churches have even been found to offer more mental health services than predominantly white churches.<sup>89</sup>

Historically the Lumbee church was used as a means for coping with the effects of colonialism, serving as a place of communal support and a mechanism with which to protect traditions, culture and uplift the AI community. Although many of these characteristics remain today, the church appears to have adopted some of the oppressive ideals which it was intended to oppose. This is reflected in participants descriptions of a shift in the church orientation from a community to congregation, creating a competitive versus cooperating environment. Not only is this discord reflected at the institutional level demonstrated by the sheer number of churches, but within the context of the congregations as well. Harmful social practices such as “othering” have become ingrained within the fabric of the church, described by some as a “saint or sinner” mentality leading to the shaming and stigmatization of those whose who do not qualify as Saints; an unachievable ideal for which many, including church members, fall short. In this way, the church takes on the role of the oppressor, facilitating the cycle of violence and drug use in the community. For those who fall short, the church is seen as the only means for salvation; however, these individuals are rarely welcomed with open arms and when they are, the support systems available to them are often weak or nonexistent given



a reliance on prayer to resolve hardships. It is these types of practices that occur within the context of the social environment that ultimately influence prevention efforts at macro and micro levels. Stigma and shame, for example, generates fear which may hamper individuals or families desire to seek treatment or lead to policies and practices at the institutional level that seeks to ignore or isolate those impacted by DRV.

Despite these shortcomings, however, participants see the church as the most viable resolution to some of the social issues experienced by the Lumbee Tribal community. The church is one of the most highly respected community institutions giving it the social standing to make a substantial and long-lasting impact. Additionally, the church has access to considerable monetary and physical assets increasing the sustainability and reach of its efforts. Participants even suggested several strategies the church could implement to ensure its success such as pastoral trainings or increased community outreach. Much work needs to be done, however, before substantial change can occur.

### **Study Limitations**

The primary limitation of this research centered around data collection and analysis which was carried out by a single investigator which could have led to some researcher-imposed bias. The investigator, however, practiced reflexivity throughout each step of the process and used member-checking to ensure the appropriate interpretation of the data. Another limitation of the research was its focus on one unique AI tribal group. Because of the distinct characteristics of the Lumbee Tribe, the study results may not be applicable to other populations or church organizations. Finally, the perspectives highlighted in this approach may not be an accurate reflection of the Lumbee community.

For example, individuals under the age of 21 were not included in this study. Given that substance use and violence tend to be concentrated among youth, including their perspective would have strengthened the results of this research. Similarly, including Lumbee participants whom have are currently incarcerated because of drug use or violence may reveal key insights into prevention and treatment not identified in the context of this study.

### **Implications for Future Research, Programming and Policy**

Given the many positive associations between religion and health generally, as well as the increasing role faith-based organizations play in the provision of health and welfare services,<sup>90 91-95</sup> further research is needed on the role of the church in the provision of mental health programs.<sup>96</sup> Although the Church was central to the community perspective on DRV, it was not the primary focus of the study. Future research on the role of the church in DRV and other mental health issues among the Lumbee and other ethnic and culturally diverse communities may want to examine (1) religious institutions as partners of health professionals;<sup>90</sup> (2) their capacity and motivation to include treatment as an integral role of the church;<sup>90, 97</sup> (3) the impact of the perception of mental health professionals, particularly in minority communities;<sup>98</sup> (4) strict policies on social practices such as abstinence from alcohol or non-affirming which have shown to increase feelings of homophobia, social isolation, and poor mental health;<sup>78, 99</sup> (5) the role church institutions play in shaping local and regional policy; (6) differences in practice and perceptions across denominations (7) evaluations of existing programming; (8) interventions such as educating faith leaders and congregations or

implementing in-house DRV policies, both focused on modifying the church environment to reduce stigma and increase support.

### Conclusion

It is important to note that the conclusions drawn from this research are not specific to the church, but reflect a larger, historical system of oppression and conflict. In the Lumbee community, the church represents just one of many mechanisms participants identified which facilitate DRV. The church is unique, however, in that participants also felt it provided the greatest opportunity to facilitate long-term recovery from DRV. The findings of this study suggest that modifying the social environment of religious institutions to include positive messages of recovery and avenues of support, as well as promoting collaborations between religious, public, and private institutions will work to reduce stigma, address issues surrounding sustainability, and cultivate a sense of unity that is critical to the overall well-being of communities.

### References

1. National Drug Intelligence Center, *National Drug Threat Assessment*, U.S. Department of Justice, Editor. 2011, National Drug Intelligence Center, National Threat Analysis Branch.
2. National Institute on Drug Abuse. *Nationwide trends*. Drug Facts, 2013 Available from: <http://www.drugabuse.gov/publications/drugfacts/nationwide-trends>.
3. Caulkins, J.P., et al., *The marijuana legalization debate: Insights for Vermont*. 2015.
4. Department of Health and Human Services, *HHS acting secretary declares public health emergency to address national opioid crisis*. 2017.
5. DEA Strategic Intelligence Section, *National Drug Threat Assessment*, U.S. Department of Justice, Editor. 2017.
6. Centers for Disease Control and Prevention. *Opioid Overview: Drug Overdose Death Data*. 2017; Available from: <https://www.cdc.gov/drugoverdose/data/statedeaths.html>.
7. De La Rosa, M., et al., *Drugs and violence: Causes, correlates, and consequences*, U.S. Department of Health and Human Services-National Institute on Drug Abuse, Editor. 1990: Rockville. p. 293.

8. National Institute on Drug Abuse. *Health Consequences of Drug Misuse*. 2017; Available from: <https://www.drugabuse.gov/related-topics/health-consequences-drug-misuse>.
9. Verona, E., B. Murphy, and S. Javdani, *Gendered pathways: Violent childhood maltreatment, sex exchange, and drug use*. Psychology of Violence, 2015.
10. Chen, P. and K.C. Jacobson, *Developmental trajectories of substance use from early adolescence to young adulthood: Gender and racial/ethnic differences*. Journal of Adolescent Health, 2012. **50**(2): p. 154-163.
11. Rojas-Gaona, C.E., J.S. Hong, and A.A. Peguero, *The significance of race/ethnicity in adolescent violence: A decade of review, 2005–2015*. Journal of Criminal Justice, 2016. **46**: p. 137-147.
12. Salas-Wright, C.P., et al., *Age-related changes in the relationship between alcohol use and violence from early adolescence to young adulthood*. Addictive Behaviors Reports, 2016. **4**: p. 13-17.
13. Wicomb, R., et al., *Illicit drug use and violence in acute psychosis among acute adult admissions at a South African psychiatric hospital*. African Health Sciences, 2018. **18**(1): p. 132-136.
14. Green, D., *The Trump hypothesis: Testing immigrant populations as a determinant of violent and drug-related crime in the United States*. Social Science Quarterly, 2016. **97**(3): p. 506-524.
15. Reed, J. and P. Whitehouse, *Harsher drug prohibition won't stop violence, but regulation might*. The BMJ, 2018. **361**.
16. Enamorado, T., et al., *Income inequality and violent crime: Evidence from Mexico's drug war*. Journal of Development Economics, 2016. **120**: p. 128-143.
17. Cerdá, M., et al., *Reducing violence by transforming neighborhoods: A natural experiment in Medellín, Colombia*. American Journal of Epidemiology, 2012. **175**(10): p. 1045-1053.
18. Furr-Holden, C.D., et al., *Neighborhood environment and marijuana use in urban young adults*. Prevention Science, 2015. **16**(2): p. 268-278.
19. Korcha, R.A., et al., *Violence-related injury and gender: The role of alcohol and alcohol combined with illicit drugs*. Drug and Alcohol Review, 2014. **33**(1): p. 43-50.
20. de Bont, R., et al., *Drug-related homicide in Europe—First review of data and sources*. International Journal of Drug Policy, 2018. **56**: p. 137-143.
21. Cohen, J.A., *The highs of tomorrow: Why new laws and policies are needed to meet the unique challenges of synthetic drugs*. Journal of Law & Health, 2014. **27**(2): p. 164-185.
22. Ford, C. and J. Bressan, *Ending the mass criminalisation of people who use drugs: a necessary component of the public health response to hepatitis C*. BioMed Central Infectious Diseases, 2014. **14**(6): p. 1-5.
23. Revels, A.A. and J.R. Cummings, *Violence and injury in Indian Country: The impact of drug trafficking on American Indian reservations with international boundaries*. American Indian Quarterly, 2014. **38**(3).
24. National Drug Intelligence Center, *Indian Country Drug Threat Assessment*, U.S. Department of Justice, Editor. 2008, National Drug Intelligence Center,.

25. American Psychiatric Association, *Mental health disparities: American Indians and Alaska Natives*. 2010, Office of Minority and National Affairs,. p. 6.
26. Hardy, A. and K. Brown-Rice, *Violence and residual associations among Native Americans living on tribal lands*. The Professional Counselor, 2016. **6**(4).
27. Gryczynski, J. and J.L. Johnson, *Challenges in public health research with American Indians and other small ethnocultural minority populations*. Substance Use & Misuse, 2011. **46**(11): p. 1363-1371.
28. U.S. Department of Commerce. *U.S. Census Bureau*, 2010. Available from: <http://www.census.gov/>.
29. Lumbee Tribe of North Carolina. *Official website of the Lumbee Tribe of North Carolina*, 2018. Available from: <http://lumbeetribe.com/>.
30. Federal Bureau of Investigation, *North Carolina offenses known to law enforcement by metropolitan and nonmetropolitan counties*, in *Crime in the United States*. 2012, United States Department of Justice.
31. Robeson County Department of Public Health, *State of the county health report*. 2013: Lumberton NC. p. 4.
32. Robeson County Health Department, Southeastern Regional Medical Center, and Healthy Robeson Task Force, *Robeson County community health assesment*. 2014.
33. Hixenbaugh, M., *Robeson County is one of most violent in state*, in *The Fayetteville Observer*. 2011: Fayetteville.
34. National Institute on Minority Health and Health Disparities, *HD Pulse: An ecosystem of health disparities and minority health resources*, 2018. National Institute of Health, U.S. Department of Health and Human Services.
35. Raab, S., *Reasonable doubt*, in *GQ*. 1994.
36. Patterson, O., *The press held hostage: Terrorism in a small North Carolina town*. American Journalism, 1998. **15**(4): p. 125-139.
37. Robeson County Department of Public Health, *State of the county health report*. 2012: Lumberton NC. p. 4.
38. Gilbert, L., et al., *Linking drug-related activities with experiences of partner violence: A focus group study of women in methadone treatment*. Violence & Victims, 2001. **16**(5): p. 517-536.
39. Copes, H., A. Hochstetler, and S. Sandberg, *Using a Narrative Framework to Understand the Drugs and Violence Nexus*. Criminal Justice Review, 2015. **40**(1): p. 32-46.
40. Kupferer, H.J. and J.A. Humphrey, *Fatal Indian violence in North Carolina* Anthropological Quarterly, 1975. **48**(4): p. 8.
41. Humphrey, J.A. and H.J. Kupferer, *Homicide and suicide among the Cherokee and Lumbee Indians of North Carolina*. International Journal of Social Psychiatry 1982. **28**: p. 7.
42. Federal Bureau of Investigation. *Violent crime*. Crime in the United States 2013; Available from: [https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/violent-crime/violent-crime-topic-page/violentcrimemain\\_final](https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/violent-crime/violent-crime-topic-page/violentcrimemain_final).

43. Angell, G.B. and G.M. Jones, *Recidivism, risk, and resiliency among North American Indian parolees and former prisoners*. Journal of Ethnic and Cultural Diversity in Social Work, 2003. **12**(2): p. 61-77.
44. Bell, R., et al., *Perceptions and psychosocial correlates of bullying among Lumbee Indian youth*. American Indian and Alaska Native Mental Health Research (Online), 2014. **21**(1): p. 1-17.
45. Maume, M.O. and C.L. Lanier, *Social isolation and weapon use in intimate partner violence incidents in rural areas*. International Journal of Rural Criminology, 2014. **2**(2): p. 244-267.
46. Smokowski, P.R., et al., *Ethnic identity and mental health in American Indian youth: Examining mediation pathways through self-esteem, and future optimism*. Journal of Youth and Adolescence, 2013. **43**(3): p. 343-355.
47. Maynor, M. and J. Kertesz. *Sounds of Faith: Religious History*. 2002; Available from: <http://www.unc.edu/~mmaynor/>.
48. Smith, J.M. and L.J. Smith. *The Lumbee Methodists: Getting to know them, a folk history*. 1990. Raleigh, NC: Commission of Archives and History, North Carolina Methodist Conference.
49. Association of Religion Data Archives, *County membership report*. 2010.
50. Association of Statisticians of American Religious Bodies, *U.S. religion census 1952-2010*. 2010.
51. NC Conference Committee on Native American Ministries. *Native American Cooperative Ministry*. 2018; Available from: [nativeamericanministries.org/native-american-cooperative-ministry/](http://nativeamericanministries.org/native-american-cooperative-ministry/).
52. Burnt Swamp Baptist Association. 2018; Available from: [www.burntswamp.org/](http://www.burntswamp.org/).
53. Southern Baptist Convention, *Basic beliefs* 2018.
54. Cummings, M., *Director of Burnt Swamp Baptist Association*. 2017.
55. Baptist State Convention of North Carolina. *Our Beliefs: The Christian and Social Order*. 2018; Available from: <https://www.ncbaptist.org/index.php?id=72>.
56. Southern Baptist Convention. *On alcohol use in America*. 2006; Available from: <http://www.sbc.net/resolutions/1156/on-alcohol-use-in-america>.
57. United Methodist Church. *Social Principles and Social Creed*. 2018; Available from: [www.umc.org/what-we-believe/social-principles-social-creed](http://www.umc.org/what-we-believe/social-principles-social-creed).
58. Groves, W.B. and R.J. Sampson, *Community structure and crime: Testing social-disorganization theory*. American Journal of Sociology 1994. **94**(4): p. 774-802.
59. Lanier, C. and L. Huff-Corzine, *American Indian homicide: A county-level analysis utilizing social disorganization theory*. Homicide Studies, 2006. **10**(3): p. 181-194.
60. Gorman, D.M., et al., *Implications of systems dynamic models and control theory for environmental approaches to the prevention of alcohol- and other drug use-related problems*. Substance Use & Misuse, 2004. **39**(10-12): p. 1713-1750.
61. Goldstein, P.J., *The drugs/violence nexus: A tripartite conceptual framework*. Journal of Social Issues, 1985(Fall ): p. 493-506.
62. McLeroy, K.R., et al., *An ecological perspective on health promotion programs*. Health Education & Behavior, 1988. **15**(4): p. 351-377.

63. Smokowski, P. *Injury Center: Violence prevention*, 2012. Available from: [http://www.cdc.gov/violenceprevention/ace/centers/university\\_of\\_northcarolina.html](http://www.cdc.gov/violenceprevention/ace/centers/university_of_northcarolina.html).
64. Bell, R.A., et al. *The Lumbee Rite of Passage: A cultural enhancement program for Lumbee Indian youth to address cultural awareness and psychosocial health*. in *Advancing Native Health and Wellness Conference*. 2012. Anchorage, Alaska.
65. Bowen, G.A., *Naturalistic inquiry and the saturation concept: A research note*. *Qualitative Research*, 2008. **8**(1): p. 137-152.
66. Francis, J.J., et al., *What is an adequate sample size? Operationalising data saturation for theory-based interview studies*. *Psychology & Health*, 2009. **25**(10): p. 1229-1245.
67. Coyne, I.T., *Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries?* *Journal of Advanced Nursing*, 1997. **26**(3): p. 623-630.
68. Patton, M.Q., *Qualitative research & evaluation methods*. 3 ed. 2002: SAGE Publications, Inc 688.
69. Corbin, J.M. and A. Strauss, *Grounded theory research: Procedures, canons, and evaluative criteria*. *Qualitative Sociology*, 1990. **13**(1): p. 3-21.
70. Valois, R.F., et al., *Evaluation of the South Carolina Teen Pregnancy Prevention Initiative: Community key leader survey and results*. 2002, U.S. Department of Health & Human Services, South Carolina Department of Social Services: Columbia, SC.
71. Earls, F.J., et al., *Project on Human Development in Chicago Neighborhoods (PHDCN): Exposure to violence (subject), wave 1*, U.S. Department of Justice, Editor. 1997, Interuniversity Consortium for Political and Social Research Ann Arbor, Michigan.
72. Berger, R., *Now I see it, now I don't: Researcher's position and reflexivity in qualitative research*. *Qualitative Research*, 2015. **15**(2): p. 219-234.
73. Noble, H. and J. Smith, *Issues of validity and reliability in qualitative research*. *Evidence-Based Nursing*, 2015: p. ebnurs-2015-102054.
74. Kornbluh, M., *Combatting Challenges to Establishing Trustworthiness in Qualitative Research*. *Qualitative Research in Psychology*, 2015. **12**(4): p. 397-414.
75. Malterud, K., *Qualitative research: Standards, challenges, and guidelines*. *The Lancet*, 2001. **358**(9280): p. 483-488.
76. Ash, J.S. and K.P. Guappone, *Qualitative evaluation of health information exchange efforts*. *Journal of Biomedical Informatics*, 2007. **40**(6): p. S33-S39.
77. Samaritan's Purse International Relief. *Operation Christmas Child*. 2018; Available from: [https://www.samaritanspurse.org/operation-christmas-child/the-greatest-journey/?utm\\_source=Ggl&utm\\_medium=cpc&utm\\_campaign=m\\_YGGJ-B18V\\_GGLOCC-TGJ&gclid=EAIaIQobChMIiNTI5cmm3AIVh8DICH2PkQPREAAYASAAEgKkSPD\\_BwE](https://www.samaritanspurse.org/operation-christmas-child/the-greatest-journey/?utm_source=Ggl&utm_medium=cpc&utm_campaign=m_YGGJ-B18V_GGLOCC-TGJ&gclid=EAIaIQobChMIiNTI5cmm3AIVh8DICH2PkQPREAAYASAAEgKkSPD_BwE).
78. Koenig, H.G., *Research on religion, spirituality, and mental health: A review*. *The Canadian Journal of Psychiatry*, 2009. **54**(5): p. 283-291.

79. Abdel-Khalek, A.M. and D. Lester, *The association between religiosity, generalized self-efficacy, mental health, and happiness in Arab college students*. Personality and Individual Differences, 2017. **109**: p. 12-16.
80. Snider, A.-M. and S. McPhedran, *Religiosity, spirituality, mental health, and mental health treatment outcomes in Australia: A systematic literature review*. Mental Health, Religion & Culture, 2014. **17**(6): p. 568-581.
81. Leamy, M., et al., *Conceptual framework for personal recovery in mental health: Systematic review and narrative synthesis*. The British Journal of Psychiatry, 2011. **199**(6): p. 445-452.
82. Roland, E.J. and L.A. Kaskutas, *Alcoholics Anonymous and church involvement as predictors of sobriety among three ethnic treatment populations*. Alcoholism Treatment Quarterly, 2002. **20**(1): p. 61-77.
83. Alcoholics Anonymous World Services, I. *The twelve steps of alcoholics anonymous*. 2018; Available from: [https://www.aa.org/pages/en\\_US/what-is-aa](https://www.aa.org/pages/en_US/what-is-aa).
84. Celebrate Recovery. *Celebrate Recovery: A Christ centered 12-step program*. 2018; Available from: <https://www.celebraterecovery.com/>.
85. Slagle, A. and J. Weibel-Orlando, *The Indian Shaker Church and Alcoholics Anonymous: Revitalistic curing cults*. Human Organization, 1986. **45**(4): p. 310-319.
86. Spangler, J.G., et al., *Dual tobacco use among Native American adults in southeastern North Carolina*. Preventive Medicine, 2001. **32**(6): p. 521-528.
87. Torres Stone, R.A., et al., *Traditional practices, traditional spirituality, and alcohol cessation among American Indians*. Journal of Studies on Alcohol, 2006. **67**(2): p. 236-244.
88. McCormick Collins, J., *The Indian Shaker Church: A study of continuity and change in religion*. Southwestern Journal of Anthropology, 1950. **6**(4): p. 399-411.
89. Blank, M.B., et al., *Alternative mental health services: The role of the Black church in the south*. American Journal of Public Health, 2002. **92**(10): p. 1668-1672.
90. Leavey, G., K. Loewenthal, and M. King, *Challenges to sanctuary: The clergy as a resource for mental health care in the community*. Social Science & Medicine, 2007. **65**(3): p. 548-559.
91. Lindley, L.L., et al., *Informing faith-based HIV/AIDS interventions: HIV-related knowledge and stigmatizing attitudes at Project F.A.I.T.H. churches in South Carolina*. Public Health Reports, 2010. **125**(1\_suppl): p. 12-20.
92. Yanek, L.R., et al., *Project Joy: Faith based cardiovascular health promotion for African American women*. Public Health Reports, 2001. **116**(1\_suppl): p. 68-81.
93. Powell, T.W., et al., *"Let me help you help me": Church-based HIV prevention for young Black men who have sex with men*. AIDS Education and Prevention, 2016. **28**(3): p. 202-215.
94. Dodani, S., et al., *HEALS: A faith-based hypertension control and prevention program for African American churches: training of church leaders as program interventionists*. International Journal of Hypertension, 2011. **2011**.



95. Stephen, C. and I. Morrison, *Group singing fosters mental health and wellbeing: findings from the East Kent "singing for health" network project*. *Mental Health and Social Inclusion*, 2011. **15**(2): p. 88-97.
96. Hankerson, S.H. and M.M. Weissman, *Church-based health programs for mental disorders among African Americans: A review*. *Psychiatric Services*, 2012. **63**(3): p. 243-249.
97. Chevalier, L., et al., *Gaps in preparedness of clergy and healthcare providers to address mental health needs of returning service members*. *Journal of Religion and Health*, 2015. **54**(1): p. 327-338.
98. Dempsey, K., S.K. Butler, and L. Gaither, *Black churches and mental health professionals: Can this collaboration work?* *Journal of Black Studies*, 2016. **47**(1): p. 73-87.
99. Barnes, D.M. and I.H. Meyer, *Religious affiliation, internalized homophobia, and mental health in lesbians, gay men, and bisexuals*. *American Journal of Orthopsychiatry*, 2012. **82**(4): p. 505-515.

Investigating Drug-related Violence in a Southeastern American Indian Tribe: Lessons  
learned and strategies for future research, prevention and treatment<sup>§</sup>

<sup>§</sup>Revels AA, Valois RF, Bell RA, Spencer SM, Farber, NB. To be submitted to  
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## **Abstract**

American Indians represent a small percentage of the United States population yet experience disparate rates of violent crime and substance use. Despite this, American Indians continue to be underrepresented in research and available data is often inaccurate or limited in scope. The purpose of this article is to provide a detailed description of the qualitative methods utilized to better understand the multi-level social and environmental factors impacting drug-related violence among the Lumbee, a southeastern American Indian tribe. By highlighting the methodological approach, challenges faced throughout the study, and recommendations for future research, more comprehensive and culturally relevant data can be collected among the Lumbee and other similar communities.

## **Keywords**

Drug-Related Violence, American Indian, Lumbee, Qualitative Methods, Identity

## **Introduction**

In the United States (U.S.) 5.2 million people (1.7% of the total population) self-identify as American Indian (AI) or Alaska Native (AN).<sup>1</sup> The majority (41%) of AI/ANs reside in the western region of the U.S., followed by the south. Ten U.S. states (California, Oklahoma, Arizona, Texas, New York, New Mexico, Washington, North Carolina, Florida, and Michigan) contain most AIs, with more than two-thirds living in metropolitan areas, away from traditional tribal lands.<sup>1,2</sup>

Enumeration of AIs has been complicated because the definition of AI is largely dependent on social, political, and cultural inclinations. Even today, differing criteria for what it means to be AI can be found at the federal, state, tribal, and individual level.<sup>3</sup> In

fact, no single criteria or standard establishes ones AI identity. The U.S. Census defines an AI based on criteria laid out by the U.S. Office of Management and Budget, who states an AI is “a person having origins in any of the original peoples of North and South America and who maintains tribal affiliation or community attachment.”<sup>1</sup>

From a political and legal perspective, the Bureau of Indian Affairs (BIA) defines an AI as an enrolled member of a federally recognized tribe. A federally recognized tribe possesses inherent rights of sovereignty and is entitled to certain benefits from the federal government. There are currently 573 federally recognized tribal groups in the U.S or approximately 1,978,099 enrolled members (less than half of that reported by Census data). The BIA also acknowledges an ethnological definition of an AI which includes knowledge of tribal culture or history, familial ties, and self-identification.<sup>4</sup> State and tribal governments frequently utilize a combination of aspects from both definitions to establish AI identity. Many states, for example, have recognized approximately 100 additional tribal groups not recognized by the federal government.<sup>2</sup> The extent with which an AI identifies with traditional tribal cultural values and practices also exists on a continuum, where diversity can be found within the context of a single AI community.<sup>3</sup>

Making generalizations about AIs using existing data is problematic given variations how AIs are defined, acculturative effects, and their location.<sup>3,5</sup> Limitations in the availability, reliability and specificity of data due to non-reporting, differing collection and reporting methodologies, and conflicting law enforcement jurisdiction represent numerous obstacles.<sup>3, 6-8</sup> Often, standard data collection tools are not ideal for use among AIs.<sup>8</sup> Racial misclassification, for example, is a significant limitation of reported data, particularly among non-reservation dwelling AIs. Errors have been found in multiple data

sources including Medicare, death certificates, HIV/AIDs and cancer surveillance systems. Mechanisms leading to misclassifications involve survey designs with racial classifications based on appearances, as well as AIs fear of reporting race due to potential discrimination.<sup>8,9</sup>

A general lack of reporting of AI data at the tribal level represents another substantial data limitation. AIs are frequently collapsed into an “other” category or are omitted from analysis entirely because of insufficient sample sizes.<sup>8,10</sup> How variables are defined and operationalized is another challenge.<sup>11</sup> Race, for example, is often used in research as a proxy for culture. Many racial groups such as AIs, however, are comprised of hundreds of unique cultural groupings.<sup>12</sup> These substantial data errors also likely result in the inequitable distribution of resources.<sup>9</sup>

Data discrepancies become more alarming when it comes to dangerous issues surrounding drug trafficking, substance use, and violence, all of which are issues experienced disproportionately by AIs when compared to other racial/ethnic groups.<sup>7, 13-18</sup> AIs, have an increased prevalence of health risk behaviors and exposure to violent crimes such as those associated with drug-trafficking and substance use.<sup>7,8</sup> Rates of substance use among AIs also rank higher than any other racial/ethnic group in the U.S.<sup>14, 15, 18, 19</sup> and violent-victimization among AIs has been found to be twice that of African Americans and 2.5 times greater than whites.<sup>2</sup>

Much like other AI data, it is highly likely that reported statistics surrounding drug use, drug trafficking, and violence in AI communities are considerably underestimated<sup>6, 20</sup> and inaccurate. AI drug use disorders, for example, were not reported in national surveys until 2001<sup>21</sup> and of the 573 federally recognized tribes in the U.S., only 95 reported

violent crime data to the FBI's Uniform Crime Report (UCR) in 2016, up from 12 tribes in 2008. A large percentage of crime among AIs, particularly intimate partner violence (50%), also goes unreported to any law enforcement agency.<sup>3</sup> Existing data are also drawn primarily from law enforcement, governmental agencies, and health care services each with unique data collection and reporting methodologies which focus on their priorities.<sup>11, 22</sup> The UCR for example does not collect data regarding the relationship between the victim and offender and some tribal law enforcement agencies lack classification codes for certain offenses.<sup>3</sup> Overlapping and conflicting law enforcement jurisdiction adds to the complexity of data collection and reporting efforts.<sup>3, 6, 7, 23, 24</sup>

Limitations of AI data reduces the capacity of researchers and policymakers to draw conclusions, recognize patterns across cases, or understand the multidimensional consequences of drugs and violence within AI communities.<sup>6, 14, 17</sup> Efforts are being made to remedy these limitations, however. For the first time in 2009, the UCR disaggregated tribal level data. In 2010, the Tribal Law and Order Act became the first policy requiring the Bureau of Justice Services (BJS) to support the implementation of a tribal data collection system.<sup>25</sup> In 2016, the BJS established a tribal justice and law enforcement panel that also included research institutions.<sup>26</sup> Recently, a database of missing and murdered indigenous women, covering cases from the U.S. to Canada since 1900 was also compiled.<sup>27</sup>

Despite efforts to improve data collection and extensive research of the drug/violence nexus generally, much of the relationship has gone unexplored or is limited;<sup>28-30</sup> a fact likely magnified at the tribal level. A better understanding of the context of substance use and violence has been cited as essential first step to fully

explicate drug-related violence (DRV).<sup>13, 31-35</sup> Investigations into aspects of rural communities<sup>29, 36, 37</sup> and the unique cultural attributes of certain populations such as AIs<sup>17, 38</sup> have been cited as two critical components requiring further exploration. Limitations associated with data collection, an issue amplified among AIs, have restricted understanding of these contextual nuisances associated with DRV. Because the ability to understand a phenomenon and/or implement effective interventions and policy is dependent upon an understanding of the context in which it occurs,<sup>11, 35, 39, 40</sup> discerning the effect of context on DRV amongst a particular community is critical for program planning and implementation.

Given the challenges and limitations surrounding data collection in Indian Country, the primary purpose of this article is to describe the methodology used in a study to better understand DRV among the Lumbee, a southeastern American Indian Tribe. With nearly 55,000 members, the Lumbee Tribe of North Carolina (NC) represents the largest AI tribe in the state and the 9<sup>th</sup> largest tribe in the nation.<sup>41</sup> The Lumbee have a unique and complex history<sup>41-43</sup> and have faced a legacy of violence, drug trafficking, and substance use.<sup>44</sup> The heart of the Lumbee community, Robeson County, is often considered the most violent county in the state of NC<sup>45, 46</sup> and has been the center of several national controversies related to the distribution of illegal narcotics,<sup>45</sup> including the murders of several prominent community figures.<sup>44, 45</sup> Moreover, substance use, particularly prescription drug use, has been consistently identified as a leading health concern among AIs and a priority area for prevention efforts in the county.<sup>47, 48</sup>

A qualitative approach was selected for this research because it aimed to engage an AI population in a discussion of their perspective of contextual issues influencing

DRV. Qualitative methods have been found to have numerous advantages, particularly for AI populations. Qualitative methods allow the researcher to thoroughly explore and describe a concept, including how the target population perceives, experiences and responds to an issue.<sup>29, 39, 49</sup> A qualitative approach is also excellent for understanding context because it allows for a holistic analysis of a system.<sup>50</sup> Utilizing this method generates rich, descriptive data that cannot be gathered through quantitative approaches which are limited in their capacity to understand intricate cultural issues and frequently assume a neutral context.<sup>5</sup> Qualitative approaches are ideal for inquiries into culture and various methods have been utilized to better understand mental health issues among AI populations in the past.<sup>5, 51</sup> This approach is also an ideal method for obtaining valid data on crime,<sup>52</sup> with the individual perspective being identified as the best unit to assess the etiology of types of DRV at community levels.<sup>35</sup> Community engagement in research is also increasingly accepted as a robust methodological approach for attaining the most realistic understanding of underlying contextual issues.<sup>39</sup> Engaging the community in this manner may provide therapeutic benefits<sup>53</sup> and empower participants to raise awareness of the issue by discussing the topic more openly within the community.<sup>54</sup> This is particularly important given efforts to silence the AI voice in the past.<sup>5</sup> Despite these advantages, the opinions and perspective of AIs has been historically lacking across numerous fields of research.<sup>40, 55, 56</sup> The impact of the context of DRV is also a gap in existing investigations of the drug/violence nexus.<sup>13, 31</sup> Much research to date has emphasized the impact of individual level factors assuming a context free environment.<sup>34</sup>

Situated in a rural environment, with distinct cultural characteristics, the Lumbee present an invaluable opportunity to enrich our understanding of the drug/violence nexus



in Indian Country. Through the collection of primary data via one-on-one interviews with Lumbee Tribal members and Key Leaders. This approach allowed for an enhanced understanding of how tribal members experience, perceive and respond to DRV. The research described in this article aimed to overcome certain data and research limitations by moving beyond racial classifications to emphasize the cultural characteristics of the Lumbee Tribe. Challenges, lessons learned, and recommendations for future research among the Lumbee and similar indigenous populations are highlighted.

### **Theoretical Assumptions and Conceptual Framework**

Integrating criminological and public health theory, a framework for the enhanced understanding of DRV among the Lumbee Tribe was developed to guide this research. The framework in Figure 4.2 focuses on multilevel, interacting, contextual factors which may substantially influence the extent and prevalence of drug-related behaviors, allowing for a better understanding of the primary barriers to and opportunities for addressing DRV in a particular community.<sup>57</sup> The framework links directly to Social Disorganization Theory which assumes a person's physical and social environment influences their behavioral choices, including increases in crime and delinquency.<sup>10, 58</sup> This model was adapted from three existing frameworks identified in the literature. First, the tripartite framework by Goldstein which suggests DRV can be understood through three primary dimensions: 1) psychopharmacological, describing effects of substances on individual behavior; 2) economic compulsive, including violence arising due to a need to purchase drugs for personal use; and 3) systemic, violence intrinsic to the purchase and selling of illegal narcotics.<sup>59</sup> Second, the factors identified within the triangle (i.e., economic) were adapted from a conceptual scheme of the National Institute on Drug Abuse.<sup>35</sup> The third framework, the socio-ecological model, assumes identified factors interact to influence

behavior at multiple levels (i.e., the hierarchical nature of the triangle).<sup>60</sup> This framework was utilized to guide the research study, informing the approach selected, development of the interview guides, and a guide for the interpretation of data.

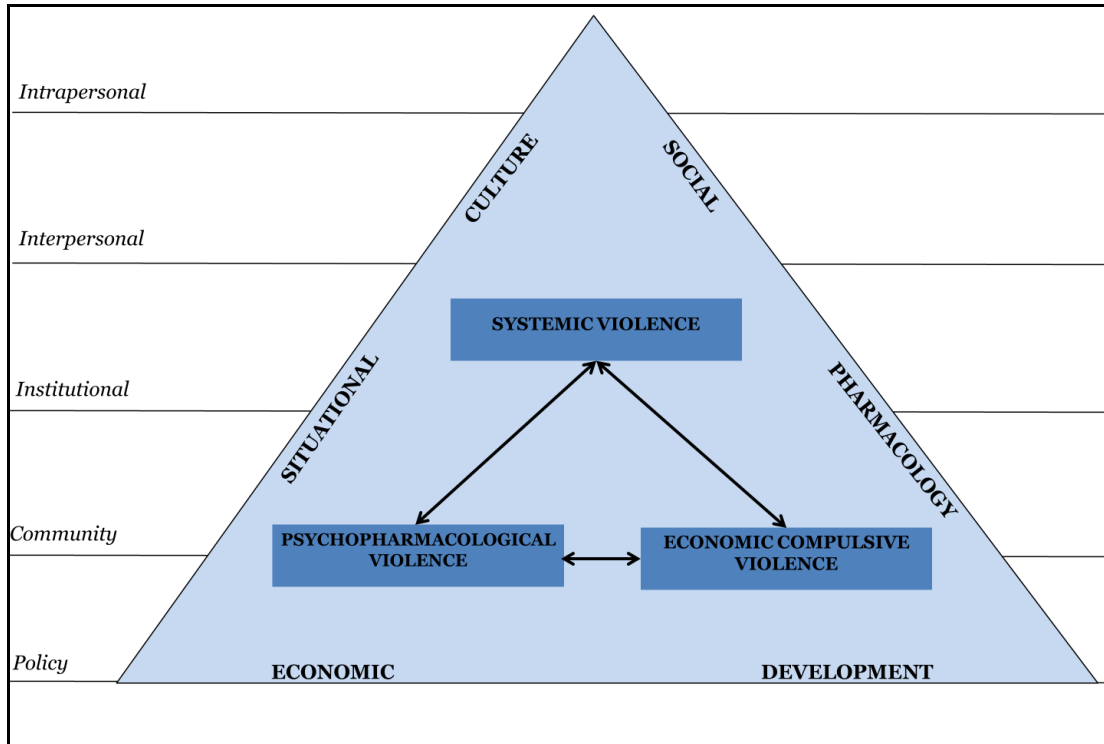


Figure 4.2. Multi-level, social & physical environmental factors impacting types of DRV

## Methods

### Study Overview

Using purposeful and theoretical sampling approaches, 17 Key Leaders and 20 enrolled members of the Lumbee Tribe were recruited to complete one-on-one, semi-structured, in-depth interviews regarding their perceptions and experiences of DRV in their community. All study activities were reviewed and approved by the University of South Carolina Institutional Review Board for the rights of human participants in research (00035161), the North Carolina Department of Public Safety (1604-01), and the

Lumbee Tribal Government (in a meeting with the Tribal Administrator in February of 2014 and presentation to the Lumbee Tribal Health Committee on April 2016 to approve the project and November 2018 to report study findings).

### **Setting**

This study was conducted primarily in Robeson County, North Carolina and the surrounding counties. Robeson County is the epicenter of the Lumbee Tribe and home to the Lumbee Tribal Government. Lumbees represent the largest minority group in the county, accounting for 37% of the population.<sup>48, 61</sup> The recruitment area also extended to surrounding counties where a large percentage of tribal members reside including Scotland, Hoke, Cumberland, Bladen, and Columbus.<sup>41</sup>

### **Sample**

The total study sample included 37 participants, comprising two subsamples: 17 Key Leaders and 20 Lumbee Tribal members. The total sample size was determined based on the qualitative research principles of saturation and sufficiency. Saturation is achieved when no new data, themes, and coding have been identified and when the depth of data is considered both rich (i.e., detailed, intricate) and thick (i.e., quantity of interview data). Strategies incorporated to ensure saturation was achieved included utilizing the same questions, interviewing participants who were not experts in the topic area and incorporating data triangulation strategies across the application of theory, approach, and analysis.<sup>62</sup> Achieving saturation at a sample size of 37 is in line with previous research.<sup>63-67</sup>

**Key Leaders.** The “Key Leaders” who participated in this study were defined as individuals holding leadership positions within the Lumbee community who directly

interact with DRV via their organization of employment (i.e., administrative, managerial or general leadership roles) or through volunteer activities. These positions included police chiefs, church pastors, tribal council members, and mental health experts. Given their experience, Key Leaders are information-rich, making their perspectives critical to understanding the context of DRV as experienced by the Lumbee and offering insight on social, economic, and situational factors influencing elevated levels of DRV in the community. All Key Leaders were aged 22 and older, worked in the community for at least two years and were familiar with the community and its assets. Key Leaders were not required to be Lumbee. A total of 17 Key Leaders were recruited to participate in the study.

**Members of the Lumbee Tribe.** Participants in this group included enrolled Lumbee tribal members aged 22 and older and were purposively selected to vary across characteristics such as gender, residence, family composition, religious affiliation, socioeconomic status, and experiences with DRV to achieve maximum variation within the sample. Ensuring diversity across participant characteristics was critical for capturing a broad perspective of DRV within the Lumbee Tribal community. A total of 20 Lumbee Tribal Members were recruited to participate in the study.

### **Recruitment**

This study employed purposeful and theoretical sampling procedures<sup>68</sup> for data collection at the individual level to attain diverse perspectives<sup>69, 70</sup> from both Key Leaders and the members of the Lumbee Tribe.

**Key Leaders.** Key Leaders were sampled in two phases utilizing a combination of criterion, snowball, and theoretical sampling.<sup>68, 69, 71</sup> In Phase 1, criterion sampling was

used to identify organizations in the Lumbee community who directly interface with DRV. These included local Police Departments, Probation Offices, Alcohol, Tobacco, and Other Drug Abuse Specialists, the Board of Education, hospitals, AI Churches, and the Lumbee Tribal Government. Within these organizations, individuals meeting the inclusion criteria were contacted to participate. Key Leaders were initially recruited through contact information attained from a professional organization or through networking at local community events. Key Leaders were asked in person or were sent invitations via email to verify eligibility and elicit their participation in interviews. In Phase 2, a combination of snowball and theoretical sampling was used to identify new participants. Additional participants were recruited via referrals from existing participants, while others were identified by reviewing gaps in the existing sample and findings from preliminary reviews of the data. Recruitment continued until theoretical saturation was attained.

**Members of the Lumbee Tribe.** Lumbee Tribal members were also recruited in two phases. Maximum Variation Sampling<sup>69, 72</sup> was utilized to recruit participants who varied across characteristics such as age, gender, residence, family composition, religious affiliation, socioeconomic status, and experience with DRV. In Phase 1, convenience sampling was used to identify participants via flyers distributed throughout the community and announcements made at local events. In Phase 2, snowball and theoretical sampling strategies<sup>69</sup> were used to identify new participants via referrals and findings from preliminary reviews of the data. Additional participants were selected based on principles of maximum variation and theoretical saturation. Eligibility for

participation was confirmed at the initial point of contact via email, phone, or face-to-face.

## **Procedure**

**Interview Guide.** Two semi-structured interview guides, tailored to each subgroup, were developed for this study utilizing items adapted from a project with Lumbee gatekeepers,<sup>63</sup> a key leader study on teen pregnancy,<sup>73</sup> and the U.S. Department of Justice’s Exposure to Violence Survey.<sup>74</sup> Sample instruments provided insight into specific topics to focus questions on, approaches for framing questions, and overall structure for the interview guide. Some items were also adapted for this study. For example, when assessing participants day-to-day exposure to and experiences with violence, an item from the Exposure to Violence Survey such as “Are you afraid you might be hurt by violence at school or work?” was adapted to, “Are you afraid you might be hurt by violence?” to allow for a more flexible discussion of exposure led by the participant. Similarly, the item “How common do you think suicidal behaviors are among Lumbee youth?” from the Lumbee gatekeeper study was adapted to, “How common do you think violence is within the Lumbee community today?”

Semi-structured interviews offer relatively systematic data collection and the flexibility for emerging topics.<sup>50, 69</sup> The reflexive nature of the interview guide allowed for free-flowing dialogue, an approach that is less invasive and more culturally appropriate for indigenous populations.<sup>5, 75</sup> Interview guides were piloted with three members of the target population prior to initiating data collection, resulting in substantial revisions to improve flow and eliminate redundancies. As the study

progressed and certain key topics emerged during analysis, such as the importance of the church, items were discarded, added to, or emphasized in the guide.

**Data Collection.** All study data were collected by the primary investigator (PI) via semi-structured, in-depth, one-on-one interviews. Interviews were scheduled over the phone, via email, or in person at a location convenient and safe for the participant and investigator. Interview locations varied by participant and included: participant's home, place of business, the local university, church meeting spaces, and a local recreational facility. Each participant was first given a brief overview of the project and verbal consent was obtained prior to the start of the interview.

Given the sensitive nature of the study topic, building participant rapport was also a critical step.<sup>69</sup> To accomplish this, all interviews followed a funnel pattern;<sup>50, 76</sup> opening with a general discussion on prominent historical events about DRV in the Lumbee community. Interviews then transitioned to dialogue regarding personal perceptions of, and experiences with, violence, drugs, and related prevention and treatment resources within the Lumbee community. Interviews lasted between thirty minutes and two hours, were audio-recorded and later transcribed verbatim for analysis. Upon completion of each interview, participants were given a \$20 honorarium. Interviews occurred over a 21-month period between February 2016 and November 2017.

### **Data Analysis and Interpretation**

All interviews were transcribed verbatim via the PI and a professional transcriptionist hired from the community. Each transcript was reviewed and compared to audio recordings for quality control. The Lumbee Tribe has a unique vernacular which can sometimes be challenging to understand, particularly for those not familiar with the

community. In instances where audio transcripts were in-audible or terminology was used the investigator did not understand, a member of the community was consulted. In most cases, this individual was able to understand the audio commentary and provide explanations for colloquialisms. To maintain participant anonymity, any identifying information present in transcripts, such as names or job titles, was removed and replaced by pseudonyms, as necessary, to minimize violations of confidentiality. All transcribed interviews were imported into Nvivo 11 for analysis<sup>77</sup>.

Data analysis and interpretation occurred concurrently with data collection and were conducted in four phases following the principles of grounded theory,<sup>70</sup> with systematic emergent coding initiating shortly after the completion of each interview. This is an approach successfully employed in AI populations and allows the AI perspective to guide the direction of subsequent interviews and analysis.<sup>5</sup> Data gathered from subsamples were initially treated as individual data-sets, with an identical analysis occurring for each group to allow for subsequent comparisons.

Without preconceived codes, in Phase 1 of analysis the PI and another investigator independently open-coded meaningful segments of one transcript for general categories and subcategories. The investigators met to compare generated codes and following an inductive approach, early themes or patterns were utilized to develop a codebook that was employed throughout the analysis of all subsequent transcripts. The codebook provided structure to the analysis and was refined as new topics emerged. After open coding, the PI initiated axial coding in Phase 2 by re-reading transcripts with a more specific focus based on the codes generated in Phase 1. In this step of the analysis categories and subcategories were refined and related for the identification of patterns. In



Phase 3 of analysis, selective coding was conducted to unify categories into central themes or core codes based on the conceptual framework (Figure 4.2) and study aims.<sup>70</sup> Themes were assessed for potential linkages and/or hierarchies, as well as alignment with conceptual and theoretical underpinnings. At this stage, an outside investigator reviewed the interview transcripts and analysis for consistency. Finally, in Phase 4 of analysis, the PI compared core themes from each subsample. Throughout this process the PI identified few discrepancies across perspectives of both Key Leaders and Lumbee Tribal Members and therefore merged the data into a single file.

### **Strategies to Reduce Bias**

Multiple strategies were also employed to enhance data trustworthiness. First, triangulation occurred across multiple levels of the study. At the theoretical level, public health and criminological theory were merged to gain a more comprehensive framework to guide the study design. Data collection and analysis were informed from both interview and observational data. The analysis of data also contained input from both peers and participants (member checks) to verify conclusions drawn and to seek additional guidance on interpretation of data.<sup>78, 79</sup> Member-checking is viewed as a key strategy for establishing data trustworthiness, offering a check on researcher bias<sup>5, 49</sup> and is important in tribal communities where misinterpretations often occur.<sup>17</sup> To accomplish this, two questions in the enrollment form gauged participant interest in a follow-up from the PI. Those indicating that they were interested in the study findings were provided summaries of the findings and manuscript drafts following Phase 4 of analysis. Feedback was requested via email and hardcopy. Twelve participants provided feedback on the data electronically or verbally and this feedback was used to revise conclusions and

manuscripts. Throughout the analysis process, constant comparisons and identification of negative-cases further reduced investigator-imposed bias, leading to increased consistency and overall trustworthiness of findings. Using theoretical memos and the codebook, the PI compared treatment of codes in each new transcript to previously coded transcripts to ensure consistent application of codes. This technique ensured achievement of data redundancy or saturation, given key insights may emerge over the course of research causing a shift in focus.

Second, the investigator also attempted to eliminate or reduce power differentials within the context of the interview setting, whether it was by adjusting the type of language used or type of clothing.<sup>49</sup> The investigator also limited sharing personal experiences and opinions to avoid biasing the direction of the conversation.<sup>78</sup> Finally, across all steps of the research process, the investigator practiced reflexivity<sup>50, 69, 79, 80</sup> to limit the influence of personal biases. As a member of the Lumbee Tribe, the PI consistently acknowledged her own personal assumptions regarding Lumbee culture and community to avoid shaping participants response. These verification strategies enhanced the overall trustworthiness of data collection, analysis, and interpretation.<sup>50, 65</sup>

### **Field Observations**

This study was originally designed with interviews as the primary mode of data collection, however, it evolved into a semi auto-ethnography, where the PIs personal experiences in the field, shaped the collection, analysis, and reporting of data.<sup>81</sup> Prior to initiating data collection, the researcher relocated to the researching setting providing insight, both personally and professionally, into the issue of DRV in the target population beyond the context of one-on-one interviews. Living in the community increased the

researcher's role as an insider giving deeper understanding of the experience shared by participants, from fear of going certain places, to the loss of loved ones due to murder. This was also very emotionally demanding for the PI between coping with the day-to-day experiences, to the constant immersion in the experiences of others through interview, transcription, and analysis processes. This experience, however, is not uncommon for both the participant and researcher when utilizing this research approach.<sup>82</sup> Participants also became emotional during the interview process, often expressing that sharing their story was therapeutic. This aligns with the experience of other researchers who see qualitative research as therapeutic for participants.<sup>53</sup> An unexpected outcome of this shift in the research method is that the process became very participatory and action oriented, a process that initiated with recruitment.

To facilitate recruitment, the researcher attended many local events related to substance use disorders such as the Longest Walk<sup>83</sup> or focus groups sponsored by a local program called Access to Recovery<sup>84</sup> where the opportunity to meet many local leaders was presented. Through this process, the researcher was introduced to, and became employed by, a program called Stop the Pain of Substance Use, a ministry of a local church that sponsored Alcoholic Anonymous meetings and community outreach events. Through this role the PI was able to work with the community in multiple capacities related to promoting recovery including assisting with the facilitation of a local support group, coordinating large community awareness events, and representing Stop the Pain on county coalitions. In this way, her role as a researcher became very participatory<sup>49</sup> via collaborations with local institutions including the Lumbee Tribe, local law enforcement, the local university, and various other local health providers in effort to build community

capacity via activities such as community outreach events, submission of grants, and coalition building. This process was also action oriented<sup>49</sup> in that, through the researcher's role with Stop the Pain, she was able to translate the findings of her research into action. For example, results indicated that many community members and leaders, were unaware of the services available in the county to address issues related to mental health. As such, she was able to lead the development and dissemination of the county's first comprehensive guide of services including prevention information, free programs, treatment options, transportation, housing, food and shelter services, as well as emergency contacts. A second finding indicated a community desire for increased church involvement. Through her work with Stop the Pain, the PI was able to partner with a local church association to help coordinate an event designed to engage the faith community, as well as design a training geared towards educating faith leaders about substance use disorders. Because of these experiences, many community members have begun to perceive the researcher as point of contact, frequently receiving referrals for information regarding substance use and available resources.

### **Discussion**

For years, local data have depicted issues surrounding DRV disproportionately affect the Lumbee community. Information on exactly why these disparities exist however, and what can be done to prevent them has been limited. To the authors' knowledge, this is the first in-depth, qualitative study focused on understanding the underlying factors which have driven DRV disparities within the Lumbee community. The methodological approach highlighted in this study, including its challenges and

strengths, may inform future health-related research among the Lumbee and other rural and racially/ethnic diverse communities.

### **Key Study Challenges**

Although the approach employed within the context of this study revealed thick and rich data surrounding the issues of DRV within the context of the Lumbee community, it was not without its challenges.

**Achieving Community Buy-In.** During the design phase, achieving “buy-in” from community members and formal organizations was identified as a potential challenge to recruitment. Owing to their historic experiences, AI communities are often hesitant to reveal sensitive information to outsiders and gaining entry to these communities can be time consuming, labor intensive, and sometimes impossible. However, because the PI is a member of the Lumbee Tribe, it was thought that this burden would be significantly reduced. In the field however, it appeared that her identity as a researcher played a more influential role than her identity as a tribal member. In many circumstances her position as a researcher was intimidating for some participants and may have created some initial uncertainty. When working with community members, some were initially uneasy regarding the process, being unsure of what to expect or afraid of saying the wrong thing. Once interviews concluded participants often asked if they answered the questions correctly. Generally, however, participants seemed to open-up as the interview progressed. Although the researcher was aware of her position and implemented strategies to limit its influence, she did not anticipate how impactful her role as a researcher would play in the process. In the future, accounting for all potential power

dynamics in AI communities via a clear written strategy will be critical to the outcomes of the research.

**Selecting Study Sample.** The decision to focus on the Lumbee Tribe was an unanticipated challenge, which impacted research design and recruitment. Research and data on the Lumbee and AIs generally is lacking, limiting guidance on culturally appropriate methodologies. Research on AIs also encompasses additional methodological steps not required with other populations. Many AI tribes for example have their own institutional review boards. In addition to seeking approval to conduct research in these communities, many tribal groups also expect to review and approve research findings and any publications. Returning research findings to tribal communities is critical given the historical and ongoing exploitation and appropriation of information and culture tribal populations continue to endure. It is also noteworthy to mention, that the Lumbee Tribal Government is a political organization, whose standing is frequently disputed within the Lumbee community. In fact, the name “Lumbee” itself is heavily contested amongst tribal members. Although the researcher was aware of this dynamic, she did not anticipate how the use of the name Lumbee would serve as barrier to recruitment. Several individuals refused to participate because they did not identify as Lumbee. These individuals, however, had Lumbee relatives and had surnames common among Lumbee people. Participants conflict simply surrounded the use of the name Lumbee as opposed to being from a different distinct tribal group. For the purposes of this research, the exclusion criteria were not reframed to include these individuals, however future studies may want to have criteria inclusive of all AIs within a community, regardless of tribal

affiliation. Understanding cultural nuisances in a community, such as those noted above, is critical to the success of research and program implementation.

**Potentially Biased Results.** A final challenge in the research is that data collection and analysis were conducted primarily by a single researcher increasing opportunities for bias in the results. The researcher did however implement steps such as peer review and member checking to limit the effect of researcher-imposed bias. Additionally, because this research was conducted by one researcher with limited resources, the length of time from the beginning to end of data collection may have influenced study outcomes. Future studies should incorporate additional staff to overcome time limitations and burdens placed on a single researcher.

### **Recommendations for Future Research**

**Focus on rural, tribal community.** The population and setting chosen for this research is unique, focusing solely on one AI tribal group, the Lumbee. As highlighted earlier, data among AIs, particularly at the tribal level is limited and often inaccurate reflecting the need for primary data collection. The focus on the rural setting in the area of DRV is also a strength given most research on the topic has been concentrated in urban areas.<sup>29, 35</sup> Increased examination and understanding of unique contextual issues within rural and tribal communities will be required before effective and sustainable improvements can be planned and implemented.

**Insider Access.** As a member of the Lumbee tribe and resident of the community, the primary researcher had insider access to the population likely enhancing recruitment and the richness of data collected. Not only did the researcher have existing relationships in the community, but she also had first-hand experiences with DRV in the community,

an understanding of the Lumbee's unique vernacular, as well as many of the cultural nuisances of the community. This status as an insider allowed her to more easily establish rapport and facilitated the recruitment process.<sup>78</sup> Research in tribal communities could likely be enhanced by including an insider at each phase of the research process.

**Data Triangulation.** This study incorporated data triangulation at multiple levels, enhancing the design and outcomes.<sup>62</sup> At the theoretical level, the researcher merged both criminological and public health theory and frameworks, including Social Disorganization Theory and the socio-ecological model, to create a framework for understanding the issue. This framework informed the study at each stage including design of the interview guide, the recruitment strategy, types of data collected, and the framework for the analysis and presentation of findings. Primary data and data from observations of the researcher were used to inform new data collection, as well as the analysis and presentation of findings. Finally, throughout phases of the data analysis process, the research utilized outside perspectives to inform the process. Perspectives from other researchers were utilized when developing the initial codebook and selecting key themes. Member checks utilizing participants were also employed to interpret audio recordings and evaluate the interpretation of data. Incorporating outside perspectives, including members of the target population is critical, particularly for those researchers who are consider "outsiders."

### **Conclusion**

Despite the limitations associated with qualitative research, the methods employed revealed deeply-rooted, complex, cultural nuances which facilitate issues surrounding DRV among the Lumbee Tribe. Levels of DRV in this population have been



historically high, and a generalized understanding of the mechanism which enable this problem (i.e. poverty, educational attainment, etc.) can be extrapolated from research in similar populations. However, it is the detailed cultural nuances gathered in this research and other similar studies that is lacking from these extrapolations and ultimately determines the success and failure of primary and secondary prevention and tertiary treatment efforts. Not only does this type of research field work challenge stereotypes, but it also allows AI communities to identify what prevention and treatment models will result in the best outcomes for their community.<sup>5</sup>

### References

1. U.S. Department of Commerce. *U.S. Census Bureau*, 2010. Available from: <http://www.census.gov/>.
2. American Psychiatric Association, *Mental health disparities: American Indians and Alaska Natives*. 2010, Office of Minority and National Affairs. p. 6.
3. Bachman, R., et al., *Violence against American Indian and Alaska Native women and the criminal justice response: What is known*, U.S. Department of Justice, Editor. 2008. p. 168.
4. *United States Department of the Interior*, 2018. Available from: <http://www.bia.gov/>.
5. Wendt, D.C. and J.P. Gone, *Decolonizing psychological inquiry in American Indian communities: The promise of qualitative methods*. *Qualitative Strategies for Ethnocultural Research*, 2012: p. 161-178.
6. Owens, J., "Historic" in a bad way: *How the tribal law and order act continues the American tradition of providing inadequate protection to American Indian and Alaska Native rape victims*. *The Journal of Criminal Law & Criminology*, 2012. **102**(2): p. 28.
7. Tighe, S., "Of course we are crazy": *Discrimination of Native American Indians through criminal justice*. *Justice Policy Journal*, 2014. **11**(1): p. 1-38.
8. Gryczynski, J. and J.L. Johnson, *Challenges in public health research with American Indians and other small ethnocultural minority populations*. *Substance Use & Misuse*, 2011. **46**(11): p. 1363-1371.
9. Knight, K., et al., *Misclassification of American Indian race in cancer incidence data in North Carolina*. 2008, North Carolina Department of Health and Human Services. p. 8.
10. Lanier, C. and L. Huff-Corzine, *American Indian homicide: A county-level analysis utilizing social disorganization theory*. *Homicide Studies*, 2006. **10**(3): p. 181-194.
11. Fagan, J., *Interactions among drugs, alcohol, and violence*. *Health Affairs*, 1993. **12**(4): p. 65-79.

12. Kasturirangan, A., S. Krishnan, and S. Riger, *The impact of culture and minority status on women's experience of domestic violence*. Trauma, Violence, & Abuse, 2004. **5**(4): p. 318-332.
13. Jackson, K.F. and C.W. Lecroy, *The influence of race and ethnicity on substance use and negative activity involvement among monoracial and multiracial adolescents of the southwest*. Journal of Drug Education, 2009. **39**(2): p. 195-210.
14. Rieckmann, T., et al., *American Indians with substance use disorders: Treatment needs and comorbid conditions*. The American Journal of Drug and Alcohol Abuse, 2012. **38**(5): p. 498-504.
15. Akins, S., et al., *Patterns and correlates of adult American Indian substance use*. Journal of Drug Issues, 2013. **43**(4): p. 497-516.
16. Pu, J., et al., *Protective factors in American Indian communities and adolescent violence*. Maternal and Child Health Journal, 2013. **17**(7): p. 1199-1207.
17. Sapra, K.J., et al., *Family and partner interpersonal violence among American Indians/Alaska Natives*. Injury Epidemiology, 2014. **1**(1): p. 7-7.
18. Eitle, D. and T. McNulty Eitle, *Factors associated with American Indian and white adolescent drug selling in rural communities*. International Journal of Law, Crime and Justice, 2015. **43**(2): p. 252-272.
19. Office of National Drug Control Policy. *Collaborating with Native Americans and Alaskan Natives*, 2012. Available from: <http://www.whitehouse.gov/ondcp/native-americans-and-alaskan-indians>.
20. Mills, J. and K. Brown, *Law enforcement in Indian Country: The struggle for a solution*. 2001.
21. Compton, W.M., et al., *Prevalence, correlates, disability, and comorbidity of dsm-iv drug abuse and dependence in the United States: Results from the national epidemiologic survey on alcohol and related conditions*. Archives of General Psychiatry, 2007. **64**(5): p. 566-576.
22. Rachuba, L., B. Stanton, and D. Howard, *Violent crime in the United States: An epidemiologic profile*. Archives of Pediatrics and Adolescent Medicine 1995. **149**(9): p. 953-960.
23. Canby, W.C.J., *American Indian law in a nutshell*. 2009, WEST, A Thomson Reuters business.
24. Bobee, H., et al., *Criminal jurisdiction in Indian country: The solution of cross deputization*. Indigenous Law & Policy Center Occasional Paper Series-Michigan State University College of Law, 2008: p. 30.
25. *Tribal Law and Order Act of 2010*. 2010.
26. U.S. Department of Justice, *Tribal crime data collection activities*. 2017.
27. Lucchesi, A. *Missing & murdered indigenous women database*. 2018; Available from: <https://www.mmiwdatabase.com/>.
28. Copes, H., A. Hochstetler, and S. Sandberg, *Using a narrative framework to understand the drugs and violence nexus*. Criminal Justice Review, 2015. **40**(1): p. 32-46.
29. Dickinson, T., *Exploring the drugs/violence nexus among active offenders: Contributions from the St. Louis School*. Criminal Justice Review, 2015. **40**(1): p. 67-86.

30. Brownstein, H.H., et al., *The relationship of drugs, drug trafficking, and drug traffickers to homicide*. Journal of Crime and Justice 1992. **15**(1): p. 25-44.
31. Korcha, R.A., et al., *Violence-related injury and gender: The role of alcohol and alcohol combined with illicit drugs*. Drug and Alcohol Review, 2014. **33**(1): p. 43-50.
32. James, S.E., J. Johnson, and C. Raghavan, "*I couldn't go anywhere*": *Contextualizing violence and drug abuse: A social network study*. Violence Against Women, 2004. **10**(9): p. 991-1014.
33. Gilbert, L., et al., *Linking drug-related activities with experiences of partner violence: A focus group study of women in methadone treatment*. Violence & Victims, 2001. **16**(5): p. 517-536.
34. Rhodes, T., *The 'risk environment': A framework for understanding and reducing drug-related harm*. International Journal of Drug Policy, 2002. **13**(2): p. 85-94.
35. De La Rosa, M., et al., *Drugs and violence: Causes, correlates, and consequences*, U.S. Department of Health and Human Services:National Institute on Drug Abuse, Editor. 1990: Rockville. p. 293.
36. Kaylen, M.T. and W.A. Pridemore, *Social disorganization and crime in rural communities: The first direct test of the systemic model*. British Journal of Criminology, 2013. **53**(5): p. 905-923.
37. Maume, M.O. and C.L. Lanier, *Social isolation and weapon use in intimate partner violence incidents in rural areas*. International Journal of Rural Criminology, 2014. **2**(2): p. 244-267.
38. Coyhis, D. and R. Simonelli, *The Native American healing experience*. Substance Use & Misuse, 2008. **43**(12-13): p. 24.
39. Hohmann, A.A. and K.M. Shear, *Community-based intervention research: Coping with the "noise" of real life in study design*. American Journal of Psychiatry, 2002. **159**(2): p. 201-207.
40. Caldwell, J.Y., et al., *Culturally competent research with American Indians and Alaska Natives: Findings and recommendations of the first Symposium of the Work Group on American Indian Research and Program Evaluation Methodology*. American Indian and Alaska Native Mental Health Research: The Journal of the National Center, 2005. **12**(1): p. 1-25.
41. Lumbee Tribe of North Carolina. *Official website of the Lumbee Tribe of North Carolina*, 2015. Available from: <http://lumbeetribe.com/>.
42. Maynor Lowery, M., *Indians, southerners, and Americans: Race, tribe, and nation during "Jim Crow"*. Native South 2009. **2**(1): p. 22.
43. Maynor Lowery, M., *Telling our own stories: Lumbee history and the federal acknowledgment process*. American Indian Quarterly, 2009. **33**(4): p. 23.
44. Raab, S., *Reasonable doubt*, in *GQ*. 1994.
45. Patterson, O., *The press held hostage*. American Journalism, 1998. **15**(4): p. 125-139.
46. Hixenbaugh, M., *Robeson County is one of most violent in state*, in *The Fayetteville Observer*. 2011: Fayetteville.
47. Robeson County Department of Public Health, *State of the county health report*. 2013: Lumberton NC. p. 4.

48. Robeson County Health Department, Southeastern Regional Medical Center, and Healthy Robeson Task Force, *Robeson County community health assesment*. 2014.
49. Kornbluh, M., *Combatting challenges to establishing trustworthiness in qualitative research*. *Qualitative Research in Psychology*, 2015. **12**(4): p. 397-414.
50. Ash, J.S. and K.P. Guappone, *Qualitative evaluation of health information exchange efforts*. *Journal of Biomedical Informatics*, 2007. **40**(6): p. S33-S39.
51. Prussing, E., *Reconfiguring the empty center: Drinking, sobriety, and identity in Native American women's narratives*. *Culture, Medicine and Psychiatry*, 2007. **31**(4): p. 499-526.
52. Jacobs, B.A., V. Topalli, and R. Wright, *Managing retaliation: Drug robbery and informal sanction threats*. *Criminology*, 2000. **38**(1): p. 171-198.
53. Rossetto, K.R., *Qualitative research interviews: Assessing the therapeutic value and challenges*. *Journal of Social and Personal Relationships*, 2014. **31**(4): p. 482-489.
54. Braithwaite, R.L. and N. Lythcott, *Community empowerment as a strategy for health promotion for black and other minority populations*. *Journal of the American Medical Association*, 1989. **261**(2): p. 282-283.
55. Davis, S.M. and R. Reid, *Practicing participatory research in American Indian communities*. *The American Journal of Clinical Nutrition*, 1999. **69**(4): p. 755S-759S.
56. Wilson, A.C., *American Indian history or non-Indian perceptions of American Indian history?* *American Indian Quarterly*, 1996. **20**(1): p. 3-5.
57. Gorman, D.M., et al., *Implications of systems dynamic models and control theory for environmental approaches to the prevention of alcohol- and other drug use-related problems*. *Substance Use & Misuse*, 2004. **39**(10-12): p. 1713-1750.
58. Groves, W.B. and R.J. Sampson, *Community structure and crime: Testing social-disorganization theory*. *American Journal of Sociology* 1994. **94**(4): p. 774-802.
59. Goldstein, P.J., *The drugs/violence nexus: A tripartite conceptual framework*. *Journal of Social Issues*, 1985. **15**(Fall ): p. 493-506.
60. McLeroy, K.R., et al., *An ecological perspective on health promotion programs*. *Health Education & Behavior*, 1988. **15**(4): p. 351-377.
61. Smokowski, P. *Injury Center: Violence Prevention*, 2012. Available from: [http://www.cdc.gov/violenceprevention/ace/centers/university\\_of\\_northcarolina.html](http://www.cdc.gov/violenceprevention/ace/centers/university_of_northcarolina.html).
62. Fusch, P.I. and L.R. Ness, *Are we there yet? Data saturation in qualitative research*. *The Qualitative Report*, 2015. **20**(9): p. 1408-1416.
63. Bell, R.A., et al. *The Lumbee Rite of Passage: A cultural enhancement program for Lumbee Indian youth to address cultural awareness and psychosocial health*. in *Advancing Native Health and Wellness Conference*. 2012. Anchorage, Alaska.
64. Morse, J.M., *The significance of saturation*. *Qualitative Health Research*, 1995. **5**(2): p. 147-149.
65. Bowen, G.A., *Naturalistic inquiry and the saturation concept: A research note*. *Qualitative Research*, 2008. **8**(1): p. 137-152.

66. Guest, G., A. Bunce, and L. Johnson, *How many interviews are enough?: An experiment with data saturation and variability*. *Field Methods*, 2006. **18**(1): p. 59-82.
67. Francis, J.J., et al., *What is an adequate sample size? Operationalising data saturation for theory-based interview studies*. *Psychology & Health*, 2009. **25**(10): p. 1229-1245.
68. Coyne, I.T., *Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries?* *Journal of Advanced Nursing*, 1997. **26**(3): p. 623-630.
69. Patton, M.Q., *Qualitative research & evaluation methods*. 3 ed. 2002: SAGE Publications, Inc 688.
70. Corbin, J.M. and A. Strauss, *Grounded theory research: Procedures, canons, and evaluative criteria*. *Qualitative Sociology*, 1990. **13**(1): p. 3-21.
71. Gentles, S.J., et al., *Sampling in qualitative research: Insights from an overview of the methods literature*. *The Qualitative Report*, 2015. **20**(11): p. 1772-1789.
72. Etikan, I., S.A. Musa, and R.S. Alkassim, *Comparison of convenience sampling and purposive sampling*. *American Journal of Theoretical and Applied Statistics*, 2016. **5**(1): p. 1-4.
73. Valois, R.F., et al., *Evaluation of the South Carolina Teen Pregnancy Prevention Initiative: Community key leader survey and results*. 2002, U.S. Department of Health & Human Services, South Carolina Department of Social Services,,: Columbia, SC.
74. Earls, F.J., et al., *Project on Human Development in Chicago Neighborhoods (PHDCN): Exposure to violence (subject), wave 1*, U.S. Department of Justice, Editor. 1997, Interuniversity Consortium for Political and Social Research Ann Arbor, Michigan.
75. Brayboy, B.M. and D. Deyhle, *Insider-Outsider: Researchers in American Indian Communities*. *Theory Into Practice*, 2000. **39**(3): p. 163.
76. Morgan, D.L., *Focus groups*. *Annual Review of Sociology*, 1996: p. 129-152.
77. *NVivo qualitative data analysis Software*. 2015, QSR International
78. Berger, R., *Now I see it, now I don't: Researcher's position and reflexivity in qualitative research*. *Qualitative Research*, 2015. **15**(2): p. 219-234.
79. Noble, H. and J. Smith, *Issues of validity and reliability in qualitative research*. *Evidence-Based Nursing*, 2015: p. ebnurs-2015-102054.
80. Malterud, K., *Qualitative research: Standards, challenges, and guidelines*. *The Lancet*, 2001. **358**(9280): p. 483-488.
81. Adams, T.E., C. Ellis, and S. Holman Jones, *Autoethnography*, in *The International Encyclopedia of Communication Research Methods*. 2017.
82. Sanjari, M., et al., *Ethical challenges of researchers in qualitative studies: The necessity to develop a specific guideline*. *Journal of Medical Ethics and History of Medicine*, 2014. **7**.
83. American Indian Movement. *The Longest Walk 5*. 2018; Available from: <http://www.longestwalk.us/>.
84. Recovery Communities of North Carolina. *North Carolina Access to Recovery* 2018; Available from: <https://rcnc.org/recovery-supports/atr/>.

## Chapter 5

### Summary, Implications and Recommendations

This chapter contains a summary and discussion of the overall research project, limitations of the study, implications for public health, and future research directions.

#### Synopsis of Findings

The specific aims of this research were to 1) examine perceptions of, and experiences with, drugs and violence among the general Lumbee Tribe and among Key Leaders working within the Lumbee community, and 2) assess perceptions of, and experiences with, drug and violence prevention and treatment resources among the general Lumbee Tribe and among Key Leaders working within the Lumbee community. These were accomplished via the completion of one-on-one, in-depth interviews with Key Leaders and Lumbee Tribal members and using a grounded theory approach to analyze the resulting qualitative data.

Upon completing data collection and analysis, it was determined that the perceptions of Lumbee Tribal members and Key Leaders on DRV aligned closely, negating the need to discuss the results from each sub-group independently. Participants identified multiple mechanisms influencing rates of DRV, as well as treatment and prevention efforts. These included poverty, stigma, geographic location, transportation and coping, all of which have been previously identified as contributing mechanisms in the literature. However, several issues arose that are unique to the Lumbee Tribe and are indicative of their complex cultural and historical experiences. These included a lack of

federal recognition, experiences of historical and intergenerational trauma, as well as division and corruption within the community and institutions at large. One of the most prominent themes to emerge, however, centered on the complex role of the local church institution in influencing DRV, which became the focus of Chapter 4, Manuscript 1. The local church institution is held in high regard by Lumbee Tribal members and was often cited by participants as one of the first places they would seek help. Participants did note that over time, local churches seem to have lost their original emphasis on morality and community and have become very religion and congregation oriented, a shift that has created opportunities for conflict and division within the community. The church also lacks a social environment that is conducive to promoting recovery from DRV. Specifically, social hierarchies within the context of the church, fatalistic attitudes, stigma, and a lack of programs or services to aid those impacted by DRV serve as barriers to prevention and treatment within the context of the church and the community at large. Despite this, however, many participants felt that the church needs to do more in the community to promote recovery from DRV and they have the capacity to do so. Several participants recommended specific strategies including pastoral trainings, increased church outreach, and treatment with a religious component.

Another critical component of the research was the approach employed to collect and analyze data. Research on AIs, particularly at the tribal level, is generally lacking, and what is available is often inaccurate. Given this, primary data collection that incorporates tribal input is often this most ideal way to gather accurate and culturally appropriate data about tribal communities. Chapter four, manuscript two details the methodological approach employed in this study, including strengths and limitations

which can be used to inform future research among the Lumbee and other AI communities. Key challenges identified included achieving community buy-in and issues surrounding the tribal name of Lumbee. Key strengths of the research centered on project's focus on a single AI tribe, having insider access to the population, as well as multiple levels of triangulation to ensure trustworthiness of the data.

### **Study Limitations**

The primary limitation of this research centered around data collection and analysis which was carried out by a single investigator which could have led to some researcher-imposed bias. The investigator, however, practiced reflexivity throughout each step of the process and used member-checking to ensure the appropriate interpretation of the data. Another limitation of the research was its focus on one unique AI tribal group. Because of the distinct characteristics of the Lumbee Tribe, the study results may not be applicable to other populations. Finally, the perspectives highlighted in this approach may not be an accurate reflection of the Lumbee community. For example, individuals under the age of 21 were not included in this study. Given that substance use and violence tend to be concentrated among youth, including their perspective would have strengthened the results of this research. Similarly, including Lumbee participants whom have are currently incarcerated because of drug use or violence may reveal key insights into prevention and treatment not identified in the context of this study.

### **Future Research Directions**

The research presented in this study appears to be the first attempt to examine the multi-level, systemic factors influencing disparate rates of DRV in the Lumbee Tribe. Given this, much work still needs to be done, both among the Lumbee and other tribal communities to improve long-term outcomes related to DRV. Further examination and



understanding of the unique social and environmental factors driving DRV within rural and tribal communities will be required before effective and sustainable improvements can be made. The findings of this study offer only a glimpse into the issues driving DRV in the Lumbee Tribe. Future studies may want to take a more in-depth look into the factors identified throughout the course of this study. Although the Church, for example, was a central theme of this research, it was not the primary focus of the study.

Future research may want to take an in-depth look into the role of the church institution in DRV. Some potential areas of focus may include the capacity and motivation of the church to include treatment as a function of their role, strict social practices such as abstinence from alcohol, differences in practice and perceptions across denominations or the implementation of interventions such as educating faith leaders and congregations on DRV to reduce stigma and increase avenues of support. Future research could explore how issues surrounding AI identity, such as a lack of federal recognition or historical trauma, relate to elevated rates of DRV in tribal communities. Finally, future research may explore how extreme poverty and lack of employment opportunities contribute to DRV.

Future research efforts should also incorporate methods that are sensitive to the unique cultural nuances present within different tribal communities. Understanding issues surrounding tribal identity or adherence to traditional practices prior to the start of research will enhance not only the research process, but the quality of findings. This could be accomplished by including an insider or gate keeper at every phase of the research process or enlisting tribal organizations as partners in the research process.

## **Implications for Public Health**

The results of this study indicate that research must increasingly examine issues within the social-physical environment to identify potential barriers and facilitators to health promotion, particularly in rural, ethnically diverse communities where research is often limited and inaccurate. In turn, prevention and treatment efforts must move beyond individual-level influences, such as encouraging behavior change, to focus instead on the physical and social environment in which we live. As evidenced in this study, seemingly unrelated social practices (i.e. those occurring within the context of the church), have the potential to influence individual perspectives of recovery, decisions to seek treatment, and access to resources. This study also reinforces the idea that research, treatment, and prevention efforts must integrate partnerships with local organizations and institutions outside of the health field to increase the accuracy, reach and outcomes of programs.

## **Conclusion**

The findings highlighted in this study reveal deeply-rooted, complex, cultural factors which facilitate issues surrounding DRV among the Lumbee Tribe. A generalized understanding of the mechanism which enable DRV (i.e. poverty, educational attainment, etc.) can be extrapolated from existing research in similar populations to better understand why DRV in this population has been historically high. It is the detailed cultural nuisances identified in this research and similar studies, however, that are lacking from the broader DRV literature and ultimately determine the success and failure of community-level prevention and treatment efforts. Not only does this type of work challenge established stereotypes, but it also allows disadvantaged populations like, AIs, the opportunity to identify what prevention and treatment models will result in the best

outcomes for their community.<sup>201</sup> As demonstrated by this study, the application of a holistic approach to understanding, preventing, and treating health disparities such as DRV, will be critical to improving the future health outcomes of populations globally.

## References

1. Walker, M.A., *Borders, one-dimensionality, and illusion in the war on drugs*. Environment and Planning D: Society and Space, 2015. **33**: p. 84-100.
2. National Drug Intelligence Center, *National Drug Threat Assessment*, U.S. Department of Justice, Editor. 2011, National Drug Intelligence Center, National Threat Analysis Branch.
3. National Institute on Drug Abuse. *Nationwide trends Drug Facts 2013* June 3, 2015]; Available from: <http://www.drugabuse.gov/publications/drugfacts/nationwide-trends>.
4. Department of Health and Human Services, *HHS acting secretary declares public health emergency to address national opioid crisis*. 2017.
5. Caulkins, J.P., et al., *The marijuana legalization debate: Insights for Vermont*. 2015.
6. DEA Strategic Intelligence Section, *National Drug Threat Assessment*, U.S. Department of Justice, Editor. 2017.
7. Centers for Disease Control and Prevention. *Opioid Overview: Drug Overdose Death Data*. 2017; Available from: <https://www.cdc.gov/drugoverdose/data/statedeaths.html>.
8. Macmillan, R., *Violence and the life course: The consequences of victimization for personal and social development*. Annual Review of Sociology, 2001. **27**.
9. Rosa, M.D.L., et al., *Drugs and violence: Causes, correlates, and consequences*, U.S. Department of Health and Human Services: National Institute on Drug Abuse, Editor. 1990: Rockville. p. 293.
10. Department of Violence and Injury Prevention and Disability, *Injuries and violence: The facts*. 2010, World Health Organization: Geneva. p. 20.
11. Korcha, R.A., et al., *Violence-related injury and gender: The role of alcohol and alcohol combined with illicit drugs*. Drug and Alcohol Review, 2014. **33**(1): p. 43-50.
12. Friedman, A.S., *Substance use/abuse as a predictor to illegal and violent behavior: A review of the relevant literature*. Aggression and Violent Behavior, 1998. **3**(4): p. 339-355.
13. Boles, S.M. and K. Miotto, *Substance abuse and violence: A review of the literature*. Aggression and Violent Behavior, 2003. **8**(2): p. 155-174.
14. Rhodes, T., et al., *Public injecting and the need for 'safer environment interventions' in the reduction of drug-related harm*. Addiction, 2006. **101**(10): p. 1384-1393.
15. Martínez, R., R. Rosenfeld, and D. Mares, *Social disorganization, drug market activity, and neighborhood violent crime*. Urban Affairs Review (Thousand Oaks, Calif.), 2008. **43**(6): p. 846-874.

16. Shannon, K., et al., *Mapping violence and policing as an environmental–structural barrier to health service and syringe availability among substance-using women in street-level sex work*. International Journal of Drug Policy, 2008. **19**(2): p. 140-147.
17. Kuhns, J.B. and T.A. Clodfelter, *Illicit drug-related psychopharmacological violence: The current understanding within a causal context*. Aggression and Violent Behavior, 2009. **14**(1): p. 69-78.
18. *National Drug Threat Assessment*, U.S. Department of Justice, Editor. 2010, National Drug Intelligence Center, National Threat Analysis Branch. p. 78.
19. Brownstein, H.H., et al., *The relationship of drugs, drug trafficking, and drug traffickers to homicide*. Journal of Crime and Justice 1992. **15**(1): p. 25-44.
20. Goldstein, P.J., *The drugs/violence nexus: A tripartite conceptual framework*. Journal of Social Issues, 1985(Fall): p. 493-506.
21. Goldstein, P.J., *Homicide related to drug traffic*. Bulletin of the New York Academy of Medicine 1925, 1986. **62**(5): p. 509–516.
22. National Drug Intelligence Center, *Indian Country Drug Threat Assessment*, U.S. Department of Justice, Editor. 2008, National Drug Intelligence Center,.
23. Ousey, G.C. and M.R. Lee, *Investigating the connections between race, illicit drug markets, and lethal violence, 1984-1997*. Journal of Research in Crime and Delinquency, 2004. **41**(4): p. 352-383.
24. Chen, P. and K.C. Jacobson, *Developmental trajectories of substance use from early adolescence to young adulthood: Gender and racial/ethnic differences*. Journal of Adolescent Health, 2012. **50**(2): p. 154-163.
25. Jackson, K.F. and C.W. Lecroy, *The influence of race and ethnicity on substance use and negative activity involvement among monoracial and multiracial adolescents of the southwest*. Journal of Drug Education, 2009. **39**(2): p. 195-210.
26. Stanley, L.R., et al., *Rates of substance use of American Indian students in 8th, 10th, and 12th grades living on or near reservations: Update, 2009–2012*. Public Health Reports, 2014. **129**(2): p. 156-163.
27. Compton, W.M., et al., *Prevalence, correlates, disability, and comorbidity of dsm-iv drug abuse and dependence in the United States: Results from the national epidemiologic survey on alcohol and related conditions*. Archives of General Psychiatry, 2007. **64**(5): p. 566-576.
28. Volkow, N.D. and T.-K. Li, *Drug addiction: the neurobiology of behaviour gone awry*. Nature Reviews Neuroscience, 2004. **5**(12): p. 963-970.
29. Sutherland, R., et al., *Motivations, substance use and other correlates amongst property and violent offenders who regularly inject drugs*. Addictive Behaviors, 2015. **45**: p. 207-213.
30. Resignato, A.J., *Violent crime: a function of drug use or drug enforcement?* Applied Economics, 2000. **32**(6): p. 681-688.
31. Miron, Jeffrey A., *Violence, guns, and drugs: A cross-country analysis*. Journal of Law and Economics, 2001. **44**(S2): p. 615-633.
32. Rhodes, T., *Risk environments and drug harms: A social science for harm reduction approach*. International Journal of Drug Policy, 2009. **20**(3): p. 193-201.

33. Valdez, A., C.D. Kaplan, and R.L. Curtis, *Aggressive crime, alcohol and drug use, and concentrated poverty in 24 U.S. urban areas*. The American Journal of Drug and Alcohol Abuse, 2007. **33**(4): p. 595-603.
34. Lipton, R., et al., *The geography of violence, alcohol outlets, and drug arrests in Boston*. American Journal of Public Health, 2013. **103**(4): p. 657-664.
35. Fitzgerald, J.L., *Mapping the experience of drug dealing risk environments: An ethnographic case study*. International Journal of Drug Policy, 2009. **20**(3): p. 261-269.
36. Mair, J.S. and M. Mair, *Violence prevention and control through environmental modifications*. Annual Review of Public Health, 2003. **24**(1): p. 209-225.
37. Northridge, M., E. Sclar, and P. Biswas, *Sorting out the connections between the built environment and health: A conceptual framework for navigating pathways and planning healthy cities*. Journal of Urban Health, 2003. **80**(4): p. 556-568.
38. Dunlap, E., et al., *Macro-level social forces and micro-level consequences: Poverty, alternate occupations, and drug dealing*. Journal of Ethnicity in Substance Abuse, 2010. **9**(2): p. 115-127.
39. Cerdá, M., et al., *Reducing violence by transforming neighborhoods: A natural experiment in Medellín, Colombia*. American Journal of Epidemiology, 2012. **175**(10): p. 1045-1053.
40. Furr-Holden, C.D., et al., *Neighborhood environment and marijuana use in urban young adults*. Prevention Science, 2015. **16**(2): p. 268-278.
41. Knight, K., et al., *Misclassification of American Indian race in cancer incidence data in North Carolina*. 2008, North Carolina Department of Health and Human Services. p. 8.
42. Letourneau, R.J. and C.E. Crump, *North Carolina tribal health assessment project: Final report*. 2009, Department of Health Behavior & Health Education, Gillings School of Global Public Health, University of North Carolina at Chapel Hill.
43. Cohen, J.A., *The highs of tomorrow: Why new laws and policies are needed to meet the unique challenges of synthetic drugs*. Journal of Law & Health, 2014. **27**(2): p. 164-185.
44. Ford, C. and J. Bressan, *Ending the mass criminalisation of people who use drugs: a necessary component of the public health response to hepatitis C*. BioMed Central Infectious Diseases, 2014. **14**(6): p. 1-5.
45. Revels, A.A. and J.R. Cummings, *Violence and injury in Indian Country: The impact of drug trafficking on American Indian reservations with international boundaries*. American Indian Quarterly, 2014. **38**(3).
46. Bachman, R., et al., *Violence against American Indian and Alaska Native women and the criminal justice response: What is known*, U.S. Department of Justice, Editor. 2008. p. 168.
47. American Psychiatric Association, *Mental health disparities: American Indians and Alaska Natives*. 2010, Office of Minority and National Affairs, p. 6.
48. Gryczynski, J. and J.L. Johnson, *Challenges in public health research with American Indians and other small ethnocultural minority populations*. Substance Use & Misuse, 2011. **46**(11): p. 1363-1371.

49. Swaim, R.C. and L.R. Stanley, *Substance use among american indian youths on reservations compared with a national sample of us adolescents*. JAMA Network Open, 2018. **1**(1): p. e180382.
50. Perry, S.W., *American Indians and crime*, U.S. Department of Justice, Editor. 2004, Bureau of Justice Statistics,. p. 56.
51. Federal Bureau of Investigation, *North Carolina offenses known to law enforcement by state by metropolitan and nonmetropolitan counties*, in *Crime in the United States*. 2010, United States Department of Justice,.
52. Federal Bureau of Investigation, *North Carolina offenses known to law enforcement by state by metropolitan and nonmetropolitan counties*, in *Crime in the United States*. 2011, United States Department of Justice,.
53. Federal Bureau of Investigation, *North Carolina offenses known to law enforcement by metropolitan and nonmetropolitan counties*, in *Crime in the United States*. 2012, United States Department of Justice.
54. Robeson County Department of Public Health, *State of the county health report*. 2010: Lumberton NC.
55. Robeson County Department of Public Health, *State of the county health report*. 2012: Lumberton NC.
56. Robeson County Department of Public Health, *State of the county health report*. 2013: Lumberton NC.
57. Robeson County Health Department, Southeastern Regional Medical Center, and Healthy Robeson Task Force, *Robeson County community health assesment*. 2007.
58. Robeson County Health Department, Southeastern Regional Medical Center, and Healthy Robeson Task Force, *Robeson County community health assesment*. 2011.
59. Robeson County Health Department, Southeastern Regional Medical Center, and Healthy Robeson Task Force, *Robeson County community health assesment*. 2014.
60. Jacobs, B.A., V. Topalli, and R. Wright, *Managing retaliation: Drug robbery and informal sanction threats*. Criminology, 2000. **38**(1): p. 171-198.
61. Gilbert, L., et al., *Linking drug-related activities with experiences of partner violence: A focus group study of women in methadone treatment*. Violence & Victims, 2001. **16**(5): p. 517-536.
62. Kupferer, H.J. and J.A. Humphrey, *Fatal Indian violence in North Carolina* Anthropological Quarterly, 1975. **48**(4): p. 8.
63. Humphrey, J.A. and H.J. Kupferer, *Homicide and suicide among the Cherokee and Lumbee Indians of North Carolina*. International Journal of Social Psychiatry 1982. **28**: p. 7.
64. Federal Bureau of Investigation. *Violent crime*. Crime in the United States 2016; Available from: [https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/violent-crime/violent-crime-topic-page/violentcrimemain\\_final](https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/violent-crime/violent-crime-topic-page/violentcrimemain_final).
65. Angell, G.B. and G.M. Jones, *Recidivism, risk, and resiliency among North American Indian parolees and former prisoners*. Journal of Ethnic and Cultural Diversity in Social Work, 2003. **12**(2): p. 61-77.

66. Bell, R., et al., *Perceptions and psychosocial correlates of bullying among Lumbee Indian youth*. American Indian and Alaska native mental health research (Online), 2014. **21**(1): p. 1-17.
67. Maume, M.O. and C.L. Lanier, *Social isolation and weapon use in intimate partner violence incidents in rural areas*. International Journal of Rural Criminology, 2014. **2**(2): p. 244-267.
68. Smokowski, P.R., et al., *Ethnic identity and mental health in American Indian youth: Examining mediation pathways through self-esteem, and future optimism*. Journal of Youth and Adolescence, 2013. **43**(3): p. 343-355.
69. Hohmann, A.A. and K.M. Shear, *Community-based intervention research: Coping with the "noise" of real life in study design*. American Journal of Psychiatry, 2002. **159**: p. 201-207.
70. Dickinson, T., *Exploring the drugs/violence nexus among active offenders: Contributions from the St. Louis School*. Criminal Justice Review, 2015. **40**(1): p. 67-86.
71. Ash, J.S. and K.P. Guappone, *Qualitative evaluation of health information exchange efforts*. Journal of Biomedical Informatics, 2007. **40**(6): p. S33-S39.
72. Patton, M.Q., *Qualitative research & evaluation methods*. 3 ed. 2002: SAGE Publications, Inc 688.
73. Braithwaite, R.L. and N. Lythcott, *Community empowerment as a strategy for health promotion for black and other minority populations*. Journal of the American Medical Association, 1989. **261**(2): p. 282-283.
74. Drug Enforcement Administration, *National drug threat assessment summary*, U.S. Department of Justice, Editor. 2014, Strategic Intelligence Section.
75. United Nations Office of Drugs and Crime, *World drug report*. 2014.
76. Drug Enforcement Administration, *National drug threat assessment summary*, U.S. Department of Justice, Editor. 2013, Strategic Intelligence Section.
77. Kilmer, B., et al., *What America's users spend on illegal drugs: 2000-2010*. 2014. p. 124.
78. Substance Abuse and Mental Health Services Administration, *Results from the 2013 national survey on drug use and health: Summary of national findings*. 2014, United States Department of Health and Human Services, Center for Behavioral Health Statistics and Quality.
79. *National Drug Threat Assessment*, U.S. Department of Justice, Editor. 2009, National Drug Intelligence Center, National Threat Analysis Branch.
80. Federal Bureau of Investigation. *Crime in the United States: Persons Arrested 2016*; Available from: <https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/topic-pages/persons-arrested>.
81. Taxy, S., J. Samuels, and W. Adams, *Drug offenders in federal prison: Estimates of characteristics based on linked data*, U.S. Department.o. Justice, Editor. 2015, Bureau of Justice Statistics. p. 1-10.
82. Office of National Drug Control Policy. *Collaborating with Native Americans and Alaskan Natives*. 2012 [cited 2012; Available from: <http://www.whitehouse.gov/ondcp/native-americans-and-alaskan-indians>.
83. Paulozzi, L., *Lessons from the past*. Injury Prevention, 2012. **18**(1): p. 70-70.



84. Office of Disease Prevention and Health Promotion. *Healthy People 2020*. 2013 [cited 2013; Available from: <http://www.healthypeople.gov/2020/default.aspx>.
85. Bushman, B.J., et al., *Youth violence: What we know and what we need to know*. American Psychologist, 2016. **71**(1): p. 17.
86. Bureau of Justice Statistics, *Fact sheet: Drug-related crime*, U.S. Department of Justice, Editor. 1994, Drugs & Crime Data Center & Clearinghouse.
87. Fagan, J., *Interactions among drugs, alcohol, and violence*. Health Affairs, 1993. **12**(4): p. 65-79.
88. World Health Organization. *Violence Health Topics 2018*. Available from: <http://www.who.int/topics/violence/en/>.
89. Rachuba, L., B. Stanton, and D. Howard, *Violent crime in the United States: An epidemiologic profile*. Archives of Pediatrics and Adolescent Medicine 1995. **149**(9): p. 953-960.
90. El-Bassel, N., et al., *Relationship between drug abuse and intimate partner violence: A longitudinal study among women receiving methadone*. American Journal of Public Health, 2005. **95**(3): p. 465-470.
91. Gilbert, L., et al., *Substance use and partner violence among urban women seeking emergency care*. Psychology of Addictive Behaviors 2012. **26**(2): p. 226-235.
92. Tiuhonen, J., et al., *Psychotropic drugs and homicide: A prospective cohort study from Finland*. World Psychiatry, 2015. **14**(2): p. 245-247.
93. Friedman, A.S., K. Glassman, and A. Terras, *Violent behavior as related to use of marijuana and other drugs*. Journal of Addictive Diseases, 2001. **20**(1): p. 49-72.
94. Werb, D., et al., *Effect of drug law enforcement on drug market violence: A systematic review*. International Journal of Drug Policy, 2011. **22**(2): p. 87-94.
95. Eitle, D. and T. McNulty Eitle, *Factors associated with American Indian and white adolescent drug selling in rural communities*. International Journal of Law, Crime and Justice, 2015. **43**(2): p. 252-272.
96. James, S.E., J. Johnson, and C. Raghavan, *"I couldn't go anywhere": Contextualizing violence and drug abuse: A social network study*. Violence Against Women, 2004. **10**(9): p. 991-1014.
97. Felson, R.B. and J. Staff, *Committing economic crime for drug money*. Crime & Delinquency, 2015.
98. Parker, R.N. and K. Auerhahn, *Alcohol, drugs, and violence*. Annual Review of Sociology, 1998. **24**: p. 291-311.
99. Moss, H.B. and R.E. Tarter, *Substance abuse, aggression, and violence*. American Journal on Addictions, 1993. **2**(2): p. 149-160.
100. Copes, H., A. Hochstetler, and S. Sandberg, *Using a Narrative Framework to Understand the Drugs and Violence Nexus*. Criminal Justice Review, 2015. **40**(1): p. 32-46.
101. Gracia, E., et al., *Exploring neighborhood influences on small-area variations in intimate partner violence risk: A Bayesian random-effects modeling approach*. International Journal of Environmental Research and Public Health, 2014. **11**(1): p. 866-882.
102. Groves, W.B. and R.J. Sampson, *Community structure and crime: Testing social-disorganization theory*. American Journal of Sociology 1994. **94**(4): p. 774-802.

103. Wilson, J.Q. and G.L. Kelling, *Broken windows*, in *Atlantic monthly*. 1982. p. 29-38.
104. Gorman, D.M., et al., *Implications of systems dynamic models and control theory for environmental approaches to the prevention of alcohol- and other drug use-related problems*. *Substance Use & Misuse*, 2004. **39**(10-12): p. 1713-1750.
105. Federal Bureau of Investigation. *Crime in the United States: Persons Arrested 2015*; Available from: <https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/topic-pages/persons-arrested>.
106. Simoni-Wastila, L., *The use of abusable prescription drugs: The role of gender*. *Journal of Women's Health & Gender-Based Medicine*, 2000. **9**(3): p. 289-297.
107. Ellickson, P.L. and K.A. McGuigan, *Early predictors of adolescent violence*. *American Journal of Public Health*, 2000. **90**(4): p. 566.
108. Kaylen, M.T. and W.A. Pridemore, *A reassessment of the association between social disorganization and youth violence in rural areas*. *Social Science Quarterly*, 2011. **92**(4): p. 978-1001.
109. O'Brien, K., et al., *Youth gang affiliation, violence, and criminal activities: A review of motivational, risk, and protective factors*. *Aggression and Violent Behavior*, 2013. **18**(4): p. 417-425.
110. Szapocznik, J., et al., *Drug abuse in African American and Hispanic adolescents: Culture, development, and behavior*. *Annual Review of Clinical Psychology*, 2007. **3**(1): p. 77-105.
111. White, H.R., et al., *Psychopathology as a predictor of adolescent drug use trajectories*. *Psychology of Addictive Behaviors*, 2001. **15**(3): p. 210.
112. Kuo, F.E. and W.C. Sullivan, *Aggression and violence in the inner city: Effects of environment via mental fatigue*. *Environment and Behavior*, 2001. **33**(4): p. 543-571.
113. Soyka, M., *Substance misuse, psychiatric disorder and violent and disturbed behaviour*. *The British Journal of Psychiatry*, 2000. **176**(4): p. 345-350.
114. Beittel, J.S., *Mexico's drug trafficking organizations: Source and scope of the violence*. *United States Congressional Research Service*, 2013: p. 7-5700.
115. Astorga, L. and D.A. Shirk, *Drug trafficking organizations and counter-drug strategies in the US-Mexican context*. *Center for US-Mexican Studies UC San Diego*, 2010: p. 1-49.
116. Reed, J. and P. Whitehouse, *Harsher drug prohibition won't stop violence, but regulation might*. *BMJ*, 2018. **361**.
117. Emerick, N.A., et al., *Homicide and social disorganization on the border: Implications for Latino and immigrant populations*. *Social Science Quarterly*, 2014. **95**(2): p. 360-379.
118. Kaylen, M.T. and W.A. Pridemore, *Social disorganization and crime in rural communities: The first direct test of the systemic model*. *British Journal of Criminology*, 2013. **53**(5): p. 905-923.
119. Kasturirangan, A., S. Krishnan, and S. Riger, *The impact of culture and minority status on women's experience of domestic violence*. *Trauma, Violence, & Abuse*, 2004. **5**(4): p. 318-332.
120. Bent-Goodley, T.B., *Culture and domestic violence: Transforming knowledge development*. *Journal of Interpersonal Violence*, 2005. **20**(2): p. 195-203.

121. Anderson, E., *Code of the street: Decency, violence, and the moral life of the inner city*. 2000, New York, NY: W. W. Norton.
122. LaFromboise, T.D., et al., *Family, community, and school influences on resilience among American Indian adolescents in the upper midwest*. *Journal of Community Psychology*, 2006. **34**(2): p. 193-209.
123. Rhodes, T., *The 'risk environment': A framework for understanding and reducing drug-related harm*. *International Journal of Drug Policy*, 2002. **13**(2): p. 85-94.
124. Jackson, R.J., *The impact of the built environment on health: An emerging field*. *American Journal of Public Health*, 2003. **93**(9): p. 1382-1384.
125. Foster, S. and B. Giles-Corti, *The built environment, neighborhood crime and constrained physical activity: An exploration of inconsistent findings*. *Preventive Medicine*, 2008. **47**(3): p. 241-251.
126. James, P., et al., *Towards an integrated understanding of green space in the European built environment*. *Urban Forestry & Urban Greening*, 2009. **8**(2): p. 65-75.
127. Yellow Horse Brave Heart, M. and L.M.D. DeBruyn, *The American Indian Holocaust: Healing historical unresolved grief*. *American Indian and Alaska Native Mental Health Research*, 1998. **8**(2): p. 23.
128. Yellow Horse Brave Heart, M., *The historical trauma response among Natives and its relationship with substance abuse: A Lakota illustration*. *Journal of Psychoactive Drugs*, 2003. **35**(1).
129. Bombay, A., K. Matheson, and H. Anisman, *The intergenerational effects of Indian Residential Schools: Implications for the concept of historical trauma*. *Transcultural Psychiatry*, 2014. **51**(3): p. 320-338.
130. Morgan, R. and L. Freeman, *The Healing of our people: Substance abuse and historical trauma*. *Substance Use & Misuse*, 2009. **44**(1): p. 16.
131. Owens, J., "Historic" in a bad way: How the tribal law and order act continues the American tradition of providing inadequate protection to American Indian and Alaska Native rape victims. *The Journal of Criminal Law & Criminology*, 2012. **102**(2): p. 28.
132. Nagata, D.K., J.H.J. Kim, and T.U. Nguyen, *Processing cultural trauma: Intergenerational effects of the Japanese American incarceration*. *Journal of Social Issues*, 2015. **71**(2): p. 356-370.
133. Yehuda, R., et al., *Relationship between posttraumatic stress disorder characteristics of Holocaust survivors and their adult offspring*. *American Journal of Psychiatry*, 1998. **155**(6): p. 841-843.
134. Morrow, D.F., *Older gays and lesbians*. *Journal of Gay & Lesbian Social Services*, 2001. **13**(1-2): p. 151-169.
135. Bureau of Indian Affairs. *Frequently Asked Questions*. 2018 Available from: <http://www.bia.gov/>.
136. U.S. Department of Commerce. *U.S. Census Bureau*. 2010. Available from: <http://www.census.gov/>.
137. Rieckmann, T., et al., *American Indians with substance use disorders: Treatment needs and comorbid conditions*. *The American Journal of Drug and Alcohol Abuse*, 2012. **38**(5): p. 498-504.

138. Akins, S., et al., *Patterns and correlates of adult American Indian substance use*. Journal of Drug Issues, 2013. **43**(4): p. 497-516.
139. Ehlers, C.L. and I.R. Gizer, *Evidence for a genetic component for substance dependence in Native Americans*. The American Journal of Psychiatry, 2013. **170**(2): p. 154-164.
140. Pu, J., et al., *Protective factors in American Indian communities and adolescent violence*. Maternal and Child Health Journal, 2013. **17**(7): p. 1199-1207.
141. Sapra, K.J., et al., *Family and partner interpersonal violence among American Indians/Alaska Natives*. Injury Epidemiology, 2014. **1**(1): p. 7-7.
142. Tighe, S., "*Of course we are crazy*": *Discrimination of Native American Indians through criminal justice*. Justice Policy Journal, 2014. **11**(1): p. 1-38.
143. Yellow Horse Brave Heart, M., et al., *Psychiatric Disorders and Mental Health Treatment in American Indians and Alaska Natives: Results of the National Epidemiologic Survey on Alcohol and Related Conditions*. Social Psychiatry and Psychiatric Epidemiology, 2016. **51**(7): p. 1033-1046.
144. National Center for Health Statistics, *Health, United States, 2016: With Chartbook on Long-term Trends in Health*. 2017: Hyattsville, MD.
145. Washborne, K.K., *Federal criminal law and tribal self-determination*. North Carolina Law Review 2006. **84**: p. 79.
146. Lanier, C. and L. Huff-Corzine, *American Indian homicide: A county-level analysis utilizing social disorganization theory*. Homicide Studies, 2006. **10**(3): p. 181-194.
147. Mills, J. and K. Brown, *Law enforcement in Indian Country: The struggle for a solution*.
148. Futures Without Violence, *The facts on violence against American Indian/Alaskan Native women*. 2012. p. 8.
149. Motivans, M., *Federal Justice Statistics, 2011–2012*, U.S. Department of Justice, Editor. 2015, Bureau of Justice Statistics. p. 1-33.
150. Minton, T.D., *Jails in Indian country, 2014*, Bureau of Justice Statistics, Editor. 2015.
151. Wiechelt, S.A., et al., *Historical trauma among urban American Indians: Impact on substance abuse and family cohesion*. Journal of Loss and Trauma, 2012. **17**(4): p. 319-336.
152. Hardy, A. and K. Brown-Rice, *Violence and Residual Associations Among Native Americans Living on Tribal Lands*. Professional Counselor: Research & Practice, 2016. **6**(4).
153. Canby, W.C.J., *American Indian law in a nutshell*. 2009, WEST, A Thomson Reuters Business.
154. Bobee, H., et al., *Criminal jurisdiction in Indian country: The solution of cross deputization*. Indigenous Law & Policy Center Occasional Paper Series-Michigan State University College of Law, 2008: p. 30.
155. *Tribal Law and Order Act of 2010*. 2010.
156. Perry, S.W., *Tribal crime data collection activities, 2015*, U.S. Department of Justice, Editor. 2015, Bureau of Justice Statistics.
157. U.S. Department of Justice, *Tribal Crime Data Collection Activities*. 2017.

158. Lucchesi, A. *Missing & murdered indigenous women database*. 2018; Available from: <https://www.mmiwdatabase.com/>.
159. Peak, K. and J. Spencer, *Crime in Indian country: "Another trail of tears"*. *Journal of Criminal Justice*, 1987. **15**: p. 485-494.
160. Bowen, G.A., *Naturalistic inquiry and the saturation concept: a research note*. *Qualitative Research*, 2008. **8**(1): p. 137-152.
161. Willmon-Haque, S. and S.D. BigFoot, *Violence and the effects of trauma on American Indian and Alaska Native populations*. *Journal of Emotional Abuse*, 2008. **8**(1-2): p. 51-66.
162. Paul, T.M., et al., *Exploring the impact of substance use, culture, and trauma on American Indian adolescents*. *Journal of Applied Rehabilitation Counseling*, 2017. **48**(1): p. 31-39.
163. United States Government Accountability Office, *Tribal Law and Order Act: None of the surveyed tribes reported exercising the new sentencing authority, and the Department of Justice could clarify tribal eligibility for certain grant funds*. 2012: Washington D.C. . p. 24.
164. Walls, M.L., et al., *Unconscious biases: Racial microaggressions in American Indian health care*. *The Journal of the American Board of Family Medicine*, 2015. **28**(2): p. 231-239.
165. Fryberg, S.A., et al., *Of warrior chiefs and Indian princesses: The psychological consequences of American Indian mascots*. *Basic and Applied Social Psychology*, 2008. **30**(3): p. 208-218.
166. Coyhis, D. and R. Simonelli, *The Native American healing experience*. *Substance Use & Misuse*, 2008. **43**(12-13): p. 24.
167. Davis, S.M. and R. Reid, *Practicing participatory research in American Indian communities*. *The American Journal of Clinical Nutrition*, 1999. **69**(4): p. 755S-759S.
168. Caldwell, J.Y., et al., *Culturally competent research with American Indians and Alaska Natives: Findings and recommendations of the first Symposium of the Work Group on American Indian Research and Program Evaluation Methodology*. *American Indian and Alaska Native Mental Health Research: The Journal of the National Center*, 2005. **12**(1): p. 1-25.
169. North Carolina Department of Administration. *Commission of Indian Affairs: Frequently asked questions*, 2015; Available from: <http://www.doa.nc.gov/cia/faq.aspx>.
170. Lumbee Tribe of North Carolina. *Official website of the Lumbee Tribe of North Carolina*. 2015. Available from: <http://lumbeetribe.com/>.
171. Smokowski, P. *Injury Center: Violence Prevention*, 2012; Available from: [http://www.cdc.gov/violenceprevention/ace/centers/university\\_of\\_northcarolina.html](http://www.cdc.gov/violenceprevention/ace/centers/university_of_northcarolina.html).
172. Hixenbaugh, M., *Robeson County is one of most violent in state*, in *The Fayetteville Observer*. 2011: Fayetteville.
173. Smokowski, P. *North Carolina Center for Excellence in Youth Violence Prevention*, 2013. Available from: <http://ncace.web.unc.edu/about/the-community/>.

174. Lowery, M.M., *Indians, southerners, and Americans: Race, tribe, and nation during "Jim Crow"*. *Native South* 2009. **2**(1): p. 22.
175. Lumbee Tribe of North Carolina. *Official website of the Lumbee Tribe of North Carolina*, 2018. Available from: <http://lumbeetribe.com/>.
176. Patterson, O., *The press held hostage*. *American Journalism*, 1998. **15**(4): p. 125-139.
177. McCulloch, A.M. and D.E. Wilkins, "*Constructing" nations within states: The quest for federal recognition by the Catawba and Lumbee Tribes*. *American Indian Quarterly*, 1995. **19**(3): p. 361-388.
178. Lowery, M.M., *Telling our own stories: Lumbee history and the federal acknowledgment process*. *American Indian Quarterly*, 2009. **33**(4): p. 23.
179. Burnt Swamp Baptist Association. 2018; Available from: [www.burntswamp.org/](http://www.burntswamp.org/).
180. Maynor, M. and J. Kertesz. *Sounds of Faith: Religious History*. 2002; Available from: <http://www.unc.edu/~mmaynor/>.
181. Smith, J.M. and L.J. Smith. *The Lumbee Methodists: getting to know them, a folk history*. 1990. Raleigh, NC: Commission of Archives and History, North Carolina Methodist Conference.
182. Association of Religion Data Archives, *County membership report*. 2010.
183. Association of Statisticians of American Religious Bodies, *U.S. religion census 1952-2010*. 2010.
184. NC Conference Committee on Native American Ministries. *Native American Cooperative Ministry*, 2018; Available from: [nativeamericanministries.org/native-american-cooperative-ministry/](http://nativeamericanministries.org/native-american-cooperative-ministry/).
185. Lewis, J.D. *Robeson County, North Carolina*. 2013; Available from: [http://www.carolana.com/NC/Counties/robeson\\_county\\_nc.html](http://www.carolana.com/NC/Counties/robeson_county_nc.html).
186. Raab, S., *Reasonable doubt*, in *GQ*. 1994.
187. National Institute on Minority Health and Health Disparities, *HD Pulse: An ecosystem of health disparities and minority health resources*, 2018. National Institute of Health, U.S. Department of Health and Human Services.
188. North Carolina State Bureau of Investigation. *Crime statistics: 2014 annual summary report*. 2014; Available from: <http://crimereporting.ncsbi.gov/Reports.aspx>.
189. Robeson County Health Department, Southeastern Regional Medical Center, and Healthy Robeson Task Force, *Robeson County community health assesment*, 2017.
190. Robeson County Department of Public Health, *State of the county health report*, 2009: Lumberton NC. p. 4.
191. McLeroy, K.R., et al., *An ecological perspective on health promotion Programs*. *Health Education & Behavior*, 1988. **15**(4): p. 351-377.
192. Fusch, P.I. and L.R. Ness, *Are we there yet? Data saturation in qualitative research*. *The Qualitative Report*, 2015. **20**(9): p. 1408-1416.
193. Bell, R.A., et al. *The Lumbee Rite of Passage: A cultural enhancement program for Lumbee Indian youth to address cultural awareness and psychosocial health*. in *Advancing Native Health and Wellness Conference*. 2012. Anchorage, Alaska.
194. Morse, J.M., *The significance of saturation*. *Qualitative Health Research*, 1995. **5**(2): p. 147-149.

195. Guest, G., A. Bunce, and L. Johnson, *How many interviews are enough?: An experiment with data saturation and variability*. *Field Methods*, 2006. **18**(1): p. 59-82.
196. Francis, J.J., et al., *What is an adequate sample size? Operationalising data saturation for theory-based interview studies*. *Psychology & Health*, 2009. **25**(10): p. 1229-1245.
197. Coyne, I.T., *Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries?* *Journal of Advanced Nursing*, 1997. **26**(3): p. 623-630.
198. Corbin, J.M. and A. Strauss, *Grounded theory research: Procedures, canons, and evaluative criteria*. *Qualitative Sociology*, 1990. **13**(1): p. 3-21.
199. Valois, R.F., et al., *Evaluation of the South Carolina Teen Pregnancy Prevention Initiative: Community key leader survey and results*. 2002, U.S. Department of Health & Human Services, South Carolina Department of Social Services, : Columbia, SC.
200. Earls, F.J., et al., *Project on Human Development in Chicago Neighborhoods (PHDCN): Exposure to violence (subject), wave 1*, U.S Department of Justice, Editor. 1997, Interuniversity Consortium for Political and Social Research, Ann Arbor, Michigan.
201. Wendt, D.C. and J.P. Gone, *Decolonizing psychological inquiry in American Indian communities: The promise of qualitative methods*. *Qualitative Strategies for Ethnocultural Research*, 2012: p. 161-178.
202. Brayboy, B.M. and D. Deyhle, *Insider-Outsider: Researchers in American Indian Communities*. *Theory Into Practice*, 2000. **39**(3): p. 163.
203. Morgan, D.L., *Focus groups*. *Annual Review of Sociology*, 1996: p. 129-152.
204. Berger, R., *Now I see it, now I don't: Researcher's position and reflexivity in qualitative research*. *Qualitative Research*, 2015. **15**(2): p. 219-234.
205. Noble, H. and J. Smith, *Issues of validity and reliability in qualitative research*. *Evidence-Based Nursing*, 2015: p. ebnurs-2015-102054.
206. Kornbluh, M., *Combatting Challenges to Establishing Trustworthiness in Qualitative Research*. *Qualitative Research in Psychology*, 2015. **12**(4): p. 397-414.
207. Malterud, K., *Qualitative research: Standards, challenges, and guidelines*. *The Lancet*, 2001. **358**(9280): p. 483-488.

## **Appendix A**

IRB Approval Letters





OFFICE OF RESEARCH COMPLIANCE

INSTITUTIONAL REVIEW BOARD FOR HUMAN RESEARCH  
APPROVAL LETTER for EXPEDITED REVIEW

This is to certify that the research proposal: **Pro00035161**

Entitled: *Investigating Drug-Related Violence in Indian Country: The Lumbee Tribe of North Carolina*

Submitted by:

Principal Investigator: Asa Revels  
College: Arnold School of Public Health  
Department: Health Promotion, Education & Behavior  
Address: Columbia, SC 29208

was reviewed and approved by the University of South Carolina Institutional Review Board (USC IRB) by **Expedited** review on **3/11/2015** (category **7**).

Approval is given for a one-year period from **3/11/2015** to **3/10/2016**. When applicable, approved consent /assent documents are located under the "Stamped ICF" tab on the Study Workspace screen in eIRB.

**PRINCIPAL INVESTIGATORS ARE TO ADHERE TO THE FOLLOWING APPROVAL CONDITIONS**

- The research must be conducted according to the proposal/protocol that was approved by the USC IRB
- Changes to the procedures, recruitment materials, or consent documents, must be approved by the USC IRB prior to implementation
- *If applicable*, each subject should receive a copy of the approved date stamped consent document
- It is the responsibility of the principal investigator to report promptly to the USC IRB the following:
  - Unanticipated problems and/or unexpected risks to subjects
  - Adverse events effecting the rights or welfare of any human subject participating in the research study
- Research records, including signed consent documents, must be retained for at least (3) three years after the termination of the last IRB approval.
- No subjects may be involved in any research study procedure prior to the IRB approval date, or after the expiration date. For continued approval of the research study, an update of the study is required prior to the expiration date. The PI is responsible for initiating the Continuing Review process. At the time a study is closed, a Continuing Review report form is to be used for the final report to the USC IRB in order to formally close the research study.

The Office of Research Compliance is an administrative office that supports the University of South Carolina Institutional Review Board. If you have questions, contact Arlene McWhorter at [arlenem@sc.edu](mailto:arlenem@sc.edu) or (803) 777-7095.

Sincerely,

Lisa M. Johnson  
IRB Manager



OFFICE OF RESEARCH COMPLIANCE

**INSTITUTIONAL REVIEW BOARD FOR HUMAN RESEARCH  
APPROVAL LETTER for CONTINUED EXPEDITED REVIEW**

This is to certify that the following proposal: **Pro00035161** / Continuing Review Number: **CR00017001**

Study Title: *Investigating Drug-Related Violence in Indian Country: The Lumbee Tribe of North Carolina*

Submitted by:

Principal Investigator: Asa Revels  
College/ Department: Arnold School of Public Health  
Health Promotion, Education & Behavior  
Columbia, SC 29208

was reviewed and approved for continuation by the University of South Carolina Institutional Review Board (USC IRB) by Expedited review on **2/10/2016** (category 7).

Approval is for a one-year period from **2/10/2016 to 2/9/2017**. When applicable, approved consent /assent documents are located under the "Stamped ICF" tab on the Study Workspace in eIRB.

**PRINCIPAL INVESTIGATORS ARE TO ADHERE TO THE FOLLOWING APPROVAL CONDITIONS**

- The research must be conducted according to the proposal/protocol that was approved by the USC IRB
- Changes to the procedures, recruitment materials, or consent documents, must be approved by the USC IRB prior to implementation
- *If applicable*, each subject should receive a copy of the approved date stamped consent document
- It is the responsibility of the principal investigator to report promptly to the USC IRB the following:
  - Unanticipated problems and/or unexpected risks to subjects
  - Adverse events effecting the rights or welfare of any human subject participating in the research study
- Research records, including signed consent documents, must be retained for at least (3) three years after the termination of the last IRB approval.
- No subjects may be involved in any research study procedure prior to the IRB approval date, or after the expiration date. For continued approval of the research study, an update of the study is required prior to the expiration date. The PI is responsible for initiating the Continuing Review process. At the time a study is closed, a Continuing Review report form is to be used for the final report to the USC IRB in order to formally close the research study.

The Office of Research Compliance is an administrative office that supports the University of South Carolina Institutional Review Board. If you have questions, contact Arlene McWhorter at [arlenem@sc.edu](mailto:arlenem@sc.edu) or (803) 777-7095.

Sincerely,

Lisa M. Johnson  
IRB Manager



OFFICE OF RESEARCH COMPLIANCE

**INSTITUTIONAL REVIEW BOARD FOR HUMAN RESEARCH  
APPROVAL LETTER for CONTINUED EXPEDITED REVIEW  
with LAPSE in APPROVAL PERIOD**

Asa Revels  
Arnold School of Public Health  
Health Promotion, Education & Behavior  
Columbia, SC 29208

Re: **Pro00035161 / Continuing Review Number: CR00023855**

Dear Ms. Revels:

This is to certify that the following proposal entitled *Investigating Drug-Related Violence in Indian Country: The Lumbee Tribe of North Carolina* was reviewed and approved by the University of South Carolina Institutional Review Board (USC IRB) for continuation by **Expedited** review on **1/29/2018 (category 7)**. Approval is for a one-year period from **1/29/2018 to 1/28/2019**. When applicable, approved consent/assent documents are located under the "Stamped ICF" tab on the Study Workspace in eIRB. IRB approval for this study will expire if continuing review approval is not granted before **1/28/2019**. The Principal Investigator must submit a Continuing Review and required attachments to request continuing approval or closure.

**Note:** The previous IRB approval expired on **01/10/2018**; therefore, no enrollment or interaction with subjects should have occurred during the period of **01/10/2018 - 1/29/2018**. If enrollment/interaction with subjects did occur during the expired period you must submit a Protocol Deviation report, see Reportable Events in eIRB.

**PRINCIPAL INVESTIGATORS ARE TO ADHERE TO THE FOLLOWING APPROVAL CONDITIONS**

- The research must be conducted according to the proposal/protocol that was approved by the USC IRB
- Changes to the procedures, recruitment materials, or consent documents, must be approved by the USC IRB prior to implementation
- *If applicable*, each subject should receive a copy of the approved date stamped consent document
- It is the responsibility of the principal investigator to report promptly to the USC IRB the following:
  - Unanticipated problems and/or unexpected risks to subjects
  - Adverse events effecting the rights or welfare of any human subject participating in the research study
- Research records, including signed consent documents, must be retained for at least (3) three years after the termination of the last IRB approval.
- No subjects may be involved in any research study procedure prior to the IRB approval date, or after the expiration date.
- At the time of study closure a Continuing Review form is to be used for the final report to the USC IRB.

The Office of Research Compliance is an administrative office that supports the USC IRB. If you have questions, contact Arlene McWhorter at [arlenem@sc.edu](mailto:arlenem@sc.edu) or (803) 777-7095.

Sincerely,

Lisa M. Johnson  
ORC Assistant Director  
and IRB Manager



*Paul Brooks*  
*Tribal Chairman*

**Office of the Tribal Chair of the**  
**Lumbee Tribe of North Carolina**

February 6, 2014

Robert F. Valois, MS, PhD, MPH  
Professor  
Health Promotion, Education & Behavior  
Discovery I Building 534A  
915 Greene Street, Room 529

Dear Dr. Valois,

My name is Tony Hunt I'm employed as Tribal Administrator for the Lumbee Tribe of North Carolina. The purpose of this letter is to inform you that Asa A. Revels, has been in contact with me about her research on American Indians with your University. We have meet and have agreed to collaborate with her on her research within our Tribe. We are glad to work with Asa and help her collected all the information that we are able to provide for her. If we can be of any further assistants please let me know.

Tony Hunt

Tribal Administrator  
Lumbee Tribe of North Carolina

6984 Hwy 711W  
Post Office Box 2709  
Pembroke, NC 28372

[www.lumbee Tribe.com](http://www.lumbee Tribe.com)

Office: 910.521.7861  
Fax: 910.521.7790  
Toll Free: 1.800.659.6585

## North Carolina Department of Public Safety Research Certification

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**Project Title:** Investigating Drug-Related Violence in Indian Country: The Lumbee Tribe of North Carolina

**Principal Investigator:** Asa A. Revels

**Project Number:** 1604-01

**Dates of Certification:** 10/24/2016 – 2/9/2017

---

This letter certifies that the project noted above has been reviewed and received approval for merit, human subjects protection, and Divisional authorization. This letter of certification enumerates the allowable research activities and sites. If an activity is not specified in this letter, it is not allowed. The reference number must be used on all correspondence.


The Principal Investigator must retain an original copy of this letter of certification. It is the only accepted means of authorizing access to research subjects. The investigator should show the letter to staff contacts and must do so when requested. This letter of certification expires on 02/9/2017

While the department will attempt to contact the Principal Investigator 3 months in advance of the approval expiration as a reminder, the Principal Investigator is responsible for renewing the approval of the research, both with the NC Department of Public Safety and with his/her institution's IRB.

The following is a list of the approved research activities and the specific facilities where activities are to be conducted:

Research and Decision Support Section:


1. To recruit probation officers through snowball sampling to participate in an interview.
- 

Signed:   
Research Merit Panel Chairperson

Date: 7/18/2016

Signed:   
Human Subjects Review Committee Chairperson

Date: 10/21/2016

Signed:   
Divisional Authorization Authority

Date: 10/24/2016

FRM1004

## **Appendix B**

### Recruitment Materials

## Research Participants Needed



## Understanding Substance Use & Safety in the Lumbee Tribe

### Description

We are seeking individuals from the Lumbee Tribe to participate in a research study about substance use and safety. To participate you will be asked to take part in a one-on-one interview where you will be asked questions about your opinion of various issues related to substance use and safety within the Lumbee Community. To participate or for more information, please contact the primary investigator to the right.

### Eligibility Criteria

1. Age 18 or older.
2. Ability to speak English.
3. Enrolled member of the Lumbee Tribe of North Carolina.
4. Lived in Robeson or surrounding counties for at least 2 years.

### Contact Information

**Asa A. Revels, MPH**  
**Primary Investigator**

**Phone:**

C: (305)978-7464  
H: (910)359-0291

**Email:**

revelsaa@email.sc.edu



Health, Promotion, Education,  
& Behavior  
Arnold School of Public Health  
915 Greene Street, Room 529  
Columbia, SC 29208

## Appendix C

### Consent and Enrollment Forms





## INVITATION TO PARTICIPATE IN RESEARCH

**Study Title:** Investigating Drug-Related Violence in Indian Country: The Lumbee Tribe of North Carolina

**Principal Investigator (PI):** Asa A. Revels, MPH

**Address:** University of South Carolina – Health, Promotion, Education, & Behavior  
Arnold School of Public Health  
915 Greene Street, Room 529  
Columbia, SC 29208  
(305)978-7464

### INTRODUCTION:

You are being invited to participate in a research study that will help researchers better understand issues in the Lumbee Tribe that may impact rates of violence and substance use among tribal members. Information gathered in this study will be used to improve future research and perhaps shape policies and programs to prevent the health consequences of violence and substance use in the Lumbee Tribe. In the following sections we provide more information about the opportunity to participate in this research study. Please take all the time you need to make your decision. If you have any questions, please contact the Principle Investigator (PI) below:

Primary Contact (PI): Asa A. Revels at (305)978-7464 or [revelsaa@email.sc.edu](mailto:revelsaa@email.sc.edu)

OR

Secondary Contact: Dr. Robert F. Valois at (803)777-6013 or [rvalois@mailbox.sc.edu](mailto:rvalois@mailbox.sc.edu)

### PROCEDURES:

You have been asked to participate in this research because you are at least 18 years old, have worked in Robeson County for at least two years, you work in some capacity with issues related to substance abuse and/or violence or you maintain an administrative, managerial, or leadership role within your organization of employment. You will be asked to participate in a one-on-one interview with the PI, Ms. Asa Revels. The interview will last about 1-2 hours and will occur at a location of your choosing. With your consent, the interview will be tape recorded and transcribed. Once transcribed, all audio recordings will be destroyed and any identifying information in the transcript will be removed. Transcripts will be stored on a secure server in a locked building. Only members of the research team will have accesses to study materials.

**BENEFITS:**

There are no direct benefits expected for participating in this study. We hope the information you provide, however, will enhance understanding of the relationship between violence and substance abuse thereby informing efforts to address these issues in the Lumbee community

**COST**

There is no direct cost to you for participating in this study. Participation is also completely voluntary, and you will receive \$20 for your time.

**RISKS**

There are moderate risks associated with participating in this study. A breach in confidentiality poses the greatest risk because some information discussed may be sensitive. As such, it is important you avoid discussing information which may incriminate you or someone else.

The sensitive nature of the topic also poses a second risk. Some questions may cause you to experience feelings of discomfort, anxiety, or stress when discussing issues related to violence or drug use. Should you feel any discomfort, you may opt to not answer certain questions, or you may discontinue your participation at any time. The PI, Ms. Asa Revels and her advisor will always be available to address any concerns.

All information collected from you will be identified with a randomly assigned study ID. Your name or other identifiable information will not be attached to your interview. Study IDs and lists with participants' names will be kept in a separate location in a locked file cabinet and in secure electronic database. This list will be destroyed at the end of the study.

**ALTERNATIVES:**

It is your choice whether to participate in this study. If you decide not to participate, you would not have to do any of the things mentioned above. If you begin the study, you have the right to withdraw from the study at any time without negative consequences. Any information you have provided before a decision to withdraw will remain part of the study documents, unless you request that it be destroyed.

**CONFIDENTIALITY:**

Your research records will be confidential (private) to the extent allowed by law. We are compelled by law to inform an appropriate other person if: (1) we hear and believe that you are in danger of hurting yourself or someone else, or (2) if there is reasonable suspicion that a child, elder, or dependent adult has been abused. In all records of the study, a study ID will identify you and only the researchers will know your name. Your name will not be used in any reports or published articles of this study. Your files will be kept in a locked cabinet, and computer records related to the study will be secured, and accessible only to the researchers.

**QUESTIONS:**

You may contact Ms. Asa Revels or Dr. Robert Valois (see contact information on page 1 of this document) if you want to learn more about the study and benefits of taking part. This study has been approved by the University of South Carolina Institutional Review Board, a committee that reviews research to make sure that those who participate will be treated ethically. You can get more information about your rights as a research participant by calling the Office of Research Compliance of the University of South Carolina at (803) 777-7095.



## INVITATION TO PARTICIPATE IN RESEARCH

**Title:** Investigating Drug-Related Violence in Indian Country: The Lumbee Tribe of North Carolina

**Principal Investigator (PI):** Asa A. Revels, MPH

**Address:** University of South Carolina – Health, Promotion, Education, & Behavior  
Arnold School of Public Health  
915 Greene Street, Room 529  
Columbia, SC 29208  
(305)978-7464

### INTRODUCTION:

You are being invited to participate in a research study that will help researchers better understand issues in the Lumbee Tribe that may impact rates of violence and substance use among tribal members. Information gathered in this study will be used to improve future research and perhaps shape policies and programs to prevent the health consequences of violence and substance use in the Lumbee Tribe. In the following sections we provide more information about the opportunity to participate in this research study. Please take all the time you need to make your decision. If you have any questions, please contact the Principle Investigator (PI) below:

Primary Contact (PI): Asa A. Revels at (305)978-7464 or [revelsaa@email.sc.edu](mailto:revelsaa@email.sc.edu)

OR

Secondary Contact: Dr. Robert F. Valois at (803)777-6013 or [rvalois@mailbox.sc.edu](mailto:rvalois@mailbox.sc.edu)

### PROCEDURES:

You have been asked to participate in this study because you are an enrolled member of the Lumbee Tribe of North Carolina, are at least 18 years old, and have lived in Robeson County or surrounding counties for at least two years. You will be asked to participate in a one-on-one interview with the PI, Ms. Asa Revels. The interview will last about 1-2 hours and will occur at a location of your choosing. With your consent, the interview will be tape recorded and transcribed verbatim. Once transcribed, all audio recordings will be destroyed and any identifying information in the transcript will be removed. Transcripts will be stored on a secure server in a locked building. Only members of the research team will have access to study materials.

**BENEFITS:**

There are no direct benefits anticipated for participating in this study. We hope the information you provide, however, will enhance understanding of the relationship between violence and substance abuse thereby informing efforts to address these issues in the Lumbee community

**COST**

There is no direct cost to you for participating in this study. Participation is also completely voluntary, and you will receive \$20 for your time.

**RISKS**

There are moderate risks associated with participating in this study. A breach in confidentiality poses the greatest risk because some information discussed may be sensitive. As such, it is important you avoid discussing information which may incriminate you or someone else.

The sensitive nature of the topic also poses a second risk. Some questions may cause you to experience feelings of discomfort, anxiety, or stress when discussing issues related to violence or drug use. Should you feel any discomfort, you may opt to not answer certain questions, or you may discontinue your participation at any time. The PI, Ms. Asa Revels and her advisor will always be available to address any concerns.

All information collected from you will be identified with a randomly assigned study ID. Your name or other identifiable information will not be attached to your interview. Study IDs and lists with participants' names will be kept in a separate location in a locked file cabinet and in secure electronic database. This list will be destroyed at the end of the study.

**ALTERNATIVES:**

It is your choice whether to participate in this study. If you decide not to participate, you would not have to do any of the things mentioned above. If you begin the study, you have the right to withdraw from the study at any time without negative consequences. Any information you have provided before a decision to withdraw will remain part of the study documents, unless you request that it be destroyed.

**CONFIDENTIALITY:**

Your research records will be confidential (private) to the extent allowed by law. We are compelled by law to inform an appropriate other person if: (1) we hear and believe that you are in danger of hurting yourself or someone else, or (2) if there is reasonable suspicion that a child, elder, or dependent adult has been abused. In all records of the study, a study ID will identify you and only the researchers will know your name. Your name will not be used in any reports or published articles of this study. Your files will be kept in a locked cabinet, and computer records related to the study will be secured, and accessible only to the researchers.

**QUESTIONS:**

You may contact Ms. Asa Revels or Dr. Robert Valois (see contact information on page 1 of this document) if you want to learn more about the study and benefits of taking part. This study has been approved by the University of South Carolina Institutional Review Board, a committee that reviews research to make sure that those who participate will be treated ethically. You can get more information about your rights as a research participant by calling the Office of Research Compliance of the University of South Carolina at (803) 777-7095.



UNIVERSITY OF  
**SOUTH CAROLINA**

**RESEARCH PARTICIPANT ENROLLMENT FORM**

**Study Title:** Investigating Drug-Related Violence in Indian Country: The Lumbee Tribe of North Carolina

Date:	_____	
Participant Name:	_____	
Address:	_____ City: _____ State: _____ Zip: _____ _____ County of Residence: _____	
Phone:	Home: _____ Cell: _____	
Qualified Study Population:	<input type="checkbox"/> Key Leader	<input type="checkbox"/> Lumbee Tribal Member
Eligibility Criteria:	<input type="checkbox"/> Age 18 and older Ability to speak English or have access to a translator  <input type="checkbox"/> Has worked in some capacity within Robeson County North Carolina for at least 2 years  <input type="checkbox"/> Organization of employment directly interfaces with the topic of interest.	<input type="checkbox"/> Age 18 or older  <input type="checkbox"/> Ability to speak English or have access to a translator  <input type="checkbox"/> An enrolled member of the Lumbee Tribe of North Carolina  <input type="checkbox"/> Has lived in Robeson County, North Carolina or surrounding counties for 2 or more years

	<input type="checkbox"/> Maintains an administrative, managerial, or leadership role within their organization of employment	
Gender:	<input type="checkbox"/> Male	<input type="checkbox"/> Female
Hispanic or Latino:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Race:	<input type="checkbox"/> White or Caucasian <input type="checkbox"/> Black or African American <input type="checkbox"/> Native American/ Aleutian/ Eskimo <input type="checkbox"/> Asian <input type="checkbox"/> Hawaiian/ Pacific Islander <input type="checkbox"/> Other (Please specify: _____)	
Age:	_____	
Education Level:	<input type="checkbox"/> Never attended school or only attended kindergarten <input type="checkbox"/> Grades 1 through 8 (Elementary) <input type="checkbox"/> Grades 9 through 11 (Some high school) <input type="checkbox"/> Grade 12 or GED (High school graduate) <input type="checkbox"/> College 1 year to 3 years (Some college or technical school) <input type="checkbox"/> College 4 years or more (College graduate)	



Relationship Status:	<input type="checkbox"/> Now married or living as married <input type="checkbox"/> Separated <input type="checkbox"/> Divorced <input type="checkbox"/> Widowed <input type="checkbox"/> Never been married	
Employment Status:	<input type="checkbox"/> Employed for wages <input type="checkbox"/> Self-employed <input type="checkbox"/> Out of work for more than 1 year <input type="checkbox"/> Out of work for less than 1 year <input type="checkbox"/> A Homemaker <input type="checkbox"/> A Student <input type="checkbox"/> Retired <input type="checkbox"/> Unable to work	
Children:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Religion:	_____	
Are you interested in receiving a summary of the results of this research?		
Yes <input type="checkbox"/> No <input type="checkbox"/>		
Are you interested in participating in other aspects of the research process such as interpreting results or distributing findings?		
Yes <input type="checkbox"/> No <input type="checkbox"/>		

## **Appendix D**

### Interview Guides

# Key Leaders In-Depth Interview Guide

*[Interviewer Script]*

*[This study focuses on drug-related violence within the Lumbee Tribe. Specifically, we are asking Key Leaders, such as yourself, about your experiences of drugs and violence within the Lumbee Community. We also want to understand how your organization interacts with drugs and/or violence to identify more efficient and effective means for distributing valuable resources.*

*Your responses will help researchers and local policy makers better understand how to reduce the future impact of drugs and violence within the Lumbee Tribe. Please remember this interview is completely voluntary and you can choose to discontinue at any time. Do you have any questions before we begin?]*

<b>PART 1: DRUG-RELATED VIOLENCE IN THE LUMBEE COMMUNITY</b>		
Q#	QUESTION	FOLLOW UP QUESTIONS & PROBES
<b>Q1</b>	Looking back on the history of the Lumbee Tribe, there have been several prominent events which have been connected with drugs and/or violence in the community. Can you recall any of these events?	<p>Sample Stories to Reference*: Henry Berry Lowry, Klu Klux Klan Riot, Julian Pierce, death of Michael Jordan’s father.</p> <ol style="list-style-type: none"> <li>1. Are these stories ever discussed among your family or friends?</li> <li>2. How often are stories like these discussed?</li> </ol> <p><i>*To avoid any participant discomfort, stories will only be referenced in passing <u>if necessary</u> to focus the participant on the topic at hand. In depth discussions may occur at participant’s request.</i></p>

<p><b>Q2</b></p>	<p>Thinking about just violence, how common do you think violence is within the Lumbee Community today?</p>	<p><i>[Violence can include an altercation between two or more people. A person can also act violently towards themselves.]</i></p> <ol style="list-style-type: none"> <li>1. How do you know? How common do you think violence is within Robeson County? North Carolina?</li> <li>2. Do you think violence is more common, less common, or about the same as other communities in this area? Why?</li> <li>3. Are you afraid you or someone you know may be hurt by violence?</li> <li>4. Over the last few years do you think violence has increased, decreased or stayed the same?</li> </ol>
<p><b>Q3</b></p>	<p>Thinking about just drugs, how common is drug use within the Lumbee community?</p>	<ol style="list-style-type: none"> <li>1. How do you know? Why do you think this is?</li> <li>2. If you were interested, how easily could you purchase illegal drugs? Why?</li> <li>3. Are you afraid you or someone you know may be hurt by drug use?</li> <li>4. What types of drugs do you think are used most often?</li> <li>5. What do you think are some consequences of drug use?</li> <li>6. Over the last few years do you think drug use has increased, decreased or stayed the same? Why</li> </ol>

Q4	How common do you think drug trafficking is within the Lumbee community today?	<p><i>[Drug Trafficking can be defined as the illegal distribution or sell of illegal or prescribed narcotics]</i></p> <ol style="list-style-type: none"> <li>1. How do you know? Why do you think this?</li> <li>2. Do you think drug trafficking in the Lumbee Community is more common, less common, or about the same as other communities in this area? Why?</li> <li>3. How involved are Lumbees? Why?</li> <li>4. Do you personally know of someone currently or previously involved in drug trafficking in the Lumbee Community?</li> <li>5. Are you afraid you or someone you know may be hurt by drug trafficking?</li> <li>6. Over the last few years do you think drug trafficking has increased, decreased or stayed the same? Why?</li> </ol>
Q5	What types of drugs do you think are trafficked through the Lumbee Community?	<ol style="list-style-type: none"> <li>1. Why do you think this is?</li> <li>2. Where do you think these drugs are coming from originally?</li> <li>3. How do you think these drugs primarily arrive in the community?</li> </ol>
Q6	Thinking about the relationship between drugs and violence, from your perspective, how would you define the term, “Drug-Related Violence” (DRV)?	<ol style="list-style-type: none"> <li>1. Can you give an example of a type of DRV you have heard of or witnessed?</li> <li>2. In what ways are drugs and violence connected? Why? Is there always a connection?</li> <li>3. In the Lumbee community, if there is a report of violence, is it most often connected to drugs?</li> <li>4. Do you think DRV is associated with certain activities or types of people?</li> </ol>

Q7	Where do you think DRV events usually occur in the Lumbee Community?	<ol style="list-style-type: none"> <li>1. Do they occur in public? Private? Why do you think that is?</li> <li>2. Is there a certain part of the county where DRV tends to occur more often? Why?</li> <li>3. Are there certain areas that you avoid?</li> </ol>
Q8	There are many factors known to increase rates of DRV. Can you think of any specific factors that promote DRV in the Lumbee community?	<ol style="list-style-type: none"> <li>1. Points of Discussion: <ul style="list-style-type: none"> <li>• Geography of the county-rural/I-95</li> <li>• Poverty (job opportunities, low education)</li> <li>• Lumbee culture (patriarchy, familial ties, Christianity vs. traditional values [pressures to conform])</li> <li>• History (recognition process/AI identity)</li> <li>• Racism</li> <li>• Federal and State Policies (corruption)</li> </ul> </li> <li>2. What factor would you say if any, is the most significant? Which factor is least significant?</li> <li>3. Are there any factors that prevent DRV?</li> </ol>
Q9	How are individuals known to partake in DRV activities perceived within the Lumbee Tribe?	<ol style="list-style-type: none"> <li>1. How do you know?</li> <li>2. Do you think this impact future behavior?</li> <li>3. Is substance abuse used as an excuse to justify certain behaviors?</li> <li>4. Do these perceptions have consequences for the individual or the individual's family or has it been accepted as normal?</li> </ol>
<b><i>PART 2: Prevention and Treatment Resources</i></b>		
Q#	QUESTION	FOLLOW UP QUESTIONS & PROBES
Q1	In what capacity do you or your organization interact with issues related to violence and/or drug use?	<ol style="list-style-type: none"> <li>1. Do you interact directly with the community, tribe, state, county, or individual? Can you explain this relationship?</li> <li>2. Is DRV the main focus of your work?</li> <li>3. Can you forecast any change in your organizations direction of focus?</li> </ol>

Q2	Who do you think is responsible for addressing issues related to DRV in the Lumbee Community?	<ol style="list-style-type: none"> <li>1. Is it policy changes at the federal or state level? Members of the Lumbee Tribe? Institutions within the community such as police, schools, churches, family? Or is up to the individual?</li> <li>2. Why did you select that group?</li> <li>3. Who, if any, is most responsible? Least responsible?</li> </ol>
Q3	To your knowledge, what violence and/or drug prevention or treatment resources are available to Lumbee Tribal members in Robeson County?	<ol style="list-style-type: none"> <li>1. What is the reputation of this service in the community?</li> <li>2. Do these organizations cater to just the Lumbee?</li> <li>3. What is the quality of these resources?</li> <li>4. Are they easily accessible for Lumbee?</li> <li>5. Do you consider religious organizations as a prevention/treatment resource?</li> </ol>
Q4	What do you think are some common barriers that may prevent Lumbees from taking advantage of available resources?	<ol style="list-style-type: none"> <li>1. Does discrimination play a role? Location? Education? Poverty? Transportation?</li> <li>2. What do you think drives these barriers?</li> </ol>
Q5	What kinds of resources do you think are needed in Robeson County to help Lumbee Tribal members cope with and prevent current and future incidents of violence, drug use and/or drug trafficking?	<ol style="list-style-type: none"> <li>1. Should these be tailored just for Lumbee Tribal Members?</li> <li>2. What is the best way to get them in the area?</li> <li>3. Who is responsible for making these changes?</li> <li>4. What are some barriers?</li> </ol>

Q6	Do you think there is anything Lumbee Tribal members can do now do to prevent violence and drug related activity in their community?	<ol style="list-style-type: none"> <li>1. Why do you think this is the best approach?</li> <li>2. Are there any other alternatives?</li> </ol>
Q7	Who else should we be talking to in order to get a better understanding of the availability of violence prevention resources for Lumbee in Robeson County?	<ol style="list-style-type: none"> <li>1. Why are they a good resource?</li> <li>2. Would you be willing to contact these people and ask them to get in touch with us?</li> </ol>
Q8	Is there anything that I did not ask that you would like to discuss?	-

*[This concludes the interview. Thank you for taking the time to participate in this research.]*



# Lumbee Tribal Members In-Depth Interview Guide

[Interviewer Script]

[This study focuses on drug-related violence within the Lumbee Tribe. Specifically, we are asking Lumbee Tribal members, such as yourself, about their perceptions and experiences of drugs and violence within the Lumbee Community.

Your responses will help researchers and local policy makers better understand how to reduce the future impact of drugs and violence within the Lumbee Tribe. Please remember this interview is completely voluntary and you can choose to discontinue at any time. Do you have any questions before we begin?]

<b>PART 1: DRUG-RELATED VIOLENCE IN THE LUMBEE COMMUNITY</b>		
<b>Q#</b>	<b>QUESTION</b>	<b>FOLLOW UP QUESTIONS &amp; PROBES</b>
<b>Q1</b>	Looking back on the history of the Lumbee Tribe, there have been several prominent events which have been connected with drugs and/or violence in the community. Can you recall any of these events?	<p>Sample Stories to Reference*: Henry Berry Lowry, Klu Klux Klan Riot, Julian Pierce, death of Michael Jordan’s father.</p> <ol style="list-style-type: none"> <li>1. Are these stories ever discussed among your family or friends?</li> <li>2. How often are stories like these discussed?</li> </ol> <p><i>*To avoid any participant discomfort, stories will only be referenced in passing if necessary to focus the participant on the topic at hand. In depth discussions may occur at participant’s request.</i></p>
<b>Q2</b>	Thinking about just violence, how common do you think violence is within the Lumbee Community today?	<p>[Violence can include an altercation between two or more people. A person can also act violently towards themselves.]</p> <ol style="list-style-type: none"> <li>1. How do you know? How common do you think violence is within Robeson County? North Carolina?</li> <li>2. Do you think violence is more common, less common, or about the same as other communities in this area? Why?</li> <li>3. Are afraid you or someone you know may be hurt by violence?</li> <li>4. Over the last few years do you think violence has increased, decreased or stayed the same?</li> </ol>

Q3	Thinking about just drugs, how common is drug use within the Lumbee community?	<ol style="list-style-type: none"> <li>1. How do you know? Why do you think this is?</li> <li>2. If you were interested, how easily could you purchase illegal drugs? Why?</li> <li>3. Are you afraid you or someone you know may be hurt by drug use?</li> <li>4. What types of drugs do you think are used most often?</li> <li>5. What do you think are some consequences of drug use?</li> <li>6. Over the last few years do you think drug use has increased, decreased or stayed the same? Why?</li> </ol>
Q4	How common do you think drug trafficking is within the Lumbee community today?	<p><i>[Drug Trafficking can be defined as the illegal distribution or sell of illegal or prescribed narcotics]</i></p> <ol style="list-style-type: none"> <li>1. How do you know? Why do you think this?</li> <li>2. Do you think drug trafficking in the Lumbee Community is more common, less common, or about the same as other communities in this area? Why?</li> <li>3. How involved are Lumbees? Why?</li> <li>4. Do you personally know of someone currently or previously involved in drug trafficking in the Lumbee Community?</li> <li>5. Are you afraid you or someone you know may be hurt by drug trafficking?</li> <li>6. Over the last few years do you think drug trafficking has increased, decreased or stayed the same? Why?</li> </ol>
Q5	What types of drugs do you think are trafficked through the Lumbee Community?	<ol style="list-style-type: none"> <li>1. Why do you think this is?</li> <li>2. Where do you think these drugs are coming from originally?</li> <li>3. How do you think these drugs primarily arrive in the community?</li> </ol>

<p><b>Q6</b></p>	<p>Thinking about the relationship between drugs and violence, from your perspective, how would you define the term, “Drug-Related Violence” (DRV)?</p>	<ol style="list-style-type: none"> <li>1. Can you give an example of a type of DRV you have heard of or witnessed?</li> <li>2. In what ways are drugs and violence connected? Why? Is there always a connection?</li> <li>3. In the Lumbee community, if there is a report of violence, is it most often connected to drugs?</li> <li>4. Do you think DRV is associated with certain activities or types of people?</li> </ol>
<p><b>Q7</b></p>	<p>Where do you think DRV events usually occur in the Lumbee Community?</p>	<ol style="list-style-type: none"> <li>1. Do they occur in public? Private? Why do you think that is?</li> <li>2. Is there a certain part of the county where DRV tends to occur more often? Why?</li> <li>3. Are there certain areas that you avoid?</li> </ol>
<p><b>Q9</b></p>	<p>There are many factors known to increase rates of DRV. Can you think of any specific factors that promote DRV in the Lumbee community?</p>	<ol style="list-style-type: none"> <li>1. Points of Discussion: <ul style="list-style-type: none"> <li>• Geography of the county-rural/I-95</li> <li>• Poverty (job opportunities, low education)</li> <li>• Lumbee culture (patriarchy, familial ties, Christianity vs. traditional values [pressures to conform])</li> <li>• History (recognition process/AI identity)</li> <li>• Racism</li> <li>• Federal and State Policies (corruption)</li> </ul> </li> <li>2. What factor would you say if any, is the most significant? Which factor is least significant?</li> <li>3. Are there any factors that prevent DRV?</li> </ol>
<p><b>Q10</b></p>	<p>How are individuals known to partake in DRV activities perceived within the Lumbee Tribe?</p>	<ol style="list-style-type: none"> <li>1. How do you know?</li> <li>1. Do you think this impacts future behavior?</li> <li>2. Is substance abuse used as an excuse to justify certain behaviors?</li> <li>3. Do these perceptions have consequences for the individual or the individual’s family or has it been accepted as normal?</li> </ol>

<b><i>PART 2: Prevention and Treatment Resources</i></b>		
<b>Q#</b>	<b>QUESTION</b>	<b>PROBES</b>
<b>Q1</b>	Who do you think is responsible for addressing issues related to DRV in the Lumbee Community?	<p>4. Is it policy changes at the federal or state level? Members of the Lumbee Tribe? Institutions within the community such as police, schools, churches, family? Or is up to the individual?</p> <p>5. Why did you select that group?</p> <p>6. Who, if any, is most responsible? Least responsible?</p>
<b>Q2</b>	Can you name any drug or violence prevention programs that currently exist within the Lumbee Community?	<p>6. What is the reputation of this service in the community?</p>
<b>Q3</b>	If you or someone you know is experiencing a problem related to violence or drugs today, where would you go to get help?	<p>4. Would you go to a hospital? Are there special treatment facilities?</p> <p>5. Would you rely on a family member?</p> <p>6. Would you seek religious guidance?</p>
<b>Q4</b>	Is there anything that would prevent you from using these resources?	<p>1. Finances? Transportation? Perceptions of others in the community?</p> <p>2. Are these facilities close by? Are these options affordable?</p>
<b>Q5</b>	Have you or someone you know ever utilized these facilities/resources?	<p>1. What was it?</p> <p>2. Do you/Did they feel comfortable?</p> <p>3. Where you/they treated professionally?</p> <p>4. Was your/their problem resolved?</p> <p>5. Would you/they use this resource again?</p>

Q6	Have you ever seen any health messages related to drugs or violence, targeting members of the Lumbee Tribe, on television, the radio, or on flyers and brochures?	<ol style="list-style-type: none"> <li>1. Were these messages helpful?</li> <li>2. Did they identify resources for treatment or prevention?</li> <li>3. Where the messages culturally appropriate?</li> <li>4. Did they change your (or your family and friends) thinking or behavior about drugs and/or violence?</li> </ol>
Q7	Where is a good location for distributing or displaying health messages about drug and violence prevention efforts for members of the Lumbee Tribe?	<ol style="list-style-type: none"> <li>1. Why did you select this location(s)/approach?</li> <li>2. In your opinion, which location is best?</li> </ol>
Q8	Have you (or your family and friends) ever been a part of or heard about a program aimed at preventing violence and/or drug use in the Lumbee Community or in the County?	<ol style="list-style-type: none"> <li>1. What setting did it occur in? School or work?</li> <li>2. What would be an ideal location for a program like this?</li> <li>3. Who should attend the program?</li> <li>4. Who should run the program?</li> </ol>
Q9	Have you heard of any local policies (perhaps within the Tribal Government) aimed at reducing the impact of drugs or violence in the Lumbee Tribe?	<ol style="list-style-type: none"> <li>1. Can you tell me about this policy?</li> <li>2. What type of policy would be effective?</li> <li>3. Who should enact the policy? Local, state, or federal government?</li> <li>4. Who should the policy target?</li> </ol>
Q10	Is there anything that I did not ask that you would like to discuss?	-

*[This concludes the interview. Thank you for taking the time to participate in this research.]*

## Appendix E

Code Book

## Drug-Related Violence in the Lumbee Tribe

### Code Book for Analysis

#	CODE	SUB-CODE	DEFINITION	EXAMPLES
1	<b>Alcohol-Related Violence</b>	-	Any discussions related to alcohol and associated violence or crime.	<p>“And every now and then, you hear 'em out there shooting around. Somebody's drinking and they're shooting. But if they wouldn't drinking, they probably wouldn't be out there shooting.”</p> <p>“My dad was a bad alcoholic. When he drunk and stuff he really didn't remember what he used to do to us, so we never held it against him. He consumed a lot of alcohol...”</p>
2	<b>Drug-Trafficking</b>	<i>Method of Distribution</i>	Strategies or techniques for distributing illegal drugs throughout the community.	<p>“We had local guys here that were drug dealers, and financing the drug culture in the county, they cut out the middleman here. Some of our guys went directly to Miami to deal with the Haitians, the Cubans, and the Columbians... would hire guys to go down to Miami on the weekend, and pick up a car, and drive it back - they'd make \$10,000 a trip. They'd tell them to go to a particular place, pick up the car, bring it back and park it, and then leave the car alone.”</p> <p>“It's coming from down south in big 18-wheelers. A lot of them move it by 18-wheelers</p>
		<i>Types of Drugs Trafficked</i>	Any reference to the types of drugs sold illegally in the	“...cocaine is the only thing we have not learned to make. Because that definitely comes from a leaf you know from South America. Columbia.”

			community.	<p>“So there's the marijuana, there's cocaine. Those have always been the two biggest. For cocaine, we've been a center of cocaine distribution for decades. It's pretty good, it's pretty pure here. So those are the two major ones that still remain.”</p>
		<b><i>Fear of Being Hurt by Drug Trafficking</i></b>	<p>Any reference to a participants fear of being directly hurt/impacted negatively by the illegal sale of drugs.</p>	<p>“Yes. Murdered especially. Robbed and murdered or just you know beat really bad... Because its heavy amounts you know. Like heavy amounts of drugs or lots of money. When I say lots, like least over \$100,000. So one hit you know?”</p> <p>“Some drug dealers get broke into and stuff, get shot up, beat up, or something round there, and yeah, when they go in and shoot people like that, random bullets could hurt anybody within the area.”</p>
		<b><i>Frequency of Trafficking</i></b>	<p>Refers to any comment on participants perception of the frequency of drug trafficking in the community.</p>	<p>“Very common...Gal there's somebody on every corner selling it... You can throw a rock from your house and hit the door.”</p> <p>“I think it's pretty common. There are families or generations that that's just their sole purpose, or their sole income.”</p>
<b>3</b>	<b>Drug Use</b>	<b><i>Accessibility of Drugs</i></b>	<p>Refers to how accessible participants think illegal drugs are in the</p>	<p>“One phone call, or one house over.”</p> <p>“It is a huge issue as far as people who have additions and just how easily it's accessed.</p>



		community.	Right within the next road, you can go and purchase whatever you want.”
	<b>Initiation into Use</b>	Refers to how participants or individuals in the community first begin using drugs.	<p>“some people are getting addicted, not purposely, but they're getting addicted because when they're prescribed some of these medications for pain, it's hard for them to wean themselves off of 'em.”</p> <p>“I even know some church members. I mean, I'm talking bout church members that's been dedicated. Sunday school teachers has actually had backaches, got on pills - Percocet's - and got hooked.”</p>
	<b>Justifications to Use Marijuana</b>	Excuses individuals in the community use to justify the use of marijuana.	<p>“Everybody sort of figures that there's nothing wrong with marijuana now, it's a recreational deal because grandma and grandpa smoked it and mom and daddy smoking it, so there's nothing wrong with it. It relaxes you.”</p> <p>“Marijuana is like the new easy drug. It's okay to smoke it. It's an herb. Jesus put it here. Indians smoked it.”</p>
	<b>Frequency of Drug Use</b>	Refers to how common participants perceive drug use to be in the community.	<p>“Every household. At least every other house. These people over here get high. This house is empty, and the house next to it over there, I know he used to smoke weed, I don't know if he does now or not.”</p> <p>“I think, my mama has a tendency to say, "there's one in every family." So yeah, I think its common. I think there's one</p>

				in every family. Regardless if its alcohol, regardless if it's crack, regardless if it's marijuana or a prescription drug they got addicted to. I mean addictions is probably in every family when it comes to a substance.”
4	Violence	<i>Violence Changes over the Last Few Years</i>	Refers to how participants perceive that violence in the community has changed over the last several years.	<p>“In my opinion, I would say its increased...Just because it feels like I hear it more in the news now, than I did even say maybe 10 or 15 years ago before I moved back. And then just recently there've been a lot of women who've been murdered in Lumberton. It just seems like it's in the news a lot more to me. I feel like its increased.”</p> <p>“I know here recently a lot of people been killt because of drugs and you know drug violence. So many people been just found in the woods and in the ditches and you know It's getting worse and worse. It ain't getting no better.”</p>
		<i>Types of Violence</i>	Refers to any types of violence referenced by participants.	<p>“And then there was another girl, they found her right there where you turn back to the road, Prim. They found her and she had been raped, runned over, beaten.”</p> <p>“I mean when I think about it, a cousin was killed and raped and tried to be burned and dis-guarded just last summer. The summer before that a person left in the ditch bank dead. “</p>
		<i>Lumbee Culture of</i>	Refers to a culture of	“a lot of our Native American people, they have to be the

		<b>Violence</b>	violence within the Lumbee Tribe described by participants.	biggest one, and no matter where we go, if we was to have a million Seminoles and there weren't but a thousand Native Americans, a thousand Lumbees, we're going try and X them out, cause this is us. We come to take this shit.”  “Well, in our culture, someone takes something from you, you go back and take it back from them. That's in a lot of cultures, but I guess our folk live by eye for an eye, tooth for a tooth. It's almost looked at as a weakness if you don't react in violence. If you don't get your stuff back.”
5	<b>Drug-Related Violence Generally</b>	<b>Location of Drug-Related Violence</b>	Participant references to locations where drug-related violence is common.	“People pull up in the gas stations smokin on a blunt.”  “They use the Walmart there off of 95 as a place and there’s a whole prostitution ring, a drug ring, there’s all kinds of stuff...all in the Walmart parking lot, it’s all right there.”
		<b>Support of Marijuana Legalization</b>	Describes whether participants support Marijuana legalization at the national level.	“I look at it like this, aint marijuana cause too many deaths. Marijuana don't really hurt people. You might eat a little bit. Feel a little lazy. But as far as hurting people and going out your mind and things, I don't see marijuana as a problem.”  “You know they used to talk about the Indians and the fire water. They'd go crazy. They'd go crazy. If they'd legalize that I think it'd be a bad move.”
		<b>Coping with</b>	Any activity,	“I used to take papa to the park

		<b>Violence</b>	techniques, behavior, etc. the participant identifies to avoid DRV	<p>every chance I get. He likes to go to the park because I don't have swings. So I'm like-- I'm not going...to keep it away from him. I want to be-- we goin go to the park. And last couple times we went, there would be like four or five carloads of kids come up, young. Well, they mighta been in their 20s or something like that. And drinking, cussing, fighting. No, I don't-- no, you can't even go to the parks no more. You see what I'm saying? Because of this. I don't even take him to the park no more”</p> <p>“Sometimes we don't even go out late at night anymore-- DUI's, drunk drivers hitting you, whatever.”</p>
		<b>Directly Impacted by Drug-Related Violence</b>	The participant has identified or discussed in some way how they are directly impacted by Drug-Related Violence,	<p>“as far as me being in recovery, I try to stay away from anybody that I assume looks like he's selling drugs. Cause I can pinpoint 'em out, because I've done it so long. I've done it almost 20 years, and I ain't nothing but 29.”</p> <p>“I have a grandson now who's on crack cocaine, and I've had incidents with him with a lot of disrespect and he's been stealing. And I finally had to just tell him he couldn't stay here anymore. Just like last night, he come back. And you can tell when he's just on a mission to get to his drugs. And I'm very leery of him. I'm afraid of him in some ways.”</p>
<b>6</b>	<b>Barriers to</b>	<b>Corruption</b>	Any crime or	“We've had I don't know how

	<p><b>Prevention</b></p>		<p>illegal activity occurring within the context of local institutions.</p>	<p>many sheriffs be arrested, how many narcotics agents in jail wind up doing prison time, tribal members over the years embezzling money.”</p> <p>“..for the simple fact is the tribe's corrupt, LRDA's corrupt, you know? And we know this already from everything that's happened - the county's corrupt, so the schools is corrupt, too. Everybody goes by what they have to go by, just like the government - they got their rules to go by, but they could slip into these things and get away with it because Jack's got they back. And you've got the same thing within the tribal council - Jack's got somebody's back - and the county's the same way.”</p>
		<p><i>Lack of Confidentiality</i></p>	<p>Participants see a lack of confidentiality in treatment and care as a barrier to prevention.</p>	<p>“And publicity. Thinking that someone is gonna, because it’s such a tight knit community. Guess who I saw today? Like your child came to my office today. Like confidentiality. Especially for those who are in the closet. And no one really knows. They'll go outside the state.</p> <p>“...once it’s out, the top secrets out, then you know, how do I reclaim my name? Cause once it is out you're always like that. You know me being a spiritual person I am, who knows the bible and really uses it to set the captives free, it’s amazing how a conversation within a church and we call Blind</p>

				Bartimaeus, still Blind Bartimaeus today, but when he encountered Christ he was no longer blind. But it still says he is known as Blind Bartimaeus.”
		<b>Transportation</b>	When participants reference transportation as a barrier to progress in Recovery.	<p>“Besides SEATS that takes you to some kind of medical appointments, what do they have? They don’t have anything. So if they wanted to go to from the rural area to the city, the closet city to get any kinda help would probably be Lumberton or maybe Pembroke. But my god that’s a 15-20-minute commute from my house--45 at the max.”</p> <p>“A lot of people don’t have access to a vehicle and when you do use your vehicle, you have to use fuel for getting to work or getting the kids to school, extra places it does add up. So transportation is a factor.”</p>
7	<b>Mechanisms Facilitating Drug-Related Violence</b>	<b>Accepted as Normal</b>	Community members accept violence and drug use a normal part of life.	<p>“I don’t know if it's the depressed community, you know, lack of economic opportunities, racism. I'm not sure. But just from what I've seen, it just seems like there more drug activity and it’s almost like it is accepted and glamourized. The fact that drug dealers have so many nice things and that its accepted. Cause it’s an acceptable way of being able to get out of poverty. To have some power and some success.”</p> <p>“I feel like the Lumbee people and perceptions have changed.</p>

			Were so many things would have been so unacceptable, that now the thug life almost is common place. So, it's a disturbing process that's happened to our people. It's just frightening.”
	<b>Coping</b>	When drug use is described as a mechanism for coping with life situations.	<p>“A lot of people who use either wise have low self-esteem...they feel inferior or just weak minded, period. Or some type of shame that they want to cover up for. They don't want to tell anybody.... like they getting raped at home. They're getting molested and they smoke a blunt like to help ease their mind...”</p> <p>“Argument with your spouse or something and you got to get away. And as you're getting away, you find your way to the drug man's house or you find your way to a friend's house and they got something going on... It's a way to block things out.”</p>
	<b>Drive for Money</b>	Violence and Drug-Trafficking heavily intertwined with individual drive for money.	“Now, the problem that we would have, in terms of actually trying to change things here, is that you'd be messing with somebody's illegal activity and income. And so what you're dealing with when you're dealing with that, you'll have political resistance from a number of areas. And not only the governmental areas, but the business area. One thing that I've said, and some of us have talked about the criminal justice system, if we had the power to dry up every dollar

				<p>that comes in this county that is illegal and drug related, what impact would it have? And the impact it would have, it would affect the economy drastically. A lot of people wouldn't be able to buy cars. You wouldn't see a lot of people out eating at the fancy restaurants. So my point is is that I don't know that there's a will in society to really try to address the issue.</p> <p>Making a dollar because they're not working nowhere. No one's working so they're making a dollar some kind of way off-- but it's sad that's you're going to make it off somebody that stays around you, keep 'em drugged up where you can keep 'em stealing or keep 'em begging or keep them doing something like that, that's messed up”</p>
		<p><b><i>Mindset of the People</i></b></p>	<p>Sense of hopelessness or helplessness in the community or the inability to see a brighter future.</p>	<p>“To me, it's a hopelessness within our people. You see it's like when I did substitute teaching and I would talk to some of the kids and everything, "What are you goin be when you grow up?" "I'm a be drug dealer. "Now, why do you want to do that?" "Man money. Goin make money." I said, "Well, you going to wind up in jail."</p> <p>I mean I think we have our ghettos or hoods in all types of people, but within us it's probably some trailer parks or low income housing that feeds this mindset to a certain extend because they just feel like they need to give up on life and</p>



				disassociate and become emotionally numb. To the fact that their dreams have died so why not live a nightmare.
8	<b>Preventing Drug-Related Violence</b>	<i>Education</i>	Education is identified as a critical component of the prevention of Drug-Related Violence.	<p>“But if the schools have more law enforcement, more guys like myself go in and talk to these kids and let them know what the drugs really due to their life, might would help.”</p> <p>“Education. They need to learn what some of these drugs do. I try to educate my kids about marijuana and what it does to you. And they really don't believe it. Well, I don't argue with them but they don't believe that there is more carcinogens in marijuana than cigarettes. You could show it to 'em on the internet, cause everything's true on the internet in their eyes but they still-- so more education I think that that's one of the keys”</p>
		<i>Focus on Youth</i>	Prevention efforts should focus on youth	<p>“Just find more to do with these kids, cause they're the ones that are coming up now. Give 'em more to do. Get 'em off the streets.”</p> <p>“If it was me, I would focus on kids. They're the ones that's goin be carried on. They're going to be the ones to stop it, pick it up, make it go faster or put a stop to it. If you raise 'em right, they ain't goin use 'em.”</p>
		<i>Need Long-Term Holistic</i>	References a need in the community for	“Like if they kept 'em in the detox and wouldn't actually let them walk out of detoxes and

		<b>Program</b>	a long-term treatment program.	<p>let 'em actually get their mind back at least 30 days. Cause seven days at Monarch that ain't even enough to do anything... That's just enough to feed them, make 'em feel good, get a shower, and bam. They ain't even had time enough to get--opiates take at least three days. I think it's even longer than that.”</p> <p>“I think it was a good experience, but it really relates to the fact of when they get out after that recovery, they go back to the same people places and things. Nothing's changed when they have changed. So it's easier to go back than it is to move forward. So maybe some kind of transitional housing, some kind of work forcement that helps them out. I don't give a care if it aint nothing but picking up trash besides the road. They get some kind of income that makes them feel established.”</p>
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## **Appendix F**

Defense Presentation Slides



# Investigating Drug-Related Violence In Indian Country: The Lumbee Tribe of North Carolina

A DISSERTATION DEFENSE

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Health Promotion, Education & Behavior  
October 25<sup>th</sup>, 2018

## Presentation Outline

- Why did I choose this topic?
- Background and Significance of the Research
- Project Objectives and Aims
- Conceptual Framework
- Overview of Target Population and Setting
- Research Methods
- Results
- Strengths and Limitations
- Future Research
- Public Health Implications

## What's it to me?

- Why Drug-Related Violence (DRV)?
- Why American Indians?
- Why the Lumbee?

## BACKGROUND & SIGNIFICANCE

## Drug-Related Violence & AIs

- American Indians in the U.S. experience substance use and violence at rates higher than other racial and ethnic groups. (Swaim, 2018; American Psychiatric Association, 2010; Indian Country Drug Threat Assessment, 2008).
- Law enforcement in Indian Country regularly report most property and violent crime are linked with drug trafficking, drug abuse, and gang activity (Indian Country Drug Threat Assessment, 2008).
- Of all AI violence victims, 71% report a perpetrator under the influence of alcohol or drugs, a rate higher than all other ethnicities (Perry, 2004).
- Substance use also plays a large role in sexual attacks of AI and Alaska Native women with more than two-thirds (68%) of victims report their attackers had been drinking alcohol and/or taking drugs before an offense (Futures Without Violence, 2012)

## Why do these patterns exist?

- Individual Level Characteristics: Race, Gender, Age, Type of Drug Used, Genetics, mental health
- Social Conditions: Declining marriages, lack of community support, residential instability, ethnic heterogeneity
- Culture Characteristics: Religion, attitudes, knowledge, norms
- Economic Conditions: Poverty, Unemployment Low, Educational Attainment
- Physical Location: Lighting, Graffiti, presences of green space, vacant homes, proximity to highways, ports, & borders
- Policy: Increased drug enforcement, focus on deterrence, distribution of resources, drug prohibition
- Historical & Intergenerational Trauma: Exposure to racism or discrimination, abuse, war

## The Problem

- Research among American Indians is limited generally (Bachman et al., 2008 ; Wendt & Gone, 2012).
- Data that is available has been found to be underestimated or inaccurate (Gryczynski & Johnson, 2011; Owens, 2012; Tighe, 2014; Knight, Yankaskas, Fleg, & Rao, 2008).
- Data is often from the perspective of outsiders (Brayboy & Deyhle, 2000).
- Data is generally unavailable by tribal groups, with information collapsed into a general AI category, other or omitted from reports all together (Gryczynski & Johnson, 2001; Lanier & Huff-Corzine, 2006)

## STUDY PURPOSE

**To collect primary data from members of the Lumbee Tribe and Key Leaders in order to better understand the contextual nuances influencing elevated rates and prevention of DRV within the Lumbee Tribal Community.**

## Project Objectives

1. Facilitate partnerships within the Lumbee Tribal community by establishing relationships with community leaders and tribal members who directly interface with drug-related violence.
2. Conduct one-on-one, semi-structured, in-depth, qualitative interviews to enhance the understanding of drug-related violence within the Lumbee Tribe.

## Why Qualitative?

- Qualitative methods offer you an in-depth description of a problem (Dickson, 2015)
- Offers a holistic view of an issue (Ash & Guappone, 2007)
- Allows for emerging topics (Ash & Guappone, 2007; Patton, 2002)
- Shown as an effective approach for gathering data on crime (Jacobs et al., 2000)
- Have been used effectively with AI populations in the past (Wendt & Gone, 2012)
- Gives voice to AI community and may provide therapeutic benefits (Rossetto, 2014; Wendt & Gone, 2012)



# Project Aims

## AIM 1

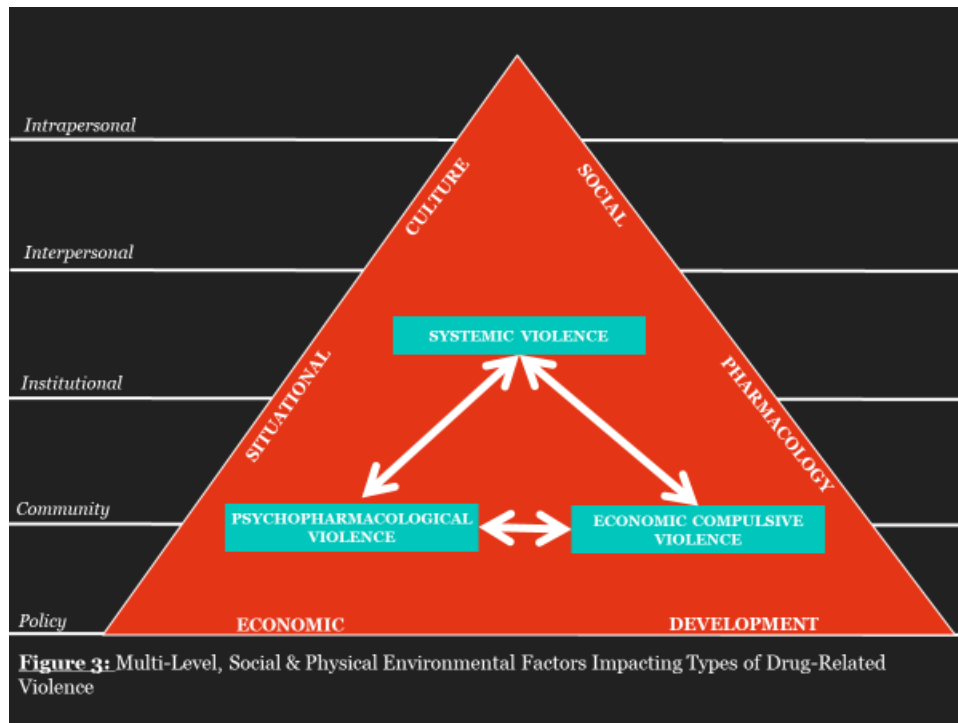
*Examine perceptions of and experiences with drugs and violence among the general Lumbee Tribe and among key leaders working within the Lumbee community.*

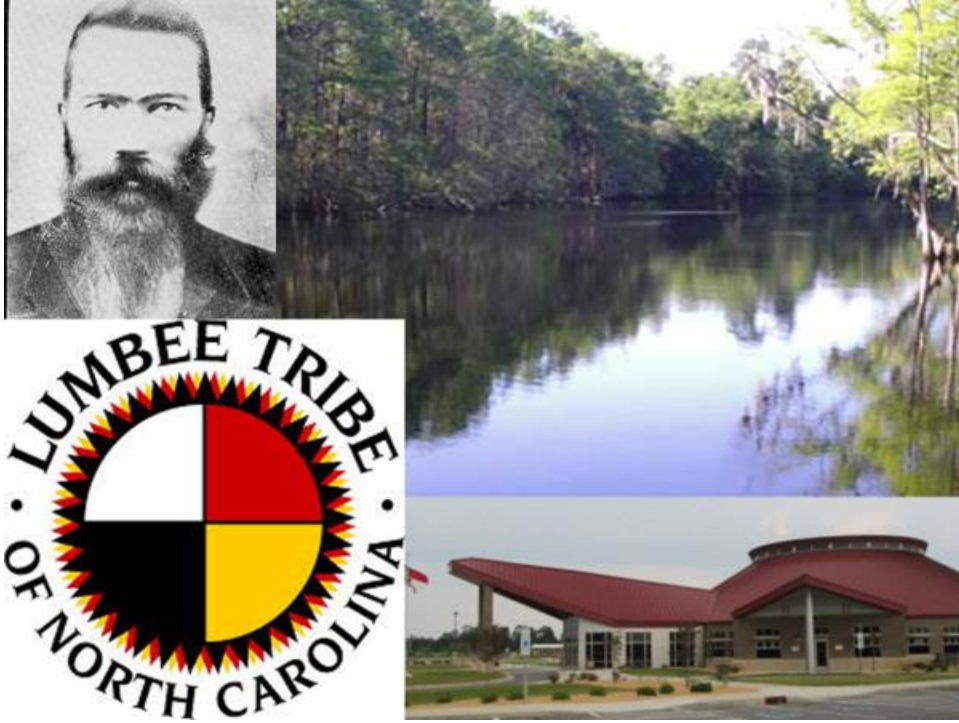
- **RQ1:** What are Lumbee tribal members' perceptions of and experiences with drugs and violence in their community?
- **RQ2:** What are Key Leaders' perceptions of and experiences with drugs and violence in the Lumbee Tribe?

## AIM 2

*Assess perceptions of and experiences with drug and violence prevention and treatment resources among the general Lumbee Tribe and among key leaders working within the Lumbee community.*

- **RQ1:** What are Lumbee tribal members' perceptions of and experiences with drug and violence prevention and treatment resources in their community?
- **RQ2:** What are key leaders' perceptions of and experiences with drug and violence prevention and treatment resources in the Lumbee community?





## Robeson County, North Carolina



## DRV among the Lumbee

- 2010-2012: According to the Uniform Crime Report, Robeson County has taken 1<sup>st</sup> or 2<sup>nd</sup> place for most incidents of violent crime in the state
- A 2017 community opinions survey revealed that violence is perceived as a priority health concern in the county and the 5<sup>th</sup> leading cause of death.
- All traffickers and independent dealers are predominant retail-level distributors on southeastern reservations (Indian Country Threat Assessment, 2008)
- In the late 1980's, cocaine brought in an excess of \$10 million into the county (Raab, 1994)
- In a 2017 Community Survey substance abuse was identified by residents of Robeson County as the 2<sup>nd</sup> leading health concern.

## Potential Contributing Mechanisms: Geography



## Potential Contributing Mechanisms: Poverty

- Robeson County is ranked as the poorest mid-sized county in the U.S., with over 34% of the population living in poverty.
- Massive job loss in the area resulted in a 44% increase in poverty between 2000 and 2005.



## Potential Contributing Mechanisms

- Strong Familial Ties
- Complex Historical Challenges
- Lack of Federal Recognition

## METHODS

## Methods-Setting

- All interviews occurred in and around Robeson County.
- The location was arranged at the convenience of the participant.
- Locations Include: participant's home, place of business, the local university, tribal facilities (i.e. community buildings), church meeting spaces, and other public spaces.

## Methods-Sample

### Key Leaders

- Individuals who hold leadership positions within the Lumbee community and have direct interaction with drug-related violence via their organization of employment.
- Examples include: Chiefs of Police; the Lumbee Tribal Council; Al Church Pastors; Teachers; and Alcohol, Tobacco, and Other Drug Abuse prevention specialists
- Age: 22 and older
- Worked in county for 2+ years.

### Lumbee Tribal Members

- Includes enrolled members of the Lumbee Tribe residing in and around Robeson County.
- Age: 22 and older
- Goal: Collect a sample representative of community.

## Data Collection

- Semi-structured, in-depth, one-on-one interviews were the primary source of data.
- Interview guides were piloted tailored to each group.
- Interviews lasted from 30 minutes to 2 hours.
- Interviews were audio recorded and later transcribed for analysis.

## Data Analysis & Interpretation

- All interviews were transcribed verbatim and imported into NVivo 10.
- Following principles of grounded theory, systematic analysis began after the first two interviews so constant comparisons can be made.
- Transcripts underwent open coding for general categories and subcategories; axial coding relating categories to subcategories; and finally selective coding unifying categories into central themes based on the conceptual framework and study aims.
- All transcripts and coding strategies underwent peer review to reaffirm any conclusions drawn by the PI.
- Member checking was used to verify conclusions drawn and to seek additional guidance on interpretation.

## Project Challenges

### Anticipated:

- Achieving community buy-in
- Safety of PI and participants
- Coordinating data collection

### Unexpected:

- Tension around the name “Lumbee”
- Multiple IRB reviews
- Level of commitment

**RESULTS**





## Results: Impact

**27 participants (73% of the sample) noted they were directly impacted by DRV.**

- 4 had lost a family member due to a drug-related murder
- 5 participants identified as a current or prior drug dealer
- 6 identified as prior or current drug user
- 18 mentioned they had a family or friend who was an active user

## Results: Impact

- Psychopharmacological (32) was the most common type of violence identified, followed by economic compulsive (25) and systemic (23).
- The majority of participants felt violence, drug use, and drug trafficking/sells were common in the community; has increased over the last few years; and they were afraid themselves or a family member could be hurt.

*"Every household. At least every other house. These people over here get high. This house is empty, and the house next to it over there, I know he used to smoke weed, I don't know if he does now or not. This man right here, him and his wife live here, his daughter and his son in law stay on the other side, they sell weed. It's like every other house."*

*"My brother's put me in the hospital twice when he was on crack and then the next day he didn't know, remember it, or he says, 'I'm sorry' or something."*

## Results: Impact

- **Types of Violence:** included murder (16), domestic violence (9), assault (9) Robbery (8); Shooting (7).
- **Types of Drugs:** The most common types of drugs identified were Prescription Pills (33), Marijuana (31), Cocaine (16), Crack Cocaine (15), Alcohol (13), and Heroin (9).
  - Youth identified as most common user.
  - Several (9) stated addiction began via pain management
- **Source of Drugs:** Prescription pills obtained fraudulently from medical providers (15); drugs brought in from outside the U.S. (15), with Mexico being identified as the primary location (9); the north-eastern U.S. (8), and manufactured in the county (8).

## Results: Top 10 Facilitating Mechanisms

1. Poverty (31)
2. Mindset of the people (30): Lazy (12), hopelessness (9), no way to better self (11)
3. Poor Home Environment (22)
4. Coping/Self-Medication (21)
5. Reputation (20)
6. Accepted as normal (19)
7. Lack of Federal Recognition (18)
8. Perceptions of corruption within local institutions (15)
9. Transportation (15)
10. Division within the community (14)

*"Poverty. They sell because they have hard life, it's a way out, my mom and dad is strung out. I gotta get school clothes."*

*"...some maybe initially it was desperation, just a way to make ends meet. And then there's so much money it entices people. There's so much to be made and when there aren't other options out there to have nice things that--well there's no other--I don't have any other way."*

*"there's this hopeless--learned hopelessness in Robeson County. I'm in Robeson County, I'm never leaving Robeson County, and I'm just going to stay here. So there's a learned hopelessness."*

## Results: Prevention

- Most participants feel (22) that recovery is an individual decision.
- Increased education was identified by most participants (21) to improve prevention efforts.
- Most participants felt preventative efforts should be focused on youth (24) with more proactive efforts in the school system (8).
- Participants would like to see increased cultural activities (10).
- Participant's would like to see a local treatment facility (9) with long-term holistic focus (9).
- Increased community outreach (7).
- Policy Changes (20): Decriminalize Drug Use (4), Treatment over jail (3).
- 14 participants wanted a Lumbee or native only facility, 14 want a facility for all that included American Indian staff (3).
- Create a more unified community (15).
- Most participants (21) said it would take a united effort to address the issue, however other responsible parties identified included: Churches (20), The Lumbee Tribe (20), Parents (11), and Schools (10).
- The best methods for communication health messages: social media (7), radio (7), communications through the church (5), T.V. (5), multiple sites (4).

## Results: Miscellaneous

- Location of DRV tends to be concentrated in certain areas (11), however it is a county wide issue (16). Public places (22) were the most common sites for DRV activity with gas stations (9) and business parking lots (4) being identified most often.
- Racism was identified by 25 persons as being an ongoing concern in the county as it relates to the distribution of resources and contributing to some violence. However, participants felt it was not as big an issue as it has been in the past.
- Participants described a Lumbee Cultural of Violence (17) which included an aggressive orientation (11), a reputation of violence outside the community (9), and the glorifying of violence (3).
- More participants supported marijuana legalization (16), while some did not (12) and others were unsure (5).
- The majority of participants think drugs and violence are always connected (21).

## Manuscript 1: Christianity and DRV among a SE AI Tribe

- Focuses on participant's perspective of the role of the church in facilitating and preventing DRV and addresses Aim 1 and 2.
- The Christian church has been apart of the Lumbee community for hundreds of years and has become a powerful institution deeply intertwined within the moral fabric of the community.
- Today there are more than 300 churches within Robeson County alone, including 2 American Indian Church Associations.
- All the 37 participants commented in some capacity on the role of the church in the community more than 115 times.
- *A query of the 1000 most commonly referenced words yielded 1,215 references to Christianity with the use of words like church or churches (651 or 0.39%); God, Lord, or Jesus (208 or 0.12%); Christian or Christianity (129 or 0.08%); and other words such as the Bible, pastor, Sunday, or religion (227 or 0.13%). This compares to other frequently cited words such as drugs or drug (2,725 or 1.62%), community (1,168 or 0.69%), or the tribe (364 or 0.17%).*

## Manuscript 1: Theme1- Community Perception of the Church

### Change in Church Culture Overtime(8)

#### Loss of Community Orientation

"Most of our churches they want to take care of themselves. They don't see ecumenical ministry as being important. They wan't participate in that...You know us coming together as a religious community and trying to work together to resolve the issues."

"...some churches have been preaching on the election and the morality of the candidates that's been running...that's the morality of our nation and our candidates, but what about the morality of our communities?...we've got to realize that our community is important first. If we save our communities, then we save our counties, then we save our state, then we save our nation."

#### Emphasis on religion over morality

"Our churches have been typically religious entities that have not made a good connection between spirituality and struggles people are living with."

"our understanding of the church in this community is so limited. Its limited to one's perspective and understanding... I don't think they are applying the holistic perspective of the gospel. They interpret it very narrowly, and they just only understand--when they come to an understanding and what makes them feel good and comfortable or what is popular or what someone else is doing."

## Manuscript 1: Theme1- Community Perception of the Church

### Discord within the church

"... the biggest issue that we have is the politics and the policies and procedures playing within the church. And it's like okay I don't like you, let's go build another church."

*"Well I don't want to participate in that church because so and so is there.' It's a self-righteous thing or 'I will not go to that church because of this preacher.'"*

"I bet you right now if you go to the same community you were raised in, you'll find about twice as many churches...people, instead of talking to each other solving a problem, we walk out of the church, and go over here, and start us another church."

## Manuscript 1: Theme1- Community Perception of the Church

### Decrease in religion and morals throughout the community at large (4)

"That's one thing that a lot of Lumbee people around here, they lack. The younger generation lacks Christianity. To me, you can be a good person, but without Christianity, you can only be so good, cause if I don't have that set in my life, then I really don't have to have morals."

"... we've got a church almost in every community. Going in those churches today they're not full. When I was growing up, you couldn't hardly get in the doors of a church because religion was the front part of every families' importance."

## Manuscript 1: Theme 1- Community Perception of the Church

### The church as a venerated community institution (14)

"I'd have the whole church praying"

*"I don't know where I could go honestly...I mean except within my church unit."*

"I think the first person I'd go to other than God would be my pastor...I think that'll be the first person I would go to other than God. I'd take it to him first and then I'd go see my pastor."

## Manuscript 1: Theme 2- The Churches Role in DRV

### Churches do not sponsor formal programs (4)

"As far as having some kind of a physical program, institutional program like AA or NA, or a treatment center, the churches don't sponsor any of those. The churches may, if a community member is in a facility and they have to raise money to stay there, for their fee, churches may contribute to families who need to raise money for that. And this kind of ministry is non-traditional for churches here."

*"I don't know no other church is willing to open their doors to have an AA or NA meeting... Why aren't our churches opening our doors to the broken people of—arguably the worst area in the nation, and they're doing absolutely— you couldn't have designed it where you could have a worse failure rate."*

## Manuscript 1: Theme 2- The Churches Role in DRV

**Participants acknowledge that the church does contribute to the community, but they generally need to do more when it comes to DRV (32).**

"I feel like you've got some churches that are stepping up to the plate, but it would be nice if all churches would cause that's what they're there for.

You've got a lot of families that are hurting because they're the end result of this violence. There's not one church I know in Robeson County that this has not touched."

"If the Church would step into the community. The community would get better...The Church, the church could do the community more good than anybody."

"The churches want absolutely nothing to do with it. And the churches are probably one of the places where they can have the biggest advocates. The biggest support system...But you know the churches really could do more, but they feel like it's not their job."

## Manuscript 1: Theme 2- The Churches Role in DRV

**Church fears getting involved**

"fear maybe of retaliation...You're holding this at your church and here I am. I'm a drug dealer, and you're getting in my way of selling...This is the way I live, and you're having this, and if this person decides, "Well, I'm off drugs." That's taking money out of drug dealers' pockets."

"I think a lot of the reasons the churches don't do as much as they could do is because they're scared and you can't blame them for that."

"Well, I think fear might be a part of it I mean that is an appropriate word. I mean you start messing with that stuff you might bring it inside [the church]."



## Manuscript 1: Theme 3- Social Practices Stalling Prevention

### **Punitive Orientation (3)**

"I think there are lots of folks who are Christian who, interpret...spare the rod and spoil the child as punitive. Instructions to be punitive... I think people see that as culture apart of being Lumbee...I think there's a very unforgiving very stern part of the culture that tends to want to punish and corporal punishment...."

"...if you listen in church to the things that we say, 'I don't know why I'm not worthy, but he brought me through it.' 'I'm not deserving of his love, but he loves me anyway.' And it all sounds great until you really think about what they're saying. I'm not worthy of love. I'm not worthy of coming through the struggle."

"...the idea of physical abuse around here even as a child with corporal punishment has been something that probably has traumatized a lot of people including me. I mean even up under the bracket of the church, you know spare the rod you spoil the child."

## Manuscript 1: Theme 3- Social Practices Stalling Prevention

### **"Saint or Sinner Mentality" (8)**

"you drink two or three beers a week, your just an alcoholic."

"difficult to get people, like the churches behind treatment, the churches behind let's help folks. Because its looked at so negatively and looked at if you were saved, you're not goin be doing this. If you are a believer, you can't have these kinds of problems."

"...state of being, that you have to be perfect to be accepted within the churches or within the relationship of God and if you're not, then you are a failure."

"if you take drugs, you're a sinner, you get saved you're a saint and there's like nowhere in between, or no grey area"

## Manuscript 1: Theme 3- Social Practices Stalling Prevention

### **Hypocrisy in the Church (10)**

"It's hard to fool young people who are on the street that know what's going on. Because they know preacher so and so's going with sister so and so. And they know the hypocrisy that may exist in some areas...and so many people I think, many young people, have lost confidence in faith, and the organizations that are supposed to be setting the example and being a model, including home."

"...breaking that bad habit that some will have of being judgmental and looking down on you is like an object that the church has been challenged with for centuries."

"But you know when you look at the number of people who call themselves Christians who are dealing drugs I mean you know it's like okay, what's up with this?" or "some of 'em think they too high and mighty. Too holier than thou."

"It's not what you have, it's not the standard, it's not where you live or what you live in that matters. It's what's in your heart that matters. And we're supposed to love everybody. No matter what they do, we're still supposed to love 'em."

## Manuscript 1: Theme 3- Social Practices Stalling Prevention

### **Fatalistic Attitudes (17)**

"only way they goin stop, unless they get Jesus. I mean, literally. I mean, cause I knew people that's-- they hit rock bottom. Literally hit rock bottom. And they'll tell you what-- the reason why they're successful today is because they had Jesus."

"God's goin have to help me wid. Cause man can't help me wid it. They talkin bout going to like counseling and stuff. That can't help me. And I feel like the Lord's my only hope. And that's why I'm going trust in God's goin fix things."

"I think a lot of people would assume that once you become Christian everything would fall and stop, and I think that's another barrier to that is not just because you become a Christian and talk to someone about it, and they think, well, if you just talk to 'em then they'll stop using drugs, or they'll stop abusing alcohol, they'll stop violence.... But I think everybody assumes that if you just get into the church and you accept Christ that it would all of a sudden just stop and go away."

## Manuscript 1: Theme 3- Social Practices Stalling Prevention

### Treatment of DRV in Church Setting

"my church...don't want addicts in the church. They got holes in their face, the smell bad. Girls come in there dressed like prostitutes."

"I think if they set up programs for people like that instead of turning their nose up at 'em... You know, 'well I don't want nothing to do with them, they're drug users.' And we have that goin on some in churches."

"I don't know how we deal, say, with a person who, whenever they see somebody that they know is a drug user, to keep them from looking with such disdain on that person. I don't know how to do that."

## Manuscript 1: Theme 4- Role of Church in the Prevention of DRV

### The Church is Responsible (29)

"But I think it's the main responsibility to fight that is the church.... I think they're the only one that has the power and the ability to even make a dent in it"

"around here you have to get the churches to lead not just as condemning drug use, but really working with how you get from point A to point C and D. Cause the churches wield a lot of power here."

"Now they may be in that religious organization as well in their first 5 years of that life. So, what did that religious organization do with that child, in the first 5 years of their life to prepare them to deal with other personalities when they go to kindergarten?"

"I would like to see our churches get more involved. The churches could really, really do a lot because a lot of people look to the churches for leadership."

## Manuscript 1: Theme 4- Role of Church in the Prevention of DRV

### Strategies for Prevention (23)-Church Leadership

"from the pulpit y'all need to be talking about this more. I said and also y'all need to have resources you can be referring a lot of your members, too."

"I feel that each pastor should be able to counsel almost any person that walks in their church. If not, they should be at least able to contact somebody to provide help."

"the pastors should be trained how to approach an addict. Or if he sees the deacon even falling asleep in church or acting a little abnormal or spending. He should be trained on what to look for, patterns."

## Manuscript 1: Theme 4- Role of Church in the Prevention of DRV

### Strategies for Prevention (23)-Religion in treatment and prevention

"The strengths a lot of times with those individuals have fallen, you know, may have fallen into drugs for whatever reason and say they were brought up in the church and statistically I don't know. I think--I think there's a strength there in terms of maybe eventually getting out of it...And I think it's difficult when those that have also fallen not having had some kind of faith or structure and trying to do things spiritually. Trying to do things by themselves... You know not having something to grasp on to and trying to fight. Sometimes you've fallen there, whether they was abused and trying to forget and not haven something to hang on to."

"if they get the right teaching in church at a younger age is to know that it's your relationship with God.... If there was people there to guide the kids on how to think and how to keep to their self and not worry about joining on with everybody else, then it would better everything."

"If you truly believe, it can help you...I mean, possibility for some people it could. I've seen changes in some people. I have.... I've met a person that was a crack head for a long time, and he got in the church, and he was a better person. Yeah, some people, yes it helps."

## Manuscript 1: Theme 4- Role of Church in the Prevention of DRV

### Strategies for Prevention (23)-Increased Church Outreach

"we do need a little more outreach, instead of trying to get them to come to the church, we say let's take the church to them. You know and try to do good deeds and do good things to draw 'em."

"Even if you got full-time pastors, they don't have office hours open for the community to come in and sit and just have some kind of consultation."

"They [the Church] have big roles to me and the community. The more that they outreach, the more they can infect the community with their morals and beliefs...To me, more outreach in your community. Not only in your community but just throughout other communities also. Basically, it could be going door to door, inviting people or having events at your church for the public to come, not to be judged or not to be talked down about, but just to be showed love."

## Manuscript 2: Investigating DRV in SE AI Tribe: Lessons Learned & Strategies for future Research

- Provides an in-depth discussion of the research methods.
- Draws attention to the limitations surrounding existing data on AIs.
- Highlights the strengths and challenges of my research.
- Makes recommendations for researchers to improve data collection efforts in AI communities.

## Strengths & Limitations

### Strengths

- Unique Topic and Population
- Insider Access
- Triangulation at
  - Theoretical level-multiple theories informed design
  - Data collection-Interviews and observation informed collection and analysis
  - Analysis-Peer Reviews and Member Checks

### Limitations

- Achieving Community Buy-in: Role as a PhD.
- Selection of Lumbee Tribe as a Study Sample Limited Data; additional research steps; Politics surrounding name of Lumbee.
- Potentially Biased Results: One researcher.
  - Peer Review
  - Member Checking
  - Reflexivity
  - Time to complete project

## Future Research

- Research presented in this study appears to be the first attempt to assess the multi-level, systemic factors driving DRV in the Lumbee Tribe—much more work needs to be done.
- Future research could explore in more detail, key elements identified in this research such as:
- The church environment (capacity, knowledge, access to resources, etc.)
  - Impacts of the lack of federal recognition (identity, access to resources)
  - Historical /Intergenerational trauma (coping, abuse)
  - Impact of reviving traditional practices within the community,
  - Program implementation/evaluation etc.
- Future research should also be sure to incorporate culturally appropriate methods including using insiders and involving tribal members/governments in the planning, implementation, and reporting of tribal data.

## Public Health Implications

- The results of this study clearly demonstrate how seemingly unrelated social practices, such as those occurring within the context of a church, shape individual perspectives of recovery, decisions to seek treatment, and access to resources.
- Results align with the theoretical assumptions of the study suggesting that our programs and policies must move beyond the individual, linear (cause/effect) approaches and shift to a more holistic approach which accounts for and attempts to correct systems level issues.
- The results of this study also reinforce the need of partnerships across multiple organizations to increase the reach and improve the success of programs.

## Other Project Outcomes

- Stop the Pain: Grass Roots Movement
- Development of Community Resource Guide
- Develop local support group
- Raising awareness of addiction



## Dedication & Acknowledgements

### Dedication

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QUESTIONS???



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## References

- American Psychiatric Association. *Mental health disparities: American Indians and Alaska Natives*; Office of Minority and National Affairs: 2010; p 6.
- Ash, J.S.; Guappone, K.P. Qualitative evaluation of health information exchange efforts. **2007**, *40*, S33-S39.
- Brayboy, B.M.; Deyhle, D. Insider-Outsider: Researchers in American Indian Communities. **2000**, *39*, 163.
- Dickinson, T. Exploring the drugs/violence nexus among active offenders: Contributions from the St. Louis School. **2015**, *40*, 67-86, doi:10.1177/0734016814562422.
- Futures Without Violence. *The facts on violence against American Indian/Alaskan Native women*; 2012; p 8.
- Gryczynski, J.; Johnson, J.L. Challenges in public health research with American Indians and other small ethnocultural minority populations. **2011**, *46*, 1363-1371, doi:10.3109/10826084.2011.592427.

## References

- Jacobs, B.A.; Topalli, V.; Wright, R. Managing retaliation: Drug robbery and informal sanction threats. **2000**, 38, 171-198.
- Knight, K.; Yankaskas, B.C.; Fleg, A.; Rao, C. *Misclassification of American Indian race in cancer incidence data in North Carolina*; 159; North Carolina Department of Health and Human Services: 2008; p 8.
- Lanier, C.; Huff-Corzine, L. American Indian homicide: A county-level analysis utilizing social disorganization theory. **2006**, 10, 181-194, doi:10.1177/1088767906288573.
- National Drug Intelligence Center. Indian Country Drug Threat Assessment. U.S. Department of Justice, Ed. National Drug Intelligence Center,; 2008.
- Owens, J. "Historic" in a bad way: How the tribal law and order act continues the American tradition of providing inadequate protection to American Indian and Alaska Native rape victims. **2012**, 102, 28.

## References

- Patton, M.Q. *Qualitative research & evaluation methods*, 3 ed.; SAGE Publications, Inc 2002; pp. 688
- Perry, S.W. American Indians and crime. U.S. Department of Justice, Ed. Bureau of Justice Statistics,; 2004; p 56.
- Rossetto, K.R. Qualitative research interviews: Assessing the therapeutic value and challenges. **2014**, 31, 482-489, doi:10.1177/0265407514522892.
- Tighe, S. "Of course we are crazy": Discrimination of Native American Indians through criminal justice. **2014**, 11, 1-38.
- Wendt, D.C.; Gone, J.P. Decolonizing psychological inquiry in American Indian communities: The promise of qualitative methods. **2012**, 161-178.