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DOMESTIC VIOLENCE IN RURAL & NON-RURAL AREAS:
A STUDY ON THE INFLUENCE OF POPULATION DENSITY ON ARREST RATES IN THE STATE OF FLORIDA

by

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B.A. University of Central Florida, 2017

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Sociology in the College of Sciences at the University of Central Florida Orlando, Florida

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ABSTRACT

Domestic violence (DV) is a global issue that can affect anyone regardless of what role they play in a family household. It does not discriminate by education, age, religion, etc. DV includes any type of violence or abuse that occurs within a domestic setting. For the purposes of this study, this content primarily focuses on intimate partner violence (IPV) as the main form of DV and is used interchangeably throughout the text. This study examines the influence of population density on arrest rates for DV and some factors behind the likelihood of arrests in urban and rural areas. The literature between both of these societies has demonstrated a clear difference in social behaviors that shape the response to DV (Websdale and Johnson 1998). Normative social influence theory suggests that people’s influence may lead someone to conform in order to be liked or accepted by a group (Izuma 2017). This theory hypothesizes that the proportion of people living in rural per county will have fewer arrests for DV than the proportion of people living in non-rural areas because of the need for positive relationships that can lead to conformity (Izuma 2017). Furthermore, it is predicted that there are less arrests in rural areas because of the effects of informal social controls in these areas. Informal social controls can take place between police and citizens that may interact more personally through socialization. An example is when citizens take matters into their own hands, therefore prolonging the reporting of crimes to police. This study uses secondary data provided by sources such as the Florida Department of Law Enforcement (FDLE) website and Social Explorer. Broader implications of this research are that it could shed some light on the social dynamics that impact the outcome of crime in both densely populated and sparsely populated areas.
ACKNOWLEDGMENTS

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CHAPTER ONE: INTRODUCTION

The purpose of this study is to shed some light on the relationship between arrest rates for domestic violence (DV) and the proportion of a county population living in rural areas compared to non-rural areas. While many parts of the world define domestic violence differently, this study mainly uses the most commonly used definition. According to the U.S. Department of Justice:

‘The term “domestic violence” includes felony or misdemeanor crimes of violence committed by a current or former spouse or intimate partner of the victim, by a person with whom the victim shares a child in common, by a person who is cohabiting with or has cohabited with the victim as a spouse or intimate partner, by a person similarly situated to a spouse of the victim under the domestic or family violence laws of the jurisdiction receiving grant monies, or by any other person against an adult or youth victim who is protected from that person’s acts under the domestic or family violence laws of the jurisdiction (2018:1).’

Urban areas are best described as cities and towns with large groups of people in close proximity. Rural areas, on the other hand, account for people geographically outside of these cities and towns, which are typically in the countryside much like small towns. Research demonstrates that domestic violence arrests and offenses are largely studied in urban areas, leaving little knowledge about how these cases are researched in rural areas (Peek-Asa, Wallis, Harland, Beyer, Dickey & Saftlas 2011). According to one study, women living in rural areas reported a higher prevalence of IPV than women living in urban areas. There was also a high percentage of women in rural areas that lived greater than forty miles from the nearest IPV program.

Most studies attribute the community dynamics of rural societies to be comprised of informal social controls. These are the reactions of people/groups that result in conformity to laws and norms. Patriarchal values are one factor that contributes to informal social controls. In
rural societies, there can be a heightened sense of masculinity and male dominance that impacts the way people respond to crime where cases of IPV can also be “handled themselves” in the privacy of one’s home rather than reported to local police (DeKeseredy & Schwartz 2009). This ties into the theory of normative social influence, which supports the idea that the need for acceptance into a group and companionship leads to conformity. Normative social influence theory constitutes that one can exhibit public compliance but not necessarily private acceptance. Therefore, this theory encourages the idea that patriarchal attitudes can influence people’s behaviors differently when they are acting in private compared to their actions in public (Izuma 2017).

Based on what the literature has shown, it is hypothesized that there are lower rates of arrests for reported DV offenses in rural areas as opposed to urban areas (Websdale and Johnson 1998). Domestic violence may be less apparent because rural areas are less densely populated than urban areas making the population more susceptible to informal social controls. With these smaller populated areas, frequent face-to-face contact with the same people can form a united community where most people support each other, thus creating close-knit relationships with police. As a result, research has shown that citizens are less likely to report crimes to the police right when it occurs because they tend to take the law into their own hands and report it later if they could not handle it themselves (Weisheit, Falcone & Wells 1996). This demonstrates how the response to crime can be handled informally in rural communities.

This study analyzes the arrest rates for domestic violence in more and less densely populated areas, i.e., non-rural and rural areas respectively. The independent variable, in this case, is population density (rural/non-rural), and the dependent variable is arrest rates for DV.
The control variables include proportion male, white, and unemployed per county. The following literature review analyzes what research finds about the community dynamics between urban versus rural communities, response differences to domestic violence in urban versus rural areas, and police response to domestic violence, including regulations specific to the state of Florida.
CHAPTER TWO: LITERATURE REVIEW

Community Dynamics

One explanation about why urban and rural societies may have a difference in rates of domestic violence arrests is perhaps the types of relationships people have with police officers within their communities. According to Weisheit, Falcone, and Wells’ (1996) study on crime and policing in rural America, it is generally believed that unlike urban areas, rural areas are highly shaped by informal social control. This basically means that many residents in rural communities, including local police, know each other more personally through socialization (Weisheit, Falcone & Wells, 1996). The relative stability of the local population is one factor that contributes to this sense of informal social control because rural citizens tend to stay in the same county and even the same house for many generations (Weisheit, Falcone & Wells 1996). These authors use the example of Freudenburg’s (1986) research on “density of acquaintanceship,” which is a term used to describe the extent to which people in a community know each other (Weisheit, Falcone & Wells 1996). Freudenburg’s (1986) study on four rural towns in Colorado found that communities with a higher density of acquaintanceship (populations ranging from 1,000 to 5,000) had fewer victim reports of crime than communities with a lower density of acquaintanceship (populations ranging from 5,000 to 10,000). This implied that towns with a lower population demonstrated more close-knit relationships with one another, therefore having a higher “density of acquaintanceship” (Weisheit, Falcone & Wells 1996). Essentially, as the population increases, the density of acquaintanceship decreases. The results of this study also demonstrated that density of acquaintanceship can influence crime in that it can increase the
citizen’s watchfulness, increase the likelihood of feeling a responsibility to act, and perhaps make suspects easier to identify (Weisheit, Falcone & Wells 1996).

Research by Weisheit and colleagues also suggest that citizens in rural communities tend to have closer relationships with police officers because they may have frequent face-to-face contact and may know each other more personally (Weisheit, Wells & Falcon 1994). It is noted that while policing styles may be similar within both urban and rural areas, the relationship between police and the community differ in that officers may typically be treated like “outsiders” in urban societies whereas police in rural areas may be treated like they are an integral part of the community (Weisheit, Wells & Falcon 1994). The sense of respect towards officers also differs within these areas in that citizens in an urban society may show more respect toward the “badge” or the law enforcement system itself, as opposed to people in rural areas who typically will show respect toward the actual individual officer based on the work they do for the community (Weisheit, Wells & Falcon 1994).

Weisheit, Falcone, and Wells (1996) also outlined several different research studies that provide evidence to support the idea of informal social control in rural areas. One of these studies was Smith’s (1980) research on shoplifting and employee theft in rural communities. Smith (1980) discovered that these types of crimes were rarely reported to the police and when they were, it would be several weeks later after the crime had been committed that the crime would be reported. (Instead, cases were handled informally. When asked why people do not seek law enforcement first, one rural criminal justice official stated that they typically tell them they simply “took care of it themselves” (Smith 1980). This shows the type of social climate in rural communities that distinguish them from urban communities.
Another important aspect of community dynamic differences between rural and urban societies is the influence of patriarchal attitudes and beliefs that commonly preside in rural societies (DeKeseredy & Schwartz 2009). In DeKeseredy and Schwartz’s book “Dangerous Exits” (2009), forty-three extensive interviews were conducted with rural women in intimate relationships. Based on the findings, DeKeseredy and Schwartz theorized that patriarchal ideology is reinforced among male friends that share similar male-controlled values. For instance, a woman attempting to exit a relationship in any way such as divorce or leaving the setting is seen as a threat to men’s masculinity (DeKeseredy & Schwartz 2009). According to DeKeseredy and Schwartz “There are a variety of sociological and social psychological process by which peers influence men to sexually victimize women, but the key point here is that such all-male groups encourage, justify, and support the abuse of women by their members” (p. 41). The results of these interviews also support the idea that women in these abusive relationships are exposed to a number of different consequences that involve more than just one factor; and should, therefore, be approached sociologically from a critical multi-faceted view including the influence of rural social structure, crime, and culture.

In efforts to understand why rural community interactions are different than their urban counterparts, Benson (2009) conducted a study to analyze the domestic violence prevalence in rural areas of Illinois. Through in-depth interviews with domestic violence survivors, it was discovered that the majority of them had difficulty with police during their encounters. It was also noted that there was a lack of transportation and access to nearby domestic violence shelters that they could get to quickly (Benson 2009). Findings concluded that common issues in rural Illinois included problems with police response to domestic violence calls, a lack of referrals to
other resources such as women’s shelters, and refusals to arrest the perpetrator even when the survivors urged the police to do so (Benson 2009). Overall, it was evident that there was a gap between Illinois law and the actual response of law enforcement as these interviews demonstrated. Benson noted that these remote locations hindered domestic violence survivor’s access to resources and assistance, which would otherwise be offered with more ease in urban locals.

Weisheit, Falcone, and Wells (1996) also discuss more of these ramifications that come with geographic isolation. According to Weisheit, Falcone, and Wells (1996:7), “Long distances may not only slow the response time of criminal justice officials, but long distances and a lack of public transportation may make it more difficult for rural citizens to get to court to testify, or to attend meetings with a probation officer.” They also argued that geographic isolation can cause rural police officers to experience a longer wait for backup. Additionally, the large rural areas covered by a small number of police officers can make responding to calls more time consuming and expensive compared to urban areas. This demonstrates that the effects of geography itself can have a great impact on the speed and time in which support services or effective responses can be provided once a crime has been reported.

Employment status and job opportunities is also a factor that plays a role in the prevalence of domestic violence among individuals living in rural areas. Hodges and Cabanilla (2011) sought to understand how different social factors may have an influence on help-seeking among Black women as a result of domestic violence. Based on a quasi-experimental survey design collected from three rural communities in the southern part of the U.S., a total of
75 black women who were currently or recently in a domestic violence shelter participated in this study. Findings indicated that 65% of these participants were unemployed and demonstrated a significant relationship between spirituality, education, coping and attitude toward help-seeking. These results contributed to the understanding of underlying risk factors that should be addressed as well as external forces that have an influence on a victim’s attitudes towards domestic violence.

Researchers Websdale and Johnson (1998) offer multiple sociological perspectives on these differences in attitudes and values within urban and rural societies. One example they used is the functionalist perspective asserting that these differences may be due to a moral and conscience decay in larger cities compared to smaller (rural) areas where informal controls such as gossip may have a greater social role. Websdale and Johnson agree that this perspective, along with numerous others, all lean toward the understanding that crime is less common in rural areas and more common in larger cities. They also argue that interpersonal violence largely occurs in rural societies because feminists criticize the image of a family unit because it perpetuates an ideology of patriarchy. Violence that occurs within a domestic setting, typically in intimate partner relationships, can make it more difficult for law enforcement officers to identify early on and resolve.

**Domestic Violence Differences between Urban and Rural Areas**

As mentioned before, research on domestic violence is largely based on IPV so consequently, there is limited literature on the general domestic violence differences between
urban and rural areas. Most studies regarding IPV are conducted on urban populations, leaving little knowledge about IPV in rural societies (Peek-Asa, Wallis, Harland, Beyer, Dickey & Saftlas 2011). One study used a cross-sectional clinic-based survey on 1,478 women to measure the prevalence, frequency, and severity of IPV in the United States (Peek-Asa et al. 2011). Their results indicated that women in small rural and isolated areas reported the highest prevalence of IPV (22.5% and 17.9%) compared to 15.5% for urban women, and over 25% of women in small rural/isolated areas lived greater than 40 miles from the closest program for IPV. It was also discovered that rural women reported significantly higher severity of physical abuse compared to women living in urban areas. These findings suggest that while rural women tend to have a higher rate of IPV, they are also the farthest away from resources and support. Researchers agreed that more IPV resources and programs should be implemented to help victims living in rural areas.

One of these resources includes medical healthcare, which based on research is often difficult to obtain for women living in rural areas. Dudgeon & Evanson (2014) note that while frequency rates of IPV are about the same in rural and non-rural areas, rural victims have individual barriers in obtaining support and resources. They argue that it is important for healthcare providers to understand the specific issues that rural survivors face because they usually access health care services through both rural and non-rural settings. Dudgeon and Evanson offer a screening tool that can be used in all types of settings (rural and non-rural) which can create opportunities for IPV survivors to disclose abuse. This, in turn, can be utilized by providers to help victims get the assistance and support they may need. Dudgeon and Evanson
(2014) assert that as a result, serious health consequences may decrease and could also help lower health care costs.

Breiding, Ziembrosk and Black’s (2009) study points out that there are no population-based studies on the prevalence of IPV in rural areas of the United States. According to the authors, “Research on IPV in rural areas is especially important given that there are relatively fewer resources available in rural areas for the prevention of IPV” (Breiding, Ziembrosk & Black 2009: 240). These researchers utilized the Behavioral Risk Factor Surveillance System (BRFSS) survey to gather data on over 25,000 rural residents in 16 states in 2005. Results indicated that 26.7% of rural women and 15.5% of rural men reported some form of lifetime IPV victimization and those living in rural areas had significantly higher lifetime IPV prevalence than those in non-rural areas. This demonstrates that further research is needed to examine the differences between urban and rural societies when it comes to IPV.

Schwab-Reese and Renner’s (2017) research aimed to analyze one of these differences by examining the associations between acceptance of and experiences with IPV between rural and urban populations. Using data from a cross-sectional survey of rural residents in a Midwest state, it was found that about 4% of respondents reported that they agreed with the statement that it is acceptable for a man to hit his partner (Schwab-Reese & Renner 2017). About 20% of men and 12% of women reported that they agreed with the statement that it is acceptable for a female to hit her partner. These findings suggest that perhaps one difference in IPV rates among rural and urban populations is that rural residents may have a higher acceptance of physical retaliation compared to urban residents. The researchers agree that it is important to break this cycle of IPV
among both types of population and continue research into the specific ways in which rural environments may contribute to the approval of aggression.

Studies have also shown that there is a lack of information when it comes to police responses toward domestic violence in rural areas (Websdale and Johnson 1997). Websdale and Johnson (1997) studied this failure to address rural domestic violence and its policing by conducting interviews with a random sample of 510 battered women living in spouse abuse shelters in Kentucky. The findings demonstrated that urban battered women rated police handling of domestics in their area more highly than did rural battered women. Results also showed that there were few differences between urban and rural battered women in regard to the police response to their physical injuries. Police officers usually responded immediately with services like arresting the perpetrator and transporting the victims to a shelter. However, these findings suggest that there is a difference between the ways in which urban battered women are treated by police compared to rural battered women when it comes to IPV. Further research should identity why these different responses occur and ways in which to improve police response tactics.

**Police Response to DV in Florida**

While other states, such as Illinois mentioned previously, have different arrest policies when it comes to certain crimes such as domestic violence, Florida specifically has its own unique laws and regulations. According to the American Bar Association Commission on Domestic & Sexual Violence, Florida statute FLA. STAT. ANN. §901.15(7) (2009) states: “A law enforcement officer may arrest a person without a warrant when: (7) There is probable cause
to believe that the person has committed an act of domestic violence, as defined in s. 741.28, or dating violence, as provided in s. 784.046” (2014:3). This is why Florida is commonly referred to as a “pro-arrest” state compared to other state policies because officers are encouraged (but not required) to arrest in an encounter of domestic violence.

In an extensive analysis of Florida law enforcement domestic violence policies, researchers analyzed the standard operating procedures (SOPs) of law enforcement agencies and compared them to the Florida Model Policy for Domestic Violence (Tatum & Clement 2007). According to the research, “The Florida Model Policy was written in an attempt to improve law officers’ compliance with Florida’s pro-arrest legislation, and the drafters of the model policy intended for it to assist officers in making important decisions about arrest” (Tatum & Clement 2007:46). After using content analysis, the findings suggested that law enforcement agencies in Florida generally follow domestic violence policies and SOPs reflective of the Florida Model Policy. However, Tatum and Clement believe there are still policies considered to be “best practices” that a lot of agencies do not apply, such as policy on dispatch within their model policies. They believe that having dispatch operators can help ensure victim and officer safety, as well as obtain evidence that could be useful for prosecution. These findings encourage policymakers to not only include a section on dispatch but also to improve SOPs in more detailed factors to consider when determining an arrest decision to limit officer liability and discretion.

Another study analyzed some of the factors that may increase the likelihood of arrest for domestic violence cases in Florida. After gathering data on domestic violence calls in one county of Florida after two years, Tatum and Pence (2015) found that the chances of arrest for domestic violence are likely to increase based on the severity of the crime, presence of an injunction,
presence of children, and severity of victim injury. However, other factors such as location of call and length of relationship did not seem to have an impact on the likelihood of arrest for domestic violence. This information was collected in the sheriff’s office through agency records of each domestic violence call made. Tatum and Pence note that several law enforcement agencies have implemented a practice of sending more specialized or higher-ranking agency officers to locations where a larger number of previous domestic violence occurrences have been reported. This could explain why the study did not produce any significant relationship between the geographic location of a domestic violence call and the likelihood of an arrest for these offenses.

**Current Study**

The literature presented above suggests that rural societies have significantly different social dynamics compared to urban societies, which leads to a difference in the societal response to domestic violence. Resources are not always readily available to victims living in rural areas because of the distance and evidence points out a higher prevalence of IPV among women in rural areas than of women in urban areas. Research also demonstrates that policies/regulations vary among states when it comes to domestic violence and police response to these cases can differ between urban and rural areas. The studies in this literature review support the central hypothesis that there are fewer arrests in rural areas compared to urban areas.

Normative social influence theory helps explain some of the reasoning behind attitudes and behaviors that persist in rural societies that are not typically observed in urban societies (Izuma 2017). This theory suggests that people tend to conform to societal norms because there
is an internal need for positive relationships with the people surrounding them. When people seek to be included into certain groups, they typically end up conforming to certain social norms based on the need for association and friendship. Some of these social norms can become social informal controls that are maintained in order to keep these relationships and as the literature points out, social informal controls mainly take place in rural societies. This theory supports the hypothesis in that there are fewer DV arrests in rural areas since people know each other more personally, they are more likely to conform in order to be accepted or feel included in these communities. Since research shows that people in rural areas interact with police officers more frequently face-to-face and civilians tend to resolve conflicts on their own, this theory would argue that people have a higher probability of conforming to these social norms than to immediately report a case of domestic violence and police to perform an arrest.
Data & Methods

Data. This study uses quantitative data. The 2013-2017 Total Arrests of Domestic Violence Offenses by County from Florida’s Uniform Crime Reports (UCR) is publicly available on the Federal Department of Law Enforcement (FDLE) website. This data is housed by the Florida Statistical Analysis Center, which is partially funded by the Bureau of Justice Statistics, U.S. Department of Justice and the Justice Research and Statistics Association. The FDLE's Uniform Crime Report (UCR) system offers standardized reports on crime statistics based on data gathered from across the state of Florida. These summary reports are issued yearly. The data for the proportion rural per county was obtained from Simple Analytics, which follows the U.S. Census Bureau’s definition for rural. This definition argues that an area must have a density of 1,000 people per square mile (pps m) for it to be considered urban (Ratcliffe, Burd, Holder & Fields 2018). Anything below this number of people per square mile is considered rural. Additionally, data was collected for the proportion male, the proportion white, and the proportion unemployed in the county. The 2017 (5-Year Estimates) U.S. UCR & FBI Crime Data found from Social Explorer provided data for the proportion male and white in the county. The proportion of unemployed per county in Florida for the years 2013-2017 was obtained from the United States Bureau of Labor Statistics website (https://www.bls.gov/lau/#cntyaa). These statistics are collected using the Local Area Unemployment Statistics (LAUS) program, which is a federal-state cooperative effort in which monthly estimates of total employment and unemployment are prepared for approximately 7,000 areas. The Statistical Package for Social Sciences (SPSS) statistics software was used to run linear (OLS) regression models. This was
utilized to determine whether the control variables for proportion male, proportion white and proportion unemployed as well as whether the county was rural or non-rural have a significant influence on the arrest rates of domestic violence.

*Research Design.* This is a quantitative study using secondary data from FDLE and Social Explorer to analyze the relationship between the independent and dependent variables. Frequencies and crosstabs will be computed to analyze the descriptive statistics. Correlations will also be calculated which can be used to examine the association of these variables. Ordinary least squares (OLS) regression will be utilized to observe the relationship between these variables. In this case, does population density significantly influence arrest rates for DV controlling for sex, race, and employment status.

*Population and sample.* The study sample is all 67 counties of Florida (Florida Department of Law Enforcement [FLDE] - Uniform Crime Report [UCR] 2017). The total population of the state is 20,484,142. The total sample of domestic violence offenses is 106,979. The total sample of domestic violence arrests is 64,781.

*Hypothesis.* It is hypothesized that there are lower rates of arrests for reported DV offenses in counties where the proportion of the county population that is living in rural areas is higher because of informal social controls that take place between police and civilians in densely populated areas according to the literature.
Model.

Independent Variable – Rural per county

Control Variables – Male per county
Non-White per county
Unemployed per county

Dependent Variable – IPV Arrests

Figure 1: Model of dependent and independent variables demonstrating the effects and direction of control variables.

Dependent Variable. The dependent variable for this research is arrest rates of domestic violence. The arrest rates per county were obtained through the 2013-2017 Total Arrests of Domestic Violence Offenses by County from Florida’s Uniform Crime Reports (UCR) dataset. The UCR data is computed and published annually by the FBI but the FBI does not collect the data itself. Rather, law enforcement agencies across the United States provide the data to the FBI, which then compiles them into these reports. The average arrest rate per county through the years 2013-2017 was calculated by dividing the number of arrests by the total population (from each year) multiplied by 100,000. The totals were then divided by five to account for each year.

Independent Variable. The independent variable in this study is population density. This was measured using secondary data from Simple Analytics for the proportion rural per county. Simple Analytics follows the U.S. Census Bureau’s definition for rural which defines rural as an area with a density less than 1,000 people per square mile (ppsm) (Ratcliffe, Burd, Holder & Fields 2018). The proportion per county population living in a rural area was calculated by adding the average percent rural per county for years 2013-2017 and then dividing by 5. These percentages were then converted to proportions to get the average proportion rural per county in Florida over five years.
Control Variables. This study utilized the 2017 (5-Year Estimates) Census’ American Community Survey found from Social Explorer and the United States Bureau of Labor Statistic labor force data to control for the proportion male, the proportion white, and the proportion unemployed per county. From the 2017 (5-Year Estimates) Census’ American Community Survey data found in Social Explorer, the proportion of males per county and the proportion of white per county were each calculated by dividing each variable by the total population. From the United States Bureau of Labor Statistics labor force data, the unemployment proportions per county for the years 2013-2017 were summed together, divided by five and multiplied by 100 to obtain the average proportions over the five years.
CHAPTER FOUR: FINDINGS

Sample characteristics for all measures included in the analysis are displayed in Table 1. For the dependent variable, the average arrest rate for domestic violence across Florida counties for the years 2013-2017 was approximately 334 arrests (sd=156.89364) per 100,000 population. For the independent variable proportion rural per county, roughly 37% of the population lived in a rural area across counties. For the control variables, on average nearly 51% of the population across counties were male (sd=.03870) and approximately 80% of the population across counties were white (sd=.09739). In addition, on average around 6% of the population across counties were unemployed (sd=.01006).

The results of the Pearson correlation analysis are shown in Table 2. Results indicate that there is a weak negative association between average arrest rates and the proportion of males per county (-.180). Thus as the proportion of males increase in a county, the average arrest rates decrease. There is a weak positive correlation between average arrest rates and the proportion of whites per county (.189). This demonstrates as the proportion of whites increase in a county, the average arrest rates increase as well. Findings also show a weak positive association between average arrest rates and the proportion of unemployed per county (.069). Specifically, as the proportion of unemployed per county increases, the average arrest rate slightly increases as well. Lastly, there is a moderate negative correlation between average arrest rates and the proportion rural per county (-.277). So as the proportion of people living in a rural area increase per county, the average arrest rates decrease.

The results of Ordinary Least Squares (OLS) regression are shown in Table 3. The purpose of this analysis was to confirm prior research that indicates that rural areas have fewer
arrests of domestic violence compared to non-rural areas. Contrary to prior research, results show there is no significant association between the proportion of the population in the county living in a rural area and rates of domestic violence arrests. Additionally, the findings indicated no significant relationship between the proportion of males in the county, the proportion of unemployed in the county, the proportion of white civilians per county, and arrest rates of domestic violence. The R squared statistic for this regression model is .120 which means 12% of the variability in arrest rates of domestic violence can be explained by the independent variables. The F statistic of this analysis is 2.107 with a p value that is greater than the alpha value of 0.05. Therefore, the null hypothesis that there is no linear relationship between the proportion of a county living in a rural area and arrest rates of domestic violence failed to be rejected. These findings did not support my hypothesis, suggesting that there is not a significant relationship between population density in a county and the rate of arrest for DV.
Table 1: Descriptive Statistic (N=67)

<table>
<thead>
<tr>
<th>Variable</th>
<th>n(mean)</th>
<th>% (sd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Arrest Rates</td>
<td>333.6167</td>
<td>156.89364</td>
</tr>
<tr>
<td>Proportion of Males per County</td>
<td>.5140</td>
<td>.03870</td>
</tr>
<tr>
<td>Proportion of Whites per County</td>
<td>.7921</td>
<td>.09739</td>
</tr>
<tr>
<td>Proportion of Unemployed per County</td>
<td>.0587</td>
<td>.01006</td>
</tr>
<tr>
<td>Proportion Rural per County</td>
<td>.3734</td>
<td>.3222</td>
</tr>
</tbody>
</table>

Table 2: Correlations

<table>
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<tr>
<th>Variable</th>
<th>Total Arrest Rates</th>
<th>Proportion of Males per County</th>
<th>Proportion of Whites per County</th>
<th>Proportion of Unemployed per County</th>
<th>Proportion Rural per County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Arrest Rates</td>
<td>1.000</td>
<td>- .180</td>
<td>.189</td>
<td>.069</td>
<td>-.277</td>
</tr>
<tr>
<td>Proportion of Males per County</td>
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<td>- .056</td>
<td>- .062</td>
<td>.703</td>
</tr>
<tr>
<td>Proportion of Whites per County</td>
<td>.189</td>
<td>- .056</td>
<td>1.000</td>
<td>.056</td>
<td>-.069</td>
</tr>
<tr>
<td>Proportion of Unemployed per County</td>
<td>.069</td>
<td>- .062</td>
<td>- .056</td>
<td>1.000</td>
<td>.112</td>
</tr>
<tr>
<td>Proportion Rural per County</td>
<td>-.277</td>
<td>.703</td>
<td>-.069</td>
<td>.112</td>
<td>1.000</td>
</tr>
</tbody>
</table>
Table 3: OLS Regression: Effects of Control Variables on Arrest Rates for DV in Florida Counties, 2013-2017

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion Male</td>
<td>265.414 (.703)</td>
</tr>
<tr>
<td>Proportion White</td>
<td>284.781 (.144)</td>
</tr>
<tr>
<td>Proportion Unemployed</td>
<td>1857.683 (.335)</td>
</tr>
<tr>
<td>Proportion Rural</td>
<td>-157.902 (.064)</td>
</tr>
</tbody>
</table>

| Intercept        | -78.337        |
| N                | 67             |
| F                | 2.107          |
| R^2              | .120           |
| Adjusted R^2     | .063           |

Note: Cell entries are given as unstandardized regression coefficient with the standard error given in parentheses.
* p< .05
Some variance inflation factor (VIF) statistics were less than 1.80.
Discussion

Because results showed that there is no significant relationship between the proportion of a county population living in a rural area and arrest rates of domestic violence, the theory of normative social influence does not fully explain the different social dynamics that take place in rural and urban areas. This theory argued that people tend to conform to societal norms based on the need for association, but the results of this analysis do not completely support this notion. The same goes for the concept of informal social controls which govern the way people respond and behave based on frequent interactions with each other. These concepts were not reinforced based on these findings. Although bivariate results showed a correlation between the proportion of the population living in a rural area and average arrest rates, once other variables were controlled for in the multivariate models a significant relationship was not found.

These findings were surprising because they do not support existing literature. Most research supported the hypothesis that there is less arrests of DV in rural counties than in non-rural counties. Research demonstrates that people who live in rural areas tend to fend for themselves and take matters into their own hands when conflict arises (Weisheit, Falcone & Wells, 1996). People in rural areas typically have a close relationship with local police officers and they feel a heightened sense of responsibility towards their community (Weisheit, Falcone & Wells, 1996). The literature also revealed that Florida is a “pro-arrest” state with police encouraged to make an arrest in a case of domestic violence. However, considering that Florida is mainly comprised of rural areas (90%) according to the U.S. Census Bureau’s definition, perhaps there is a limited interpretation of the rate of domestic violence arrests based on this state alone. Other states that have a larger ratio of non-rural areas compared to rural areas, may reveal different results.
indicating a higher rate of arrest for domestic violence. With only 10% of Florida considered non-rural, it is difficult to analyze the social dynamics that differ between these areas and rural areas. Since most of Florida is rural, we cannot just safely assume that social informal controls are the only reasoning behind the way people behave and respond to crime the way in which they do.

Some of the limitations of this study include that suburban areas were not taken into consideration as a substantial factor. Suburban areas are typically on the outskirts of a city but have a lower population density than inner cities. However, they can sometimes consist of large communities which may have affected the differentiation between the proportion of a county that was rural compared to the rest of the county that may have been considered urban while having parts of that area that were suburban. These variations in population density could have affected the accuracy of what is considered to be rural based on the definition used for this research. Another limitation was that the control variables for the proportion male, the proportion white, and the proportion unemployed were very restrictive in the choice of responses based on the dataset provided by FDLE. For instance, there are more categories for sex that go beyond just male or female. Also, the rate of arrests for domestic violence per county may not be completely accurate in that it doesn’t account for cases that are not reported or for offenses that do not lead to an arrest. The rate of arrests for domestic violence may fluctuate throughout the years as well and this analysis only provided data from certain years which limits the timeframe of the study.
CHAPTER FIVE: CONCLUSION

This study did not reveal a significant relationship between the rate of domestic violence arrests and the proportion of the county population living in a rural area. In regards to normative social influence theory, the need for positive relationships with the people around us may lead to conformity. However, while this idea supports previous literature on community dynamics in rural areas that are maintained by informal social controls, the results do not aid in the knowledge or understanding of societal influences in rural areas that make them different from urban or non-rural areas. Therefore, future research should analyze what other factors may explain the relationship between arrest rates of domestic violence and rural/non-rural areas.

On a larger scale, further studies could explore the rates of DV arrests states across the U.S. and compare them between rural and urban areas. The state of Florida is not only geographically different than other states but also distinct in certain characteristics such as racial and ethnic make-up, political views, and laws. This type of research could provide a better understanding as to what other factors, other than social informal controls, make rural areas different from non-rural or urban areas on a macro level. Having an extended knowledge on the influence of societal norms in rural and urban communities can help identify and analyze patterns of domestic violence that could otherwise go undetected. Furthermore, it is important to continue research on rural/urban sociology in order to examine what other societal forces promote the existence of other types of crime, not just domestic violence. Future research should also focus on more than just five years of data on the arrest rate of domestic violence seeing as these rates can fluctuate over time.
LIST OF REFERENCES


