

Evaluating Community Policing in Madison, WI

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ABSTRACT

The relationship between police and urban communities has been deteriorating since the 1990's. In recent years there has been an increase in violent crime in urban communities and property crime due to widespread opioid addiction. Police departments across the country have implemented a new policing strategy; community policing in an attempt to repair the relationship between police and the communities they serve, as well as solve the previously stated problems facing their communities. The results of Zhao's (2004) and Mulhausen's (2001) prominent research into Community Oriented Policing Grants are inconclusive and there has been little research into specific community policing strategies and their effectiveness at reducing crime. The following research attempts to determine the effectiveness of the Madison Police Department's community policing strategies at reducing both violent and property crimes in Madison, WI. The results of the research showed no significant relationship between the number of foot patrols conducted by police and the number of assaults committed. However, a significant relationship was detected between foot patrols and the number of burglaries committed in Madison. The findings of this paper are not in any way a concrete or end all conclusion on the effectiveness of community policing. More work needs to be done by law enforcement professionals and researchers to consistently define and conceptualize community policing in order to fully understand the practice and its effectiveness.

INTRODUCTION

Overall, violent crime in America has decreased significantly since the 1990's, but some select urban areas across the United States have not enjoyed the decrease in violent crime that the majority of the country has experienced (Sharkey, 2017). Police departments in urban communities are attempting to adapt to the changing culture in policing while still fighting crime and keeping their neighborhoods safe. As America becomes more diverse and urban areas face quality of life challenges, police see their roles in the community changing too. Police serving in these urban communities must adapt to meet the needs of residents. Community policing has been a strategy that has gained momentum in the past decade as police departments across the country attempt to adapt to their new role in the 21st century. Community policing is defined by the United States Department of Justice as "philosophy that promotes organizational strategies, which support the systematic use of partnerships and problem-solving techniques to proactively address the immediate conditions that give rise to public safety issues such as crime, disorder, and fear of crime." A key aspect of this definition is partnership. Community policing emphasizes partnerships between police and residents, businesses, and other organizations in the communities they serve. Together they work to solve specific problems facing their communities that could lead to crime. Because community policing is fairly new, there has been relatively little research into its effectiveness in fighting crime. Violent crime steadily decreased from the 1990's until the early 2000's. However, since 2015 urban communities in the United States have observed a slight increase in violent crime. The United States has also been battling a war against opioid addiction in recent years. Widespread opioid addiction has led to an increase in overdoses resulting in thousands of deaths. It has also led to an increase in property crime and theft. Addicts who are desperate for money needed to score their drugs often turn to crime or theft to obtain the funds. This begs the question how does community policing work to solve these two challenges facing law enforcement today? This study examines how effective community policing is at deterring and preventing violent crime and burglaries in urban communities.

LITERATURE REVIEW/THEORY

Policing in the United States has changed drastically in the past several decades. Three policing strategies used widely throughout the United States are: Strategic Policing, Broken Windows Policing, and Community

Policing. This paper focuses on Community Policing efforts and the effect these efforts have on violent crime in urban areas.

Strategic policing includes more focused tactics with the aim of improving performance and reducing crime (Steinburg & Austin, 2007). These strategies include directed patrols, saturation patrols, crackdowns, and hot spot policing. One major component of strategic policing is intelligence lead policing. This relatively new phenomenon allow police departments to analyze and map crime statistics to improve their services and fight crime more efficiently. One result of intelligence lead policing is COMPSTAT. This style of policing is usually used in larger agencies. COMPSTAT uses crime mapping and statistics to highlight problems in specific precincts or districts. Police captains and commanders then meet and discuss their efforts and resources being used in their jurisdictions to fight the immediate problems facing their specific districts or precincts. COMPSTAT allows for accountability among supervisors and officers as well as efficient use of time and resources when fight crime in urban areas. One critique of hot spot policing efforts is that it does not eliminate crime but instead relocates crime to a different area. "The Effects of Hot Spot Policing on Crime" by Anthony Braga (2007) examines a patrol strategy used in strategic policing. Hot spot policing entails police departments focusing patrols and resources on specific "high crime" areas. The goal is to reduce overall crime by using resources and time more efficiently (Steinburg & Austin, 2007). Braga's research looked at nine studies of hot spot policing efforts in Minneapolis, Jersey City, St. Louis, Kansas City, Houston, and Beenleigh (Australia). Crime reductions were found in seven of the nine studies.

Another strategy that has been widely used by police departments throughout the 1990's and into the 21st century is Broken Windows, otherwise known as Quality of Life Policing. In Broken Windows, police crackdown on small petty crimes like graffiti, fare evasion on public transit, or other quality of life crimes in order to discourage disorder that could lead to more serious violent crimes like murder, rape, battery, robberies, etc. (Bratton, 2015). Broken Windows was made famous by the NYPD throughout the 1990's and into the 21st century in order to reduce violent crime that plagued the country's largest city. The Broken Windows strategy significantly reduced the number of homicides in New York City from 1990 to 2013. In 1990, New York City accounted for 9.6% of the United States homicides. By 2013 it accounted for just 2.4%. The reduction in crime in New York City thanks to a Broken Windows policing strategy was significant, but it did not come without controversy. Stop and Frisk was a strategy used by the NYPD to search individuals for contraband like weapons or drugs. This led to a significant amount of arrests and consequently contributed to the reduction in crime (Huq, 2017). In 2011, a federal judge ruled the stop and frisk strategies used by the NYPD were unconstitutional on the basis of racial discrimination. People of color were disproportionately stopped and frisked by members of NYPD. Because of this ruling, Broken Windows policing often has a negative connotation attached to it.

Finally, Community Policing has the goal of improving the relationship with police departments and the communities they serve and building the legitimacy of police in their communities. The United States Department of Justice defines Community Policing as "a philosophy that promotes organizational strategies, which support the systematic use of partnerships and problem-solving techniques to proactively address the immediate conditions that give rise to public safety issues such as crime, disorder, and fear of crime" (Reisig, 2010). The key aspect of this definition is "partnerships and problem-solving techniques." Community Policing emphasizes partnerships between police and community organizations and residents. This is a change from the policing style used in the mid to late twentieth century that was militaristic, where the police were view as occupying forces in urban communities. The partnership aspect of Community Policing defines the police's role as members of the community working with others to collectively solve the problems that are unique to the communities they serve, a stark difference between the two strategies. Community Policing as brought about the revival of foot and bicycle patrols (Reisig, 2010). The whole idea of foot patrols is for officers to interact with residents and is shown to make the public feel safer and improve the public's attitude towards police (Reisig, 2010). Another key aspect to Community Policing is decentralized police operations (Wycoff & Skogan, 1993). A decentralized approach allows officers to interact more closely with particular neighborhoods they patrol and address a neighborhood's specific needs. Community Policing has been prioritized in the past decade because of the civil unrest and racial tensions that have been facing police departments and urban communities throughout the country (Wade, 2017). Community Policing is a tool used by many departments to improve relationships and build trust within the communities they serve. Nonenforcement interactions with the public are a key component to Community Policing in order to build trust and establish positive relationships with constituents (President's Task Force on 21st Century Policing, 2015).

There have been many federal initiatives or programs that have promoted Community Policing. The Community Oriented Policing Services Program (COPS) was enacted by the Clinton Administration during the

1990s and provided billions of dollars to local law enforcement agencies to hire more officers and reform their practices towards community-oriented policing to reconnect police with the public (Wade, 2017). Community Policing has been proven to improve the relationship between police and the public, and with the racial tensions between many urban communities and police, many law enforcement agencies have begun adopting some form of Community Policing strategies. However, research into whether the COPS grants in the 1990s led to a reduction in crime are mixed. President Obama also formed The President's Task Force On 21st Century Policing in 2014 when social unrest grew after many high-profile shootings of unarmed black men by police. This task force completed a report with recommendations to police departments on how to reform policing practices to tackle the challenges facing diverse urban communities in the United States.

All three of the previously discussed strategies are not mutually exclusive. Often, they are used as compliments of each other in crime fighting (Reisig, 2010). Police departments could use strategic policing strategies such as hot spot patrols and saturation patrols as part of their Community Policing efforts. For example, police could concentrate their efforts such as foot patrols or bicycle patrols in high crime areas to try and deter crime as well as interact with residents face to face. Police could also hold or attend community meetings with residents and other officials to hear the concerns of residents and develop a plan to properly address the issues facing that specific neighborhood. These strategies are the essential aspects of Community Policing. The whole idea of Community Policing is partnering with community members and using problem solving to improve the quality of life for residents. This corresponds with the Broken Windows theory that aims to crack down on quality of life crimes that would otherwise seem harmless in order to prevent more serious crimes (Cordner, 2007). An example of broken windows being incorporated into Community Policing is police working in cooperation with other organizations or agencies to improve the quality of life in a neighborhood. This could be coordinating with the public works department to install more street lighting in a neighborhood to deter crime that occurs at night. Another example would be connecting with a city's sanitation department to plan additional pick up times for trash and waste in an apartment complex to ensure it is sanitary and a safe place for kids and adults to play and congregate peacefully. Improving the living conditions of a neighborhood can help reduce crime and disorder. This is the key principle of the broken windows strategy. These examples are what Sharkey (2018) refers to as 'collective efficacy' in his book *Uneasy Peace*. Sharkey defines it as "social cohesion, trust, and shared commitment to the community." According to Reisig, research has shown that collective efficacy is a strong predictor of neighborhood crime, delinquency, and disorder.

The relationships between police departments and the communities they serve has becoming increasingly strained in the past decade in the United States. High profile shootings of unarmed black men such as Michael Brown in Ferguson, Missouri or Walter Scott in South Carolina have caused outrage in minority communities regarding America's criminal justice system. Many local police agencies have turned to Community Policing strategies to build trust and more effectively police in diverse urban communities. The federal government for years has been promoting Community Policing through The Community Oriented Policing Services Program (COPS) which awarded over \$13 billion in grants to local police agencies from 1995-2008 with the goal of encouraging the hiring of more Community Policing officers and fostering police-community problem solving (Reisig, 2010).

When it comes to the strategic aspect, Community Policing revives a policing strategy used in the very origins of police work, the foot patrol. The idea of utilizing the foot patrol is to promote face to face interactions with the public (Reisig, 2010). Face to face interactions allow officers to get to know community members and establish relationships with them. This way officers are in tune with problems and concerns that are facing their specific community and its citizens. It also shows residents that police officers are invested in their neighborhood and truly care about them and their quality of life. During foot patrols, officers can also receive tips or learn of problems that need to be addressed while patrolling their communities. This is a huge tool that can be used by police departments to build trust within communities and provides a personal touch to policing by building strong relationships. Neighborhood association/community meetings, block parties, and other community events are also great opportunities for face-to-face contact between police and residents in a nonenforcement capacity. By participating in these events, officers get to know their community better while giving them an opportunity to have a positive interaction with residents outside of their traditional role of enforcing the law. The ultimate goal of all these strategies is reduce crime. But unlike other strategies, Community Policing focuses on building partnerships within the community to accomplish this goal.

The personnel hired by police departments is also an important part of Community Policing. President Obama's Task Force on 21st Century Policing's final report (2015), recommends "law enforcement agencies should

strive to create a workforce that contains a broad range of diversity including gender, race, language, life experience, and cultural background to improve understanding and effectiveness in dealing with all communities.” This recommendation is vitally important to policing in diverse urban communities. Communities are more likely to respect and recognize the authority of police departments that reflect the culture and makeup of their neighborhood. A study by Pamela Black and Camilla Kari (2010) found minority police cadets ranked themselves better able to assess needs and interact with diverse cultural groups than nonminority police cadets. In addition, it is important that officers are assigned and work in the same geographic area for an extended period (Reisig, 2010). This allows officers to become familiar with the neighborhood, its residents, and the unique problems facing the communities they patrol. The familiarity an officer gains by patrolling the same area consistently gives officers firsthand knowledge that helps them solve problems in their specific beats.

Muhlhausen (2001) conducted research into how COPS grants affect crime rates. Supporters of the COPS Program have cited the number of officers the grants have allowed local agencies to hire. Muhlhausen claims that this is not an appropriate measure of the effectiveness COPS grants had on violent crime rates. His study addresses the impact COPS grants had on violent crime rates specifically at the county level. Muhlhausen’s study categorized violent crime as murders, forcible rapes, robberies, and aggravated assaults. In order to analyze the relationship between COPS grants and violent crime rates, “researchers used data on the amount and type of funding received by local law enforcement by county along with violent crime offenses and arrests at the county level, admissions to prison for violent crimes by county, county socioeconomic factors, and local government expenditures” Muhlhausen states that COPS grants directed for the hiring of additional officers and redeployment grants did not have statistically significant effect on reducing violent crime rates. He claims that two possible reasons for this could be that the actual number of officers added to the street by COPS grants is significantly less than funding indicates or the grants were ineffective in reducing crime without a clear crime fighting objective. He went on to quote the 1997 Department of Justice review of crime fighting programs that claimed “community policing with no clear strategy for targeting crime risk factors, such as high-crime “hot spots” and illegal firearm possession, is ineffective in reducing crime.” The story of COPS Miscellaneous grants is quite different however, research by Muhlhausen found “miscellaneous grants, including funds for addressing such specific problems as gangs, domestic violence, and illegal use of firearms by youth, have a statistically significant effect on reducing violent crime rates.” In fact, he found that “for each additional \$1 of miscellaneous COPS grants per capita, the expected value of violent crime declined by almost 16.2 incidents per 100,000 people” (Muhlhausen, 2001). While the research by Muhlhausen is insightful and an important evaluation of COPS grants provided by the federal government, it does not investigate specific Community Policing strategies and their effects on crime. This research aims to evaluate one of the core community policing strategies, foot patrols. Specifically, how foot patrols impact violent crime and property in urban areas.

Zhao (2004) also conducted research into the effectiveness of COPS grants on crime reduction. Zhao’s study focused instead on cities instead of counties. Zhao states that using data from cities is a more adequate measure for accessing COPS grants on affect on crime compared to counties. He claimed that using data at the county level is insufficient because there is not uniform COPS funding for all police departments in a county. Therefore, analyzing crime rates at the county level would not be an accurate evaluation of COPS grants effect on crime. Zhao’s research contained three independent variables and two dependent variables. The three independent variables included the three types of COPS grants; hiring grant, innovative grant, and MORE grant. The two dependent variables analyzed were property crime and violent crime per 100,000. The study also controlled six variables that may affect crime rates. These six variables are: community heterogeneity or the number of minority residents in a neighborhood, along with percentage of unemployment, percent of single parent households, percentage of young people between the ages of 15 and 24, percentage of homeownership, and community mobility measure by the percentage of people living at the same address since 1985. A total of 6,100 cities were studied from 1994-1999 as part of Zhao’s research. Research found that the effect COPS grants had on violent crime and property crime rates likely varies based on city size. However, all three categories of COPS grants reduced both violent and property crimes in cities with populations larger than 10,000, and “according to the FBI, 89 % of the U.S. population lives in an area where police departments serve a population greater than 10,000.” Innovative grants showed to have the greatest affect on both property and violent crime.

Neither Zhao’s (2004) or Muhlhausen’s (2001) study addressed specific Community Policing efforts and their affect on crime. One of the essential aspects of Community Policing is face to face contacts between patrol officers and residents. The foot patrol is a popular method used in the broken windows policing strategy but also provides opportunities for officer-initiated contact as a part of Community Policing. Zhao’s study just like

Mulhausen's analyzed the relationship between the amount of federal funding received from COPS programs by police departments and crime rates. These studies are relevant and helpful in determining if federal funding is effective. However, research into different Community Policing strategies such as foot patrols, bike patrols, nonenforcement community events etc. are scarce. In order to understand if Community Policing strategies are truly effective at reducing crime, such as violent crime and property crime specifically, it is important to analyze and study the relationship between these specific efforts and crime rates in cities where police diligently practice Community Policing. Ratcliffe et al (2011) conducted a study into the effectiveness of foot patrols in high crime or "hotspot" areas in Philadelphia. A total of 120 hotspots were used in the experiment. These hot spots were then divided into target areas and control areas consisting of specific city blocks. Foot patrols were conducted twice a day in the target areas. No foot patrols were conducted in control areas. During the experiment, officers' activity varied. Some conducted more community-oriented work where they would speak to community members or visit child care centers while other officers focused more on crime interviewing/stopping pedestrians or stopping cars at stop signs. The study found that "violent crime hotspots that were recipients of foot patrols for up to 90 hours per week had a reduction in violence of 90 offenses, outperforming control areas by 23 percent." The experiment conducted by Ratcliffe et al was specific in the fact that it examined precise high crime areas of the city broken down by city blocks. This research attempts to add to these existing bodies of research to examine specific community policing efforts and their effect on violent crime and property crime. Foot patrols in Madison differ from the foot patrols conducted by Philadelphia Police because Madison uses foot patrols as a component of their community policing efforts with the goal of making nonenforcement contacts with residents establishing relationships and improving social capital. Philadelphia police's efforts different in the fact they conducted foot patrols with the specific goal of fighting violent crime and not as a form of community policing. The theory is that community policing efforts like foot patrols help build and increase social capital in communities. This will result in a higher quality of life for residents and reduce the need or temptation to commit crime.

I hypothesize that an increase in community policing efforts, e.g. foot patrols by the Madison Police Department over the past several years has increased the quality of life for Madison's residents and consequently reduce crime. Community policing efforts help build social capital and provide resources and information to residents, helping them improve their own quality of life. These efforts could help residents with treating their addictions, specifically opioid addictions that may cause individuals to commit crimes or provide them connect them with resources that help them improve their education, employment status, or stress management skills. These efforts and improvements lead to a decrease in violent crime and property crime, specifically the number of assaults and burglaries that occur in Madison, WI.

DATA & METHODS

To test the hypothesis, community policing efforts were conceptualized as the number of foot patrols conducted by police and used as the independent variable. The two dependent variables were the number of assaults reported to police representing violent crime and the number of burglaries reported to police representing property crime. The data was acquired from the Madison Police Department through a public records request for every call type categorized as "foot patrol" for the past ten years. Due to limited staffing and resources of the Madison Police Department's Records Department, only five years of data for "foot patrols" from 2013-2017 were obtained. Each foot patrol call was also categorized by date and location by police district. Madison was divided into five police districts from 2013 until 2017; North, South, East, West, and Central. The data for the number of assaults and burglaries reported to police was obtained from the Annual Crime Report released by the Chief of Police every year. Data for the number of assaults and burglaries reported each year were available city wide as well as broken down to the number reported in each district. A final data set was compiled where the total number of assaults, burglaries and foot patrols (contacts) reported each year from 2013-2017 were listed and categorized by district. Assaults, burglaries, and contacts were grouped by district to account for differences in crime across districts. The City of Madison was chosen for the experiment because of the Madison Police Departments strong commitment to community policing. In order to accurately measure community policing and its effectiveness it was important to select a department that practiced and was committed to true community policing. Foot patrols were chosen as the independent variable as a measure for community policing efforts because it is one of the fundamental and most widely used community policing strategies being utilized by police departments in urban areas across America.

Using the program Stata, the mean and median were calculated for both the independent and dependent variables. The mean and median were calculated as the measure of central tendency for both the independent variable (contacts) and dependent variables assaults and burglaries. The standard deviation and range were calculated for both variables to measure their spread. A bivariate and multiple regression analysis were conducted between foot patrols and both assaults and burglaries. A Pearson's R test was ran accompanying the regression analyses. Running a regression analysis for both relationships displayed the regression model and statistical significance of the relationship. A Pearson's R Test was ran to determine the strength and direction of the relationship as well. Because of limited time and resources, Data for specific confounding variable was unobtainable. The confounding variables could have potentially affected the relationship between the independent and dependent variable. Instead, a dummy variable was created for each district in an attempt to control for confounding variables to determine if they affected the strength and direction of the relationship between foot patrols (contacts) and the number of assaults and burglaries. Then ran a multiple regression analysis with the dummy variables to was conducted determine if the relationship changed after controlling for confounding variables.

Table 1 shows the measures of central tendency and dispersion for assaults, burglaries and foot patrols (contacts). Again, the median would likely be the most accurate measure of central tendency due to the high standard deviation and range for both variables. This suggests there is a large amount of variation in both assaults and burglaries along with the number of foot patrols (contacts) conducted each year. Strong outliers on both the high and low end could significantly impact the mean for each category with only five years of data. The median value reported for contacts was "159," assaults was "354," and the median number of burglaries was "207." The range for contacts was "707." This suggests that there was a significant difference in the number of foot patrols conducted from one district to another or a significant difference in the number of foot patrols conducted in a calendar year.

Table 1. Measures of Central Tendency and Spread for Police Contacts, Assaults, and Burglaries

Variable	Mean	Median	Standard Deviation	Range
Contacts	215.44	159	183.83	707
Assaults	358.48	354	56.25	237
Burglaries	224.8	207	84.23	304

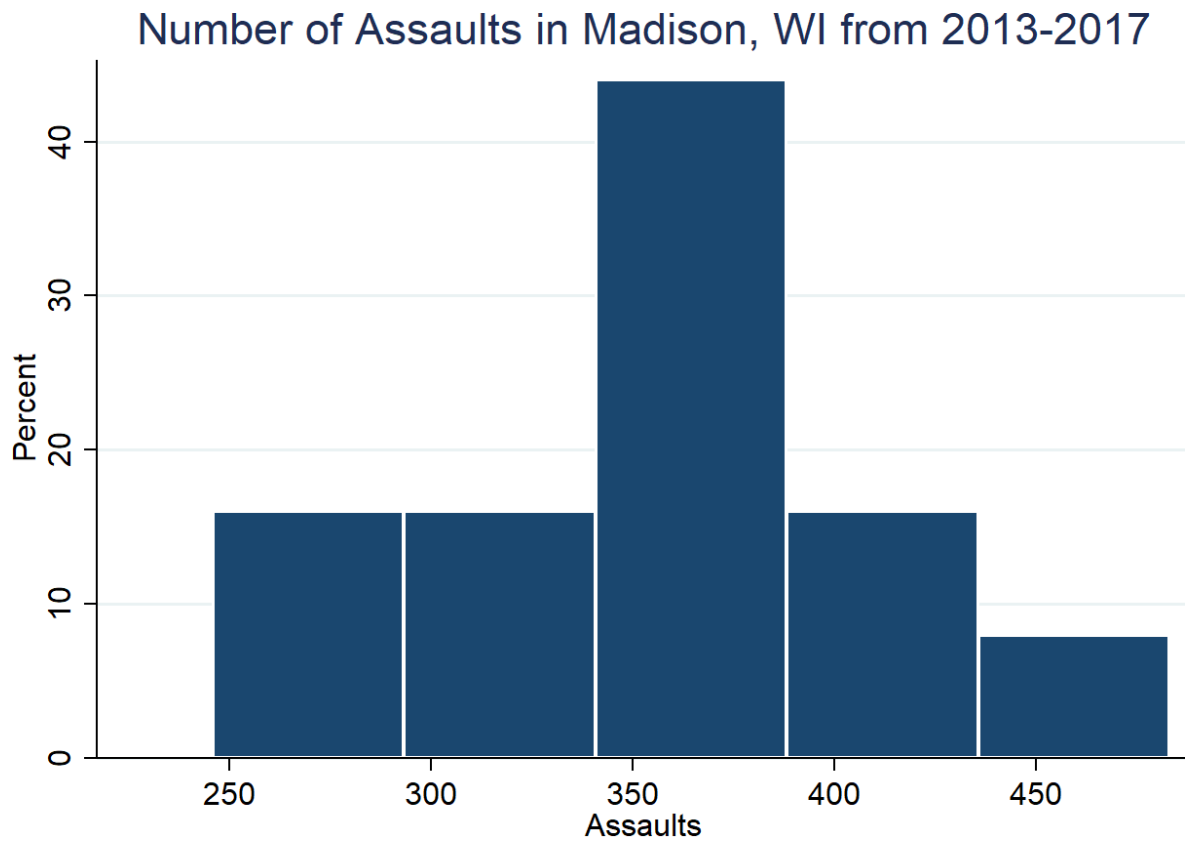


Figure 1. Figure 1 below displays a histogram containing the number of assaults that occurred in Madison from the 2013 through 2017. The distribution of assaults is symmetric. The histogram shows that 40% of the data collected from the districts across Madison had between 340 and 380 assaults reported to police.

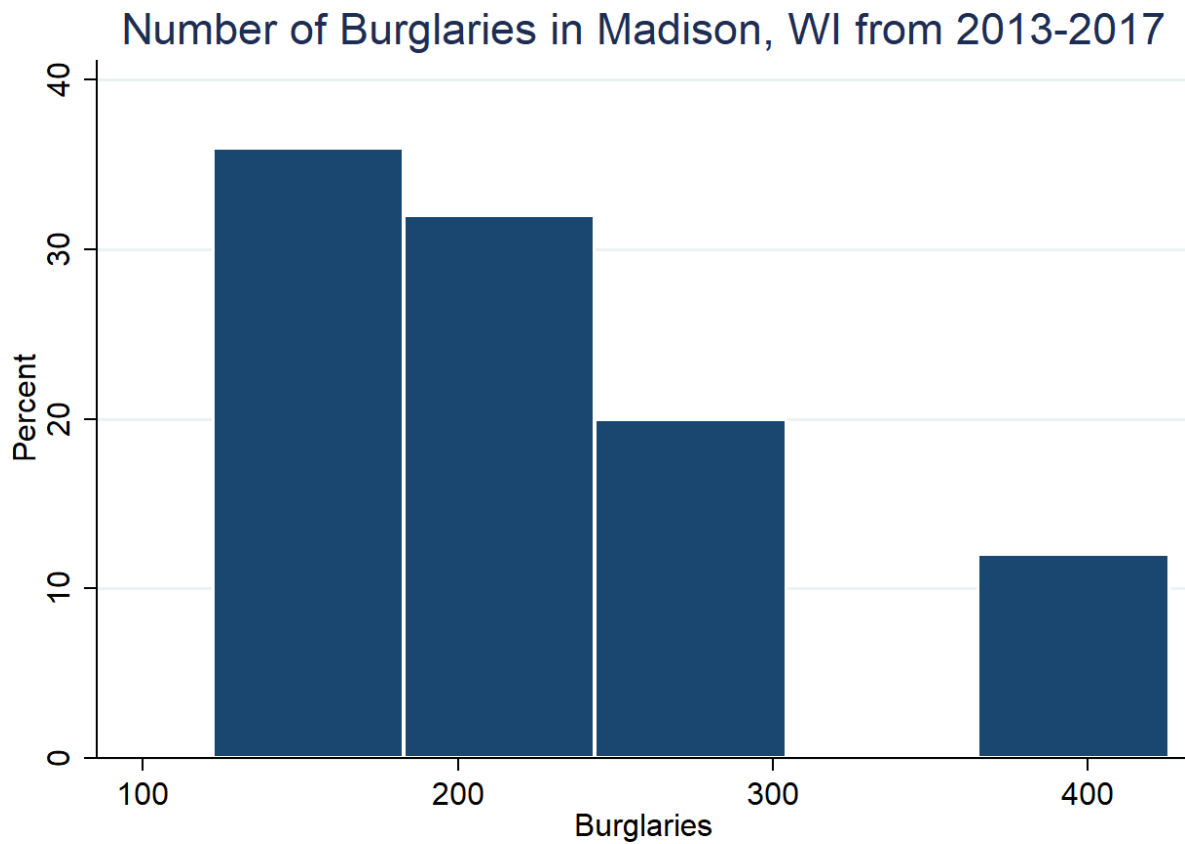


Figure 2. Figure 2 displays a histogram the number of burglaries reported for each police district across Madison from the year 2013 through 2017. The distribution of burglaries is positively skewed. One could infer from the histogram that there are relatively few burglaries committed in Madison compared to the number of assaults.

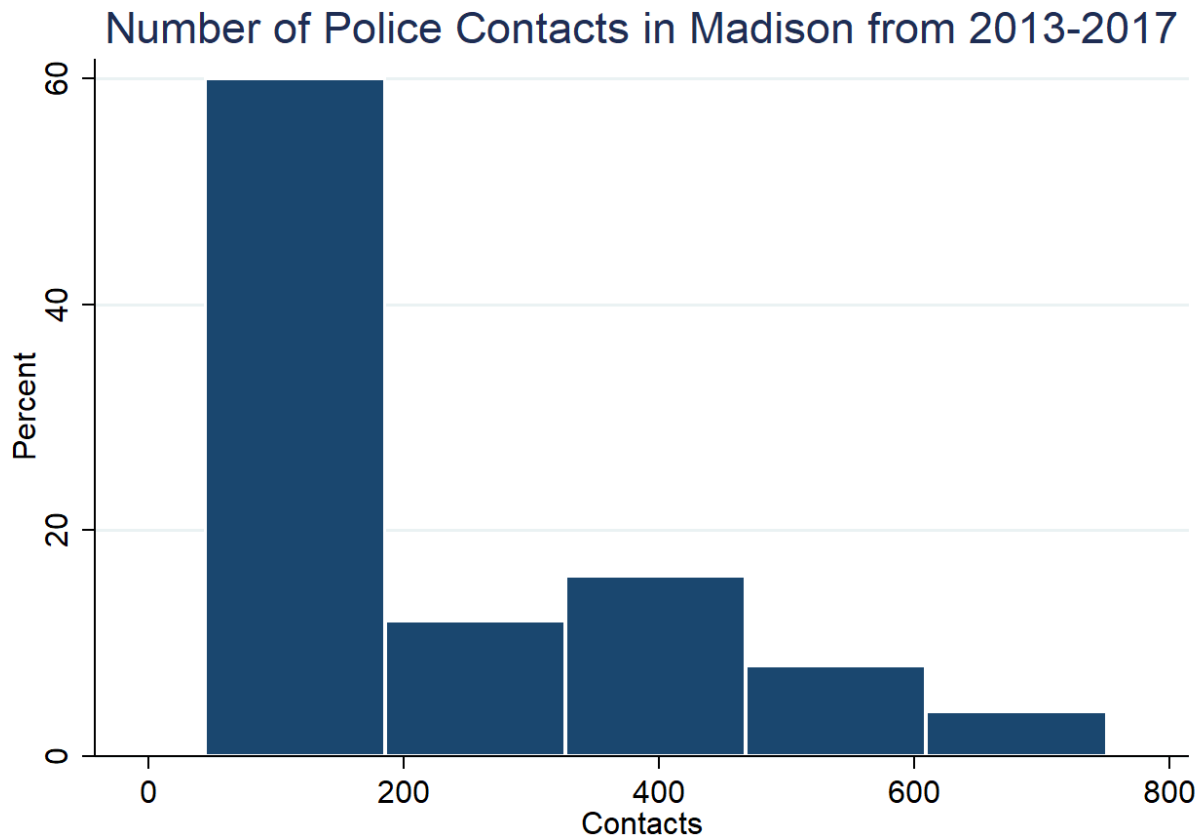


Figure 3. Figure 3 displays a histogram for the number of police contacts across districts in Madison from 2013 through 2017. This distribution of data is positively skewed. 60% of the data collected showed police made less than 200 contacts. The small amount of police contacts may affect the ability of police to deter crime.

RESULTS

To begin the analysis, a Pearson's R test was conducted. The results showed a very weak negative relationship of $-.0574$. This shows there is no real substantive relationship between the number of foot patrols conducted by police and the number of assaults that occurred in Madison, WI. The Pearson's R test also showed that there was no statistically significant relationship between the independent and dependent variable with a p-value of $.7851$. After running a Pearson's R test, a bivariate regression analysis between foot patrols and assaults was conducted. The results of the bivariate regression test are shown in Table 2. The coefficient for the bivariate model was -0.018 meaning that there would be a .018 decrease in assaults for every foot patrol conducted by the Madison Police and if they conducted zero foot patrols there would be 363.27 assaults committed, which is the constant value displayed in the regression model. The model showed a p-value of $.785$ deeming the relationship statistically insignificant. This was consistent with the results from the Pearson's R test ran previously. An important figure obtained from the regression model was R-squared. R-squared was reported as -0.04 in the initial regression model meaning that police contacts accounted for only 0.4% of the variation in the number of assaults that occurred in the City of Madison. This suggests that there might be significant confounding variables that may affect the relationship between police contacts and assaults. Consequently, dummy variables for police districts were created.

A multiple regression analysis with the dummy variables for district was conducted in an attempt to control for any potential confounding variables. The results are shown in Table 2 as well. The resulting coefficient for the

multiple regression analysis was “0.049,” meaning that for every foot patrol conducted by police there was an increase in .049 assaults in Madison. The constant was “384.84.” If the Madison Police Department were to conduct zero foot patrols, there would be 384.84 assaults committed in Madison while controlling for other variables. The relationship between foot contacts and assaults was still statistically insignificant with a p-value of “.151.” However, the R-squared result “.59” after controlling for confounding variables. This suggests that there are other variables or factors that affect the number of assaults committed in Madison, WI. After running both a Pearson’s R test and a Regression Analysis while controlling for confounding variables with dummy variables, one can conclude that there is neither a substantive or statistically significant relationship between police contacts and assaults committed in the City of Madison.

Table 2. Regression Analysis Between Foot Patrols and Assaults

Variable	Bivariate Model	Multiple Regression Model
Foot Patrol Contacts	-0.018	0.049
East	-	3.41
West	-	59.96
North	-	-27.89
South	-	-85.42
Constant	363.27	384.84
R ²	-0.04	0.59
*P<0.05		

A Pearson’s R Test was run to test the relationship between police contacts and burglaries as well. The Pearson’s R Test displayed an extremely weak positive relationship between contacts and burglaries with a value of “.156.” The reported p-value was “0.455” deeming the relationship statistically insignificant. A bivariate regression analysis between contact and burglaries was also conducted, the results are shown in Table 3. After running the bivariate regression analysis between contacts and burglaries the intercept or constant value was reported as “209.05” and the coefficient was reported as “0.07.” This means that for every foot patrol conducted by Madison Police, there is a 0.07 increase in the number of burglaries committed in Madison. If police were to conduct zero foot patrols there would be 209.05 burglaries committed. The p-value was “0.76” This was similar to the Pearson’s R p-value and deemed the relationship statistically insignificant as well. However, after running the multiple regression analysis with dummy variables for police districts, the relationship between contacts and burglaries changed. The intercept or constant value in the multiple regression analysis was “305.65” and the coefficient was “-.016.” This means that for every foot patrol conducted there is a decrease of .16 burglaries in Madison. If there were no foot patrols (contacts) conducted in Madison, there would be 305 burglaries committed. The p-value was “.007” which is less than the .05 threshold deeming the relationship statistically significant. Additionally, the R-squared value of “-.02” in the bivariate regression increased to “.79.” This suggests that confounding variables significantly influenced the number of burglaries that were committed in Madison. The results of the multiple regression analysis between foot patrols and burglaries are shown below in Table 3.

Table 3. Regression Analysis Between Foot Patrols and Burglaries

Variable	Bivariate Model	Multiple Regression Model
Foot Patrol Contacts	0.07	-0.16*
East	-	-80.99
West	-	101.77
North	-	-138.32
South	-	-109.82
Constant	209.05	305.66
R ²	-0.02	0.79
*P<0.05		

Discussion/Conclusions

Based on the results of the research, one can conclude that foot patrols (contacts) are not effective in reducing violent crime. The story is different for the relationship between police contacts and burglaries, however. The multiple regression analysis showed a statistically significant relationship between the two variables. The analysis showed that foot patrols (contacts) decrease the amount of burglaries committed in Madison. The fact that police contacts reduce burglaries but not assaults is intriguing. The question is why are foot patrols (contacts) effective at reducing burglaries but not assaults? One reason for this could be the nature of the two different crimes and symptoms that could lead to burglaries or assaults. For example, police have the ability to counsel or refer an individual to addiction treatment or counseling resources to help them fight addiction of opioids. If the treatment is effective, the individual will not be as likely to commit a burglary for drug money or be desperate to steal things because they used all their money buying drugs and need to steal to obtain money. Or even outside the realm of addiction, an officer could connect an individual with a non-profit organization or a job training center that will help them apply and find jobs. An employed individual has a source of income and consequently will not have the need to steal or burglarize. The symptoms or conditions that lead someone to commit assault aren't as observable or preemptive as burglary. Assault is often a crime of passion and a person's decision to assault someone is made in that specific moment, therefore it is harder to prevent. Additionally, the violent crime rate in a city could possibly affect community policing efforts' ability to reduce violent crime. Madison has a relatively low violent crime rate and is voted one of the best places to live in America on an annual basis. Because the violent crime rate is already low, it could be hard to significantly reduce violent crime. Conducting research in a city where there is a high violent crime rate may be more sufficient for determining how effective community policing is at reducing violent crime. Finally, the amount of data that was available was a significant limitation of the research. Due to limitations of the Madison Police Departments Public Records Department only five years of data were obtained. The small sample size could have impacted the statistical significance of the relationship found using regression analyses.

There are many confounding variables that could have impacted the relationships between police contacts, burglaries, and assaults. The large change in R-squared values from the bivariate regression to the multiple regression showed how evident confounding variables were in the relationships. Some confounding variables that may impact the number of assaults that are committed include the socioeconomic status of residents and the educational level of residents. Individuals of lower socioeconomic status and those with lower levels of education attainment tend to commit more crimes than those with high levels of educational attainment and higher socioeconomic status. These factors are beyond the influence of law enforcement. The number of calls for service police receive could affect the amount of foot patrols police conduct. When police are busy answering calls, they have less free time to conduct foot patrols. Unless a department has a specific number of officers dedicated to conducting foot patrols in a certain area, it can be hard for patrol officers to find the time to conduct foot patrols. Police departments could assign officers to strictly conduct foot patrols in their beat. The goal of these officers is not to answer calls for service but rather interact with residents learning about the community and establishing relationships with residents. Although, this may not be fiscally feasible with strained budgets of local government. The geography of a patrol area may also affect officers' ability to conduct foot patrols. Foot patrols are ideal for dense urban areas that are easy to navigate by foot. But, if an officer is patrolling in a suburban or more rural area and must cover more area, foot patrols are not realistic or physically feasible.

Research showed that foot patrols (contacts) do reduce the amount of burglaries in Madison but not the number of assaults. This does not mean that community policing is ineffective at fighting violent crime. Community policing is an extremely complex strategy that has many components. Foot patrols are just one example. Throughout the research process it was apparent that academics along with police personnel often describe community policing differently. In order to fully understand community policing and its effectiveness, it is important to establish a consistent definition of community policing. When every police department shares the same fundamental definition of community policing, it will be apparent those departments that truly practice community policing and those who do not. Ideal community policing has many aspects. The first is employing a diverse workforce. When a police department employs officers who come from diverse educational, cultural, and socioeconomic backgrounds, they will have more legitimacy among residents. Having a workforce with a diverse skillset is invaluable for police when trying to solve the complex problems they encounter every day on the job. Non-enforcement contacts are also a vital component of community policing that should be practiced by every police department. Often times interactions between police and the public are negative because police are either issuing a citation, making an arrest, or responding to an emergency. Non-enforcement contacts provide officers the opportunity to build relationships with residents and engage in meaningful conversations with residents outside the tradition role of enforcing the law. A

few examples of non-enforcement contacts include officers participating in community sporting events, attending block parties, attending neighborhood association meetings, or visiting local schools and interacting with students. Foot patrols also give officers the opportunity to engage with community members and build relationships while deterring crime and responding to calls for service. All the previously mentioned strategies are vital parts of community policing that should be utilized if a police department is going to implement community policing. Conceptualizing community policing can also be difficult for researchers. Because community policing is such a broad term it is often difficult for researchers to measure community policing practices in their totality. In order to understand and measure community policing and its effectiveness in the future, it is important that researchers and police personnel accurately describe and conceptualize community policing in its totality.

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