

THE REPRESENTATION OF WOMEN IN POLICING AND COMMUNITY POLICING
IMPLEMENTATION

By

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ABSTRACT

Police departments are currently interested in increasing the presence of female personnel. Providing a diversified spectrum of communication and problem-approaching perspectives through female voices could bring additional insights to community policing. The purpose of this thesis is to examine whether the representation of women in large, local departments affects community policing implementation. It utilizes the 2016 and 2020 Law Enforcement Management and Administrative Statistics (LEMAS) datasets to assess this relationship via a logistic regression. The results failed to find statistical significance between women representation across ranks and community policing implementation. Yet, one of the control variables, task scope, showed statistical significance with community policing implementation. Further research studies are encouraged to support the potential association between women representation and various forms of community policing implementation.

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This thesis is dedicated to my parents' endless support and belief in me.

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TABLE OF CONTENTS

<i>INTRODUCTION</i>	<i>1</i>
<i>LITERATURE REVIEW</i>	<i>4</i>
<i>METHODS</i>	<i>24</i>
<i>RESULTS</i>	<i>33</i>
<i>DISCUSSION</i>	<i>41</i>
<i>CONCLUSION</i>	<i>52</i>
<i>REFERENCES</i>	<i>53</i>

INTRODUCTION

Law Enforcement agencies have undergone many changes throughout the decades and will continue to experience changes as policies and programs progress. The creation of community policing (COP) opened an additional spectrum in policing as rebuilding trust and partnerships with the community was highly emphasized. Based on the U.S. Department of Justice (2023), community policing practices are currently being utilized in over 13,000 law enforcement agencies. Community policing encourages the community and police officers to work closely to solve community problems and secure public safety (Wilson, 2006). Moreover, decentralization is part of community policing programs, which suggests police officers provide localized solutions by building partnerships through positive community engagement and understanding the roots of community problems (Skogan & Roth, 2004).

In addition to police agencies' preference towards community policing, an effort to increase women's representation is not a new concept since it has been going on for more than a decade (Martin, 1989). The lack of female representation is present across all ranks in policing, including line staff, sergeants, intermediate supervisors, and chiefs. To respond to this crisis, more recruitment strategies dedicated to women and recognition of women's distinctive characteristics are being suggested by law enforcement agencies to prevent women representation from declining; for example, police agencies may use specific advertising methods (Donohue Jr, 2021). However, the pace of change is still slow as the provided suggestion varies (Donohue Jr, 2021), and women continue to be underrepresented as female full-sworn police officers represent only about 13% (McGough, 2023).

There is a wealth of literature addressing elements of the community policing model and the lack of representation of women in workforce; however, addressing community policing

implementation in relation to female officers' unique attributions, such as soft communication skills, has rarely been examined. With the ongoing problems of women underrepresentation among police agencies, emphasizing the female officers' unique attribution could not only promote an increase in women representation but could also advance community policing toward building community relationships and securing collaborative partnerships.

This paper examines two key topics relevant to today's police agencies, which are community policing implementation and women representation. In order to assess the relationship between the representation of women across the ranks and community policing implementation in large, local police agencies, the software called Statistical Package for the Social Sciences (SPSS) is used to illustrate the results of descriptive statistics and logistic regression using Law Enforcement Management and Administrative Statistics (LEMAS) surveys from 2016 and 2020 to fulfill its purpose. The methods section provides a detailed explanation of the used variables, followed by a result section that discusses the actual statistical findings. The discussion section further elaborates on the statistical significance and insignificance found in the result section, as well as some of the limitations of this study.

The findings of this study can be incorporated into several aspects of policing in the future. First, the study can demonstrate the values of women's organizational performance. Higher female representation in the workplace, including policing, is likely to result in more organizational dedication, job satisfaction, and meaningful work (Clerkin, 2017). This study may share the importance of women's representation in organizational performance and meeting organizational goals. Second, police agencies can find ways to better implement community policing by acknowledging the females' unique attributions. The implementation of community policing has its challenges and limitations. Therefore, understanding the potential positive

influences female police officers make in community policing may lead to innovative approaches and overcome implementation challenges. Lastly, the study may become a reference when future recruitment and retention strategies dedicated to female personnel are being discussed. Many law enforcement agencies recognize the importance of diversity, and police agencies are creating female-friendly recruitment and retention strategies (Clary, 2020). Researching, comparing, and collaborating on existing valuable information can lead to diverse applicant pools (Donohue Jr, 2021), and this study's appreciation of the distinctive traits of female police officers can further support the development of recruitment and retention strategies dedicated to female officers.

LITERATURE REVIEW

Community Policing

Characteristics of Community Policing

Traditional policing practices received numerous criticisms and appraisals of police being “ineffective, inefficient, and insensitive” (Greene, 2000, p. 303). The traditional policing model utilizes a reactive manner, which means that this policing model relies heavily on authority, bureaucratic structure, and communication within the agencies. Also, police officers tend to prioritize responding to major crimes more than communicating with the public and social disorder (Archbold et al., 2022). As a result, law enforcement had to seek alternative methods to increase police legitimacy (Greene, 2000, p. 303). The ideas of legitimacy vary, but it is a vital element when addressing relationship between police officers and community members as police legitimacy often get studied from “the viewpoints of citizens, looking at citizens’ perception of fairness in policing and the impact on citizens’ willingness to cooperate with the police and comply with the law” (Noppe et al., 2017, p. 474). Additionally, traditional policing styles ought to be modified and improved because they ignore the importance of non-law enforcement’s participation and responsibilities within the communities (Goldstein, 1987). Moreover, police do not have enough personnel and capacity to address all issues occurring in the communities by themselves, and as a result, community policing emerged as a new style of policing that prioritizes community interaction and proactive crime prevention.

Community policing can be defined as changing the “fundamental nature of the relationship between people and their police to one of mutual respect and trust” (Trojanowicz & Bucqueroux, 1990, p. 14). Both traditional and community policing prioritize reducing disorder, but traditional policing places higher values on officers’ response time and number of arrests

(Verma & Dombrowski, 2018), while community policing takes a more subtle approach to diminish the unnecessary sufferings (Trojanowicz & Bucqueroux, 1990). Furthermore, community policing endeavors to identify community problems, gather applicable information and provide short- and long-term solutions based on the severity of the problems (Goldstein, 1987). This policing approach differs from others as it requires both efforts from law enforcement and citizens (Hall, 1990; Rosenbaum & Lurigio, 1994). Active communication is strongly encouraged with other institutions with similar interests, such as crime and order, to form collaborative relationships as they engage in the problems (Skolnick & Bayley, 1988). Skolnick and Bayley (1988) provide examples of having community meetings with local organizations and organizing global meetings with commanders from different countries. Through these practices, community policing seeks to rectify the existing misconceptions of police work and reconcile the relationship between police and community residents (Chuck, 2017). Police officers being more connected and accessible to the community will not only decrease the citizens' level of fear but also help to prevent future crimes, which community policing is hoping to achieve (Goldstein, 1987). Ultimately, community policing strives to increase public safety, social interactions, and quality of life while decreasing the level of fear and unnecessary tensions among citizens (Greene, 2000).

Effects of Community Policing

The outcomes of community policing may vary as they depend on considerable factors. Many existing research studies indicate that community policing influences the perception of crime. Cordner (1997) states that despite mixed results about the relationship between fear of crime and community policing, the existing evidence and community surveys are leaning towards a positive direction. The author further added that it is now a commonly accepted belief

that community policing assists in reducing fear of crime and increasing the perception of safety (Cordner, 1997). Another researcher, Crowl (2017), gathered prior research studies, analyzed community policing strategies and their effectiveness, and concluded that among 16 comparison groups, nine studies indicate that community policing activities are related to reducing fear of crime, representing a little over half of the comparison groups. As community policing required a two-sided effort from police officers and community members, Lee et al. (2023) surveyed Houston residents to understand the relationship between a reduction in fear of crime and citizens' participation level in community policing programs. The research study indicates that content community members learned from community policing programs hosted directly by police agencies shows a significant reduction in fear of crime.

A higher trust level can be achieved through increased satisfactory contact between police officers and community members through community policing (Van Damme, 2017). Furthermore, more appreciation should be present among police officers and community members as interactions between two are ubiquitous (De Vries & Van der Zijl, 2001). Community members should act in cooperative manner and listen to police officers to resolve the reported problems. On the other hand, police officers should handle the reported problems from community members with care and respect to “build social cohesion in a way that generates support and increases the trust citizens have in both the officer and the police organization as a whole” (De Vries & Van der Zijl, 2001, p. 284). Even though community policing reduces the fear of crime, further research is encouraged because it can impact the initial level of fear of crime based on community conditions and individuals' past experiences with a crime (Lee et al., 2023).

Not only does community policing show promising results in reducing fear of crime, but community policing activities also positively impacts public perceptions of police. Community policing is closely associated with the public perception of police, as Gill et al.'s (2014) meta-analysis concluded that community policing enhances the police legitimacy and public satisfaction level of police. Hawdon et al. (2003) surveyed multiple neighborhoods in South Carolina by telephone to understand the correlation between community policing and public perception of police. The survey results indicate that the frequent presence of police officers in their communities to perform tasks, such as maintaining order and enforcing laws, can leave a positive impression on the public (Hawdon et al., 2003). Furthermore, Yuksel and Tepe (2013) adds that one of the most crucial elements to increased public perception of police is knowing that police officers are working towards solving community problems and improving public safety. A series of satisfactory contacts between citizens and police officers can increase public perception of police, reduce fear of crime, and move forward to establish secure trust and partnerships.

Challenges to Community Policing

There are several challenges when operationalizing and implementing community policing (Sadd & Grinc, 1998; Mastrofski et al., 2007; Frank, 2023). Sadd and Grinc (1996) communicate that many police officers fail to clearly understand the purpose and roles of community policing. A lack of mutual understanding of the missions of community policing led police officers to struggle to meet the high demands of community members. Frank (2023) stated that police officers and citizens “do not have a solid knowledge of their actions and the reasoning behind them” (p. 12). Without fully acknowledging the true motives of why police officers act in a certain way and vice versa with citizens, a harmonious partnership cannot be reached, which

community policing highly emphasizes. The size of police agencies could also impact the level of police officers' understanding of community policing because Moon (2006) found that police officers in larger police agencies are more likely to be supportive of community policing. The discussion of community policing and agencies' size will be further discussed later.

Resistance within police agencies is an additional barrier to community policing implementation (Sadd & Grinc, 1998; Mastrofski et al., 2007). Mastrofski et al. (2007) concluded that the absence of active communication and insufficient resources further challenge community policing. There are several reasons for the lack of support and communication present in the police agencies, but it usually stems from different priorities and perspectives among police officers across the ranks; for example, the usage of police discretion is an ongoing debate as understanding in policing work may differ by position (Mastrofski et al., 2007). Several elements may influence the usage of police discretionary (Huff, 2021), and its consequences are hard to get generalized. Police officers with higher ranks tend to hold a traditional supervisory culture, where control and command are more emphasized, making it harder to receive support from supervisors in community policing activities (Mastrofski et al., 2007). Community policing could require police officers to exercise a certain degree of discretion, but it would be challenging without understanding from superiors and will affect police officers' ability to perform.

Community policing activities require not only more time and effort from police officers but also sufficient resources; therefore, police agencies' decision to allocate resources is an additional challenge (Sadd & Grinc, 1996). Police agencies constantly must reach out to outside management agencies, such as the government or the community, to acquire sufficient resources (Mastrofski et al., 2017), and police officers of higher ranks' ability to effectively allocate

available resources matters (Den Heyer, 2014). However, in general, there is limited information about the responsibilities of police agencies' resource allocation, and further research is encouraged to notice a connection between types of available resources and community policing activities to be performed at maximum effectiveness.

Women in Policing

Police culture is often considered masculine due to the past emphasis on warrior policing styles and gender societal roles, which contribute to the current struggles to recruit female personnel into police agencies (Schuck, 2017; Rushin, 2021). The need for female representation in law enforcement started to gain attention in the 1990s as the policing profession moved away from a traditional policing model and towards an era of community policing (Schuck, 2017). Regardless of the rank, there is still a far greater number of male officers than female officers, but the number of female officers has consistently escalated over the past few years (Matusiak & Matusiak, 2018; Wilson & Grammich, 2022). In 2021, about 87% of full-time officers in the United States were male, whereas about 13% were female officers (Korhonen, 2023; McGough, 2023). The 13% may seem small, but compared to the female officer statistics in local police agencies in 1987 of 7.6%, it is steadily increasing (Langton, 2010). The growth in female representation was seen especially in large agencies due to the agencies' employment initiatives as a means to recruit more female personnel that small agencies tend not to offer (Matusiak & Matusiak, 2018). However, Yim (2009) reported that women who graduated with a criminal justice degree prefer pursuing an advanced degree rather than joining law enforcement. Despite the strengths and contributions that female officers display, they tend to be under-represented, which is an area that police agencies should raise more awareness of (Lonsway et al., 2002). The abundance of research studies encourages the police force to increase female personnel, but

raising more awareness about the underrepresentation of female personnel in law enforcement agencies would provide an opportunity to alleviate the obstacles that women experience in the police force, such as discrimination and harassment (Todak, 2017).

An increasing number of organizations and resources are becoming available in response to the need for female personnel. For example, the 30×30 initiative was created to improve female representation within policing and alter the current policing culture in a more suitable way for females. This initiative seeks to have a 30% representation of women in police recruit classes by 2030, eliminate existing biases, assess females' specific needs, and diversify police agencies (McGough, 2023). Moreover, this initiative's body of work from its members suggests that the double representation of females has positive organizational outcomes, including an increase in community policing practices. If police agencies continue to put effort into increasing the number of female personnel, outcomes could be promising. Feminine traits, such as informality, soft communication, and fairness, could be beneficial when addressing community-based problems and settling disputes among citizens and police officers, which will be discussed in more detail in the paragraphs below. The more women's distinctive traits and attributions are recognized, the higher the possibility of women-friendly implementation being created, potentially leading to a higher likelihood of community policing being implemented.

One of the criticisms of policing over the years has been excessive use of force; however, a few existing research studies indicate that females are less likely to use excessive force against citizens. For example, the Cincinnati Police Department compared the civil liability payouts for excessive force between male and female officers over the time period of 1999 and 2000, and the result demonstrated that "male officers cost two and a half times more than female officers in terms of excessive force payout, accounting for 92.3% of the dollars spent" while "female

officers accounted for only 7.7% of the dollars paid in out-of-court settlements for excessive force and wrongful death” (Lonsway et al., 2002, p. 61). Similarly, Schuck and Rabe-Hemp (2005) associated a reduction in force use with greater women involvement between police officers and community members. Female officers and female-female pairs are less likely to use force toward citizens than male officers or male-male pairs. Having less excessive force on its own is a positive result, but in addition, having more representation of women in policing serves as a positive indication of saving unnecessary costs on court settlements and payouts, allowing police agencies to allocate funds in other necessary areas to advance community policing.

Theory of Representative Bureaucracy

This study investigates if the increased representation of women and their soft skills within police agencies would result in a reciprocal increase in community policing implementation. This study relies on the concepts outlined in representative bureaucracy theory, which suggests that "passive representation leads to active representation of minority groups" (Johnston & Houston, 2018, p. 3) and a "public workforce representative of the people in terms of race, ethnicity, and sex will help ensure that the interests of all groups are considered in bureaucratic decision-making process" (Bradbury & Kellough, 2011, p. 157).

Mosher (1968) emphasizes two types of bureaucracy representativeness: passive representation and active representation. Leaning on Mosher’s concepts, this study uses passive representation to refer to the increase of female population and representation within police agencies (Bradbury & Kellough, 2011; Webeck & Lee, 2022). This passive representation can be achieved when there is an increase in the number of female officers in police agencies. Active representation refers to when female representation extends beyond the organization level and affects the policies and systems as a whole to further improve female representation in policing

(Webeck & Lee, 2022). An illustration of active representation is 30x30 Initiative because the 30x30 Initiative targets policing in a much broader sense with the hope of advancing women in policing and changing police culture.

Despite the potential positive consequences of increasing women's representation, there are some limitations to using this theory. Gender and its influence in organizational settings is hard to generalize as few studies have been conducted on it. For example, the results of studies that investigated representative bureaucracy regarding gender may be limited to these studies' selection of organizations, policies, and geographic areas included in their research (Bishu & Kennedy, 2020). Additionally, representative bureaucracy assumes that more policies and benefits dedicated to women would manifest as a result of the increase in female representation at the police agency/organizational level, which may fail to address "how gendered social and organizational processes shape outcomes of representation" (Kennedy et al., 2020, p. 1114). Lastly, pressure within police agencies—where masculinity tends to be emphasized—might disparately impact women and men's abilities to perform tasks as police officers (Kennedy et al., 2020). While gender may not be the sole influential factor, it may—in some part—result in significant differences in policing performance that are dependent on officer characteristics, interaction skills, organizational culture, and more.

Even though there is increasing attention on women in the police force, women's representation is still lacking in the majority of police agencies: "Women currently comprise <13% of sworn officers, and women are 3% among leadership ranks" (McGough, 2023, p. 6). However, some literature implies that increasing the number of female officers brings positive changes to police agencies. In general, women working in masculine cultures like law enforcement prefer carrying out values and beliefs that positively affect the organizations rather

than doing so for their own benefit (Kennedy et al., 2020). Also, female officers may better handle some instances with their soft communication skills and problem-approaching perspectives. For example, Miller and Segal (2019) conclude that when female officers manage sexual assaults and domestic violence cases, the quality of policing is more promising. Female officers endeavor to provide the most comfortable and supportive environment for crime victims and to prevent victims from suffering additional traumas (Rich & Seffrin, 2014).

The importance of representative bureaucracy is discussed in the 30×30 Initiative by addressing female officers' unique values that could benefit policing organizations. Some of the unique values mentioned are female officers being less likely to use force, female officers engaging better with crime victims, public perception of female officers being honest and compassionate, etc. (McGough, 2023). The 30×30 Initiative attempts to improve women's representation in policing by revealing barriers and offering professional recommendations and practices to address those issues effectively in diverse contexts. The voices of women who are/were part of law enforcement are involved in sharing the need to transform the policing culture to embrace the value of having underrepresented groups and ensure their specific needs are fulfilled. Then, the increase in women's representation may lead to organizational changes to capitalize on their skills and priorities efficiently and lead to more community policing implementation as a result.

The representative bureaucracy theory is discussed in various policing settings. Riccucci et al. (2014) tested the role of passive and symbolic representativeness of gender in agencies with citizen perception of trust and fairness of domestic violence units. This study's findings suggest that there is a causal relation with gender representation because women tend to be more actively reporting domestic violence crimes to police officers. If representativeness encourages

community members to be more involved in policing activities, problems can be addressed more quickly and effectively. By examining the community's perceptions of passive and active representations of specialized unit operations and their outcomes, agencies can better protect women's rights and representation (Ricucci et al., 2014).

Another study by Morabito and Shelley (2015) used representative bureaucracy theory to examine passive representation of female, non-White, and African American proportions in agencies. The study focuses mainly on passive representation because “without passive representation (i.e., staffing on organization with employees that reflect the composition of the community), it is impossible for agencies to engage in more active representation” (Morabito & Shelley, 2015, p. 346). The results indicate many organizational variables, such as agency size, vertical differentiation, etc., are positively associated with the proportion of female officers. It emphasizes that reaching workforce diversity is crucial in community policing because agencies that reflect the community’s composition (i.e., passive representation) are more likely to attain active representation. This study is important as it illustrates how staff composition may affect organization structure.

However, Socia et al. (2021) argue that how an organization believes it represents the community may not align with the public perception of the organization's representations. How community members perceive police agencies as serving their community will influence citizens to believe in favorable or unfavorable ways rather than how police agencies actually serve or represent the community (Theobald & Haider-Markel, 2009). Therefore, Johnston and Houston (2018) investigated whether the passive representation of females in leadership positions leads to the active representation of women and concluded that the passive representation of females in leadership positions may not always lead to active representation in contexts where masculinity

is emphasized. Yet, most research studies utilized representative bureaucracy to test their assumptions at the street level, meaning that line staff are more likely to be subject to tests than individuals in leadership positions (Johnston & Houston, 2018). Thus, further research is encouraged to understand the relationship between passive and active representation in broader perspectives.

Women Representation and Community Policing

Policing Styles

There are conflicting views regarding the implementation of community policing across the ranks. Novak et al. (2003) expressed that supervisors and middle management may not be in favor of community policing as it “shifts power and discretion away from supervisors and places it in the hands of line officers, and may result in a perceived or actual loss of power, control, and discretion” (p. 60). Even if middle managers embrace the fundamental concepts of community policing, they could be reluctant to bring changes in their agencies to reduce confusion and prevent potential issues it may bring (Vito et al., 2005). Moreover, there is a potential for supervisors’ view of community policing to affect the line staff’s perspectives because officer’s subjective view of police work was the least powerful variable when understanding police officers’ behaviors (DeJong et al., 2001). Thus, even if line staff support community policing, they agree with supervisors’ values and concepts.

However, many studies present the opposing aspect, which is that supervisors’ positions are more likely to be in favor of community policing than line staff. Rosenberg et al. (2008) conducted a case study on the Racine Wisconsin Police Department to understand the officers’ attitudes toward community policing. They found that while line staff were most supportive of organizational structural changes, they were least supportive of community policing. Sergeants

and higher authorities showed conflicting results, as higher ranks were supportive of community policing but least supportive of changing organizational structures (Rosenberg et al., 2008). Line staff tends to support traditional police officers' behaviors with the explanation that community policing is not considered real police work (Novak et al., 2003). Nevertheless, there is no clear understanding of the relationship between officer rank and support for community policing (Shupard & Mearns, 2019).

Despite the unfavorable views on community policing across the ranks, as the officers witness the optimistic outcomes that community policing could bring to an agency through a strong emphasis on communications and soft skills that it requires (Skoczek, 2023), officers across the ranks could change their views on community policing. Greater representation of women may help since female officers could alleviate community-oriented concerns more smoothly without using unnecessary coercion (Schuck & Rabe-Hemp, 2005). Communication skills are important in policing because open and meaningful communication between police officers and community members is one of the simple yet effective methods to make a significant difference in the outcomes (Bain et al., 2014).

Partnership is one of the critical elements of community policing (Yarwood, 2016). Police agencies form partnerships with a variety of associations, such as victim service providers, neighborhood associations, citizen police academies, etc., to effectively maintain the communities' quality of security and protection. As expected, partnerships are full of interactions, which make police officers' "predisposition, attitudes, and behaviors" extremely important (Shoub, 2021, p.13). As the series of direct interactions between police officers and citizens increases, community members will develop additional positive perspectives about the police. Female officers are proactive and sensitive to public opinions, allowing organizations to

incorporate those ideas into their future agendas to enhance community satisfaction (Murphy, 2023).

Furthermore, female officers are less likely to carry out an enforcement-oriented approaches into their working practices (McCarthy & O'Neill, 2014). Female police officers focus more on preventive approaches to working with diverse individuals (McCarthy & O'Neill, 2014). On the other hand, even though male officers also have a desire to provide support, they tend to consider partnerships as a means to understand, address, and resolve ongoing crime problems sufficiently (McCarthy & O'Neill, 2014). There is a particular interest in partnerships involving vulnerable populations, such as families and children, for female officers (McCarthy & O'Neill, 2014). As the above paragraph discusses, those special interests could place more weight on female officers' willingness to work closely with victims. Therefore, female officers could increase success in securing partnerships.

Lastly, leadership styles are discussed because leadership can alter the organization's overall atmosphere, but also it will be seen differently based on representation of women in supervisory ranks. Leadership of sergeants, intermediate supervisors, and chief will be especially important as they exert supervision to their subordinates. Robin Engel (2003) examined the relationship between sergeants and lieutenants' style of supervision and its impact on patrol officers for two years in Indianapolis and St. Petersburg police agencies. The research concluded that active supervision seems to be the most promising, which encourages supervisors to be actively involved in the performance of their subordinates. Police officers working under active supervisors spend more time on problem-solving and community policing activities than other types of supervisors (Engel, 2003). Community policing requires leaders to perform both task-oriented and interpersonal relationship-oriented styles interchangeably, as both are crucial for

successful outcomes. Eagly and Johnson (1990) conducted a meta-analysis on leadership styles and gender. They concluded that male leaders tend to be task-oriented and use autocratic styles. In contrast, female leaders hold onto democratic styles because “proceeding in a participative and collaborative mode may enable many female leaders to win acceptance from others, gain self-confidence, and thereby be effective” (Eagly & Johnson, 1990, p. 248). There is no definite policing leadership style that fits all contexts, but knowing the sex of the leaders and recognizing their leadership styles can positively influence policing (Murphy, 2023). As leadership styles seem to have considerable influences, this research paper further examines whether the representation of women at different ranks would have potential differences in outcomes given that women and men differ in leadership styles (Cordon et al., 2020).

Communication Approaches

Communication differences between women and men can be seen in various settings. In the policing setting, female and male officers have different approach styles when interacting with citizens. Female officers will be soothing while carrying out the conversation, whereas male officers will be more straightforward and to the point, which can have different consequences (Beetles & Crane, 2005; McQuiston & Morris, 2009). For example, females will focus on building mutual understanding, and males will focus on being productive (McQuiston & Morris, 2009). Numerous pieces of literature have attempted to provide several explanations for gender differences; however, there is still no definite answer (Poeschl, 2021). Some potential explanations that frequently arise are due to the existence of gender roles and different sociolinguistic subcultures (Leaper, 1991; Suciu, 2013). Again, it is important to note that there is no black-and-white answer for which approach is better because it varies by the complexity of situations and the characteristics of officers (Merchant, 2012). Yet, by understanding the

different approaches, police agencies can utilize the strengths of each gender's styles of approach based on the community's or agency's needs and wants at that time, which could lead community policing to become more efficient and prosperous.

Females' communication styles tend to provide a greater sense of comfort and connection because it is more indirect and emotion-involved (Dash et al., 2021; Hippel et al., 2011).

Moreover, many females feel a sense of accomplishment when problems they have actively been involved in are resolved through forming and maintaining relationships rather than merely suggesting. Therefore, working harmoniously with surroundings to discover the most suitable option is far more crucial for females (Beetles & Crane, 2005; McQuiston & Morris, 2009).

Conversely, when solving problems or alleviating situations, males' motive tends to be competitively driven. They prioritize gaining control over the situations and completing the given tasks (Meeker & Weitzel-O'Neill, 1977; McQuiston & Morris, 2009). Males' concerns skew towards demonstrating their own worth, status, and abilities; in some sense, males are more individualistic than females (Suciu, 2013). To provide an example in a business setting for both gender approaches, when males and females are in the midst of negotiating terms, males would handle the situation like they are playing a game to win over opponents, whereas females would view negotiation as teamwork (Heaston, 2021).

Women prioritize teamwork and a sense of involvement while performing community policing-related tasks, which could lead to high public participation levels. Then, more opportunities will be provided to establish a secure partnership between police officers and community members. Also, female officers are willing to listen actively and react to problems. While listening to the struggles of communities or community members, female officers observe nonverbal language simultaneously, which could be advantageous to the information collection

processes (Murphy, 2023). These distinctive attributions and communication styles of women can benefit in increasing overall community policing implementation because partnerships can be best achieved through a series of interactions and active engagements.

Females' unique attributions described above can be incorporated with reoccurring factors in community policing, such as building trust and active communications, to serve the community better. Then, police agencies may notice the positive changes in community members' level of participation and willingness to cooperate when female officers are involved, which could potentially result in the adoption of a COP specialized unit to sufficiently accommodate the demands.

Organizational Context

The organization context section discusses organizational factors that could influence community policing implementation.

Organization Size

Several studies discuss the importance of organization size on community policing implementation, but there are mixed results, as the level of impact can be seen differently depending on the comparison factors. In general, larger police agencies have more resources and a broader range of opportunities related to community policing activities (Maguire et al., 1997). Larger police agencies could benefit from having a greater number of officers than smaller agencies; for example, more frequent patrols could be present in larger police agencies (Sozer & Merlo, 2013).

On the other hand, some studies illustrate the contrasting results of large police agencies. Wilson (2006) did not find a significant relationship between large police agencies and community policing implementation. Moreover, police officers in small police agencies are more

responsive to community problems and can form more positive relationships with citizens through regular causal encounters (Liederbach & Frank, 2003).

The size of the organization matters because the larger the agencies, the more sworn officers available to accommodate the community needs. Thus, more specialized units are likely to be present in order to divide available agencies' manpower (Jurek et al., 2017). Moreover, large police agencies have more complexity in their structures because with higher number of police officers to manage, agencies must have the ability to "improve coordination, reduce conflict, and/or achieve tighter organizational control" (Maguire, 2003, p. 74).

Organization Region

Location is associated with many aspects of police administrations due to "regional differences in political structures, regional variation in innovation diffusion networks, and regional differences in the historical development of police and police reform" (Maguire et al., 1997, p. 375). As this study focuses on community policing implementation, the Western region especially shows more success in implementing community policing specialized units than other regions (Wilson, 2006). Police agencies in the western region are twenty percent more likely to have more community policing activities than eastern police agencies (Maguire et al., 1997). There are no clear explanations for the regional difference in community policing, but some factors of the historical development of police (Langworthy & Travis, 1994) and innovation diffusion networks (Weiss, 1992) are repeatedly mentioned in existing literature. Innovation diffusion networks include but are not limited to assessing and measuring organizational changes (Johnson, 2015); for example, regional differences in political or historical development can impact the adoption of community policing.

Even though many research studies observed variation in organization regions, the explanation is very simplistic and lacking. Traditionally, the rationale for controlling regional variables in policing was either considered "something that must be controlled for" or was not mentioned at all (Maguire et al., 1997, p. 374). However, Wilson (2006) explained that geographic region could have an impact on community policing implementation because residents tend to have different expectations of police officers and the community's needs based on their community characteristics. He showed the relationship between the region of police agencies and the implementation of community policing and concluded that police agencies in the West are the strongest predictor of implementing community policing practices.

Task Scope

Task Scope refers to “the variety of inputs or tasks that need to be accomplished,” (Dewar & Hage, 1978) and “the range of functions for which an agency is responsible” (Jurek et al., 2017). The more specialized units each agency has, the more accountabilities that agency should endure, and problems of resource distribution and officer allocation can be present. Moreover, given tasks will become more complex and require further structural adjustment due to the high volume of information that needs to be processed, which could possibly lead to decentralization (Maguire, 2003). Therefore, it is crucial to understand what other factors are competing with community policing specialized units to get a grasp on the level of potential impact on outcomes.

Community policing contains multiple approaches and tasks, making planning and implementing processes harder. Therefore, “community policing is almost always attempted with specialized units and within individual police districts” (Rosenbaum & Lurigio, 1994, p. 303). However, there are other approaches to community policing that do not involve specialized units,

for example, “community policing encourages agencies to develop two-way communication systems through the internet” (U.S. Department of Justice, 2014, p. 9). Community policing units in police agencies implement more significant number of community policing programs compared to the police agencies that do not have community policing dedicated units (Namgung, 2018). Moreover, Namgung (2013) examines the effectiveness of the specialized police units and concludes that police agencies with community policing specialized units promote community policing-related activities and engage in more interactions with communities and citizens. Police officers from community policing specialized units tend to follow the three distinctive dimensions of community policing, which Namgung (2013) defined as community engagement, problem-solving, and organizational transformation. Based on the reactions of the community members, they also make changes to the organizational priorities.

Present Study

The present study extends the existing literature on the effects of women on organizational function while considering community policing implementation. The present study hopes to fill the gap on whether women's leadership can be attributable to community policing implementation in police agencies. Even though many previous studies look at women representation, there are few that address both line-level and command-level positions. This study hopes to explore the issues of women representation in a more present day context, given the heightened emphasis on such issues. This study examines women's representation in each rank (line, sergeant, intermediate supervisor, and chief) using the Law Enforcement Management and Administrative Statistics (LEMAS) surveys to determine if leadership positions have an impact on community policing implementation.

METHODS

Hypotheses

Previous research has emphasized that police agencies need diverse minority representation to achieve collaborative partnerships between officers and citizens. Police officers and community members co-exist because police rely on community members to report crimes and provide necessary information, whereas community members rely on police to reduce disorder and secure public safety (Wilson, 2006). This study examines the associations between the representation of women and community policing (COP) in agencies, more specifically, it tests the following hypothesis:

Hypothesis 1: Higher percent of female Line Staff representation in 2016 will be associated with community policing implementation in 2020.

Hypothesis 2: Higher percent of female Sergeant representation in 2016 will be associated with community policing implementation in 2020.

Hypothesis 3: Higher percent of female Intermediate Supervisors in 2016 will be associated with community policing implementation in 2020.

Hypothesis 4: Having a female Chief in 2016 will be associated with community policing implementation in 2020.

Data

This research study utilizes the secondary database from the Law Enforcement Management and Administrative Statistics (LEMAS) survey from 2016 and 2020. LEMAS is a cross-sectional survey that targets state and local law enforcement agencies in the United States and has collected data periodically since 1987 to gather general information about the agencies (United States Department of Justice, 2016; United States Department of Justice, 2020). LEMAS

attempts to survey total of 3,499 county, local, and state law enforcement agencies, but after removing a few agencies due to several reasons, such as having special jurisdictions or contracts, having less than one full-time equivalent sworn officers, closed departments, and more, the eligible sample size was 3,471 for 2016 and 3,462 for 2020 (United States Department of Justice, 2016 & United States Department of Justice, 2020). The LEMAS surveys are self-reported questionnaires that can be either taken through the web or paper: 75% were via the web and 25% via hardcopy in 2016, whereas 88% were completed via web and 12% via hardcopy in 2020 (United States Department of Justice, 2016 & United States Department of Justice, 2020). In 2016, a total of 2,135 local police departments responded, with a response rate of 81.7% (United States Department of Justice, 2016). The response rate of local police departments in 2020 was 79.5%; a total of 2,075 police agencies of all sizes of local departments completed the survey (United States Department of Justice, 2020).

Sample

The LEMAS surveys every large department (i.e. 100+ full-time sworn officers). However, the selected sample for this study includes large, local police departments that completed the LEMAS survey for both 2016 and 2020, and includes full information on the community policing, staffing and contextual variables (described below). Large departments were surveyed because they are more likely to have special units and exhibit variability in their implementation. They tend to have more flexibility in the usage of resources and officers than smaller departments. Local departments were surveyed because 91% of local departments serving 100,000 or more residents according to the Bureau of Justice Statistics (Goodison, 2022). For this study, cases indicate agencies.

The original LEMAS datasets include 564 cases in 2016 and 638 cases in 2020 for large, local departments. In the process of limiting cases to large local departments, the 2016 and 2020 datasets were merged into one dataset by key value, “ORI9”, the unique 9-digit Originating Agency Identifier for each agency. All data management and analyses were completed using SPSS version 14. There were 686 cases when dataset was merged. Then, removals of irrelevant cases proceeded and removed 255 cases, and the final dataset was left with 431 agencies. The reasons for case removals varied: two agencies due to the absence of ORI9, 121 agencies due to being newly created in 2020, 47 agencies due to being considered as regional or county agencies (which was the combined category for LEMAS 2016), 78 agencies due to missing/unavailable data in number of officers, and seven agencies due to having negative number of line staff. The justification for having a negative number of line staff will be discussed further in the section below. As a result, the final dataset has a total of 431 cases that appear both in 2016 and 2020, which represent 76% of large departments in 2016 and 68% of such departments in 2020.

Measures

Community Policing Implementation (Dependent Variable)

The dependent variable for this study is community policing implementation; more specifically, it was operationalized as if the agency had a community policing specialized unit in 2020.

For the community policing implementation variable, the question, “As of December 31, 2020, how did your agency address the following problems/tasks?” was used with five answers to choose from. The five answer options are (1) Agency had a specialized unit with personnel assigned full-time to address this problem/task, (2) Agency did not have a specialized unit with full-time personnel, but agency had designated personnel to address this problem/task, (3)

Agency did not have a specialized unit with full-time personnel, but agency addressed this problem/task, but did not have designated personnel, (4) Agency did not have a specialized unit with full-time personnel, but agency did not formally address this problem/task, and (5) Agency's jurisdiction did not have this problem (N/A).

Hyon (2018) examined whether municipal police departments with community policing specialized units result in a more community policing implementations, concluding that "police agencies with community policing units are more likely to produce quantitatively more community policing programs compared to other agencies without such units" (p. 150). Thus, for this study, community policing implementation was operationalized as whether the agency had a special unit in 2020 by recoding all other options as (0) and Agency had a specialized unit with personnel assigned full-time to address this problem/task as (1). See Table 1 for a complete list of the variables used in the study.

However, an opposing view supports different forms of community policing, claiming that community policing implementation should be an outcome of entire organizations working towards changes (U.S. Department of Justice, 2014). Many police agencies are endeavoring to incorporate the concepts of community policing through undergoing organizational changes (Rosenbaum & Lurigio, 1994; Ford, 2007). The LEMAS surveys have pages dedicated to community policing to understand the commitment at more of a higher organizational level; for example, the 2020 LEMAS survey asked whether an agency formed informal partnerships or formal written agreements with other institutions. If police agencies are more likely to support community policing, it is more likely to lead to the adoption of community policing (Burruss & Giblin, 2014). One of the methods to achieve institutionalized is to create community policing plans of their own that identify the key elements and inputs for success (Murphy, 2020).

Therefore, institutionalizing community policing practices could help achieve its goals better than having community policing specialized units. Nevertheless, there is no clear line for success since the success of organizational changes is hard to measure (Ford, 2007).

Women in Policing (Independent Variables)

Four ranks are discussed in this study: line staff, sergeants, intermediate supervisors, and chief. In most agencies, line staff comprise the largest number, and their duties vary (Erstad, 2021; Los Angeles, 2023). For example, the Los Angeles Police Department (LAPD) describes that line staff patrol communities, respond to service calls, meet community needs, and many more. (Los Angeles, 2023). Depending on the size of the agencies, sergeants' responsibilities may vary. Sergeants generally supervise line staff and act as liaisons between higher authorities and subordinates (Erstad, 2021). The rank intermediate supervisors include "below chief executive and above sergeants or first-line supervisors" (United States Department of Justice, 2016; United States Department of Justice, 2020). Intermediate supervisors can be considered as middle management (Erstad, 2021). The chief is the highest-ranking officer in the agencies. The chief position oversees all the procedures and operations occurring in the agencies and takes part in implementing and enforcing the policies (Erstad, 2021).

In each LEMAS survey, each agency was responsible for providing an accurate number of full sworn officers, sergeants, and intermediate supervisors, along with their sex, and indicating the sex of the chief. The majority of variables (e.g., male/female full sworn officers, sergeants, and intermediate supervisors) are given in numeric values in each LEMAS survey. The chief variable was distinguished between man or woman. Additionally, the line staff required separate calculations since the LEMAS survey did not solicit the number of line staff alone.

The number of line staff for each sex was calculated by adding the number of sergeants, intermediate supervisors, and chief per each sex and subtracting that value by the number of full-time sworn officers of the respective sex. For example, women line staff was calculated as ($\#$ of women sworn officers - ($\#$ women sergeants + $\#$ women intermediate supervisors + woman chief)). Then, the percentage of women line staff was calculated by dividing the number of women line staff by number of total line staff: ($\#$ women line / $\#$ men and women line). Notably, seven agencies were labeled as an ineligible sample because the number of line staff turned out to be negative - thus, they were deleted-. Those cases were considered inaccurate as an agency's possible lowest number of officers is zero.

This study required the percent calculation of women in each agency at each level (i.e., line staff, sergeants, and intermediate supervisors) in 2016 to examine potential variation of effects of women representation on community policing implementation. The same percentage calculation steps applied to the line staff statistics were also applied to sergeants statistics and intermediate supervisors statistics. For each agency, the equations of [$\#$ women sergeants / $\#$ total sergeants] and [$\#$ women intermediate / $\#$ total intermediate] were used to calculate the percentage of sergeants and intermediate supervisors. Chief representation is considered a dummy variable, indicating if the chief is male (0) or female (1) in 2016.

Organizational Context (Control Variables)

Organization Size. In the sample group, size was already limited to agencies with 100 or more full-sworn officers as Maguire et al. (1997) mentioned that large agencies tend to have more number of officers and resources to allocate. Thus, this study is using the number of full-sworn officers in each agency in 2016 as a size for the organization due to the mixed results on size with different forms in existing literature to prevent any outside influences.

Organization Region. For this study, based on the agencies' state, I recoded them as 1 = West and 0 = others (Midwest, South, and Northeast). Maguire et al. (1997) examined the patterns of community policing implementation and discovered that Western police agencies are more likely to practice community policing than other regional police agencies by 20 percent. Moreover, Wilson (2006) concluded that police agencies in the Western region have more community policing practices and activities than in other regions.

Task scope. Agencies can indicate if they have special units to address 24 types of problems/tasks in 2016, which are (a) Bias/hate crime, (b) Bomb/explosive disposal, (c) Child abuse/endangerment, (d) Crime prevention, (f) Crime analysis, (g) Cybercrime, (h) Domestic violence, (i) Drug education in schools, (j) Drug enforcement, (k) Environmental crimes, (l) Financial crimes, (m) Firearms, (n) Gangs, (o) Human trafficking, (p) Impaired drivers (DUI/DWI), (q) Internal affairs, (r) Juvenile crimes, (s) Missing children, (t) Repeat offenders, (u) Research and planning, (v) School safety, (w) Special operations (e.g., SWAT), (x) Terrorism/homeland security, and (y) Victim assistance.

With the exclusion of community policing specialized units, the other 24 specialized units in 2016 will be an index variable because community policing specialized units serve as the dependent variable for this study. The existence of community policing specialized units is from LEMAS in 2020, as opposed to other specialized units from 2016. The number of specialized units may affect the COP implementation in two different ways: agencies might be willing to create additional specialized units if they have other specialized units as they have strategies for creating specialized apparatus, or agencies might be reluctant to create more specialized units as they have to spread available resources and make changes on priorities. For this study, I recoded

each of the 24 specialized units as an index variable where the value indicates the number of specialized units each agency had with personnel assigned full time to address the problem/task.

Model / Analytical Strategy

A descriptive analysis of all the variables will be conducted to provide mean, range, standard deviation, maximum, and minimum of each variable. Then, a logistic regression analysis will be conducted to assess the effects and relationships of women representation in 2016 on community policing implementation in 2020 while controlling for the contextual variables. The results of the analysis will be discussed in terms of their implications for research and practice.

This study uses two separate time periods, 2016 and 2020, to allow for temporal causation. "The causal relations cannot be perceived directly but are instead inferred from observable qualities" (Buehner, 2012, p. 1490); thus, percent of female officers across ranks in 2016 and the existence of COP unit in 2020 are examined for this study. This study uses the two recent datasets in time from LEMAS, 2016 and 2020, as the closer the time and space, the higher the possibility of being causally related (Buehner, 2012).

Table 1. Summary of Model Variables

Variable Name	Type	Description	Measurement
COP Specialized Unit in 2020	Dependent Variable	If an agency has community policing specialized unit	0 = NO 1 = YES
Female Line Staff in 2016 (%)	Independent Variable		0 – 100%

Table 1. (cont'd)

Female Sergeants in 2016 (%)	Independent Variable		0 – 100%
Female Intermediate Supervisors in 2016 (%)	Independent Variable		0 – 100%
Female Chief in 2016	Independent variable		0 = Man 1 = Woman
Organization Size in 2016	Control Variable		# full-time sworn officers
Organization Region	Control Variable		0 = Others (Midwest, South, Northeast) 1 = West
# Task Scope in 2016	Control Variable	(Index Variable) Indicating how many specialized units each agency has / total of 24 specialized units	0 - 24

RESULTS

Descriptive Statistics

Descriptive statistics are provided in Table 2 for all variables used in this study, and all the statistics were rounded to three decimal points.

Table 2. Descriptive Statistics

Variable	n	Mean/Percent	Minimum	Maximum	SD
(DV) COP Specialized Unit in 2020	431				
Yes (%)	313	72.600			
No (%)	118	27.400			
(IV) Female Line Staff in 2016 (%)	431	12.530	1.000	50.000	5.815
(IV) Female Sergeants in 2016 (%)	431	9.340	0.000	100.00	9.890
(IV) Female Intermediate Supervisors in 2016 (%)	431	8.600	0.000	50.000	8.659
(IV) Chief Sex in 2016	431				
Female (%)	24	5.600			
Male (%)	407	94.400			
(Control) Size in 2016	431	469.805	80.000	36050.000	1949.853
(Control) Region	431				
West (%)	93	21.600			
Others (%)	338	78.400			
(Control) # Task Scope in 2016	431	10.256	0.000	24.000	5.336

Dependent Variable

Table 2 indicates that community policing (COP) specialized units, the dependent variable for this study, were present among 313 police agencies and absent in 118 police agencies reported in 2020 (n=431). The majority of the police agencies (72.6%) had community policing (COP) specialized units in 2020, whereas only 27.4% answered they did not. A far greater number of police agencies have community policing specialized units in their served communities to address needs.

Independent Variables

As shown in Table 2, the descriptive statistics of female representation across four ranks (line staff, sergeants, intermediate supervisors, and chief) were examined. According to the 431 police agencies that completed the 2016 Law Enforcement Management and Administrative Statistics (LEMAS) survey, on average, 12.530% of female line staff were female, 9.340% of sergeants were female, and 8.600% of intermediate supervisors were female, with a standard deviation of 5.815%, 9.890%, and 8.659% respectively. The mean percentage of the line staff was the highest, and intermediate supervisors was the lowest. The highest mean in line staff is not surprising as each police agency typically has a greater number of sworn line staff than officers in supervisory positions. Some agencies show a very low percentage, as 45 agencies reported having no female sergeants and intermediate supervisors at all, and an agency had a single female line staff. In contrast, the Bessemer (AL) Police Department reported having up to half of female line staff, and the Flint (MI) Police Department reported having half of intermediate supervisors out of the total officers in that rank. The dependent variable for this study is community policing implementation; more specifically, it was operationalized as if the agency had a community policing specialized unit in 2020. It was also unusual that a police

agency reported that all sergeants were female officers. These police agencies will be considered outliers because they are too far from the mean percentage across the ranks shown in Table 2. All three independent variables, line staff, sergeants, and intermediate supervisors, are skewed to the right. The skewness of intermediate supervisors (0.982) is acceptable, and the skewness of line staff (1.445) is moderately acceptable. However, the skewness of sergeants (4.129) is beyond the normal distribution range and considered non-normal. Even though there is a presence of high skewness in some independent variables, logistic regression does not require assumptions to be met concerning the distribution of independent variables (Cokluk, 2010). All variables are within the acceptable kurtosis range as it is in the range of -10 to 10 (Brown, 2006). Therefore, independent variables that show high skewness or kurtosis values do not need to be manipulated to meet an assumption of normal distribution.

Lastly, the chief's sex was addressed separately, as the chief has only one position available per police agency. Of the 431 police agencies reported to the 2016 LEMAS survey, 5.600% had female chiefs, and 94.400% had male chiefs.

Control Variables

Table 2 displays the control variables of this study: size, task scope, and region. There was considerable variation in size. The mean of the size of police agencies was 469.805 officers, with a standard deviation of 1929.853. The minimum number of full-sworn officers was 80. Police agencies with below 100 full-sworn officers seem not to correspond with the target sample, but those agencies had more than 100 full-sworn officers when the 2016 LEMAS survey was taken, but the number of police officers decreased due to several potential reasons: turnover, paid leaves, etc. The maximum number of full-sworn officers was 36,050, which was the New York City Police Department. There were more police agencies, such as Chicago, Los Angeles,

Houston, and Philadelphia, with more than 5,000 full-sworn officers. While the high number of officers seems appropriate, as those cities tend to be more populated than other cities, those agencies would be considered outliers. Due to the large variation, size (15.060) is highly skewed to the right, to the point where it is beyond the normal distribution range. Given the substantial skewness of this variable, researchers who use officer size as a contextual variable typically transform it into its natural log (Wilson, 2006; Roberts & Roberts Jr, 2007; Roberts & Roberts Jr, 2009). This study follows that common practice by using the natural log of agency size because the SPSS dataset provided unusual results without using the logged size.

Lastly, frequency statistics were conducted for the regions. Of 431 police agencies, 93 were in the western region (21.6%), while 338 were in the southern, midwestern, and northeast regions.

Correlation and Variance Inflation Factor

Correlations and Variance Inflation Factors (VIF) are provided below for variables used in this study, and all the statistics were rounded to three decimal points.

Correlation

This study used two types of correlations: Pearson correlations for interval and dichotomous variables and tetrachoric correlations for two dichotomous variables.

Table 3. Correlation

Variables	1	2	3	4	5	6	7	8
1.(DV) COP Specialized Unit in 2020	1							
2.(IV) Female Line Staff in 2016 (%)	0.540	1						
3.(IV) Female Sergeants in 2016 (%)	.096*	.234**	1					

Table 3. (cont'd)

4.(IV) Female Intermediate Supervisors in 2016 (%)	.066	.400**	.226**	1				
5.(IV) Female Chief in 2016	.256	.084	.080	.053	1			
6.(Control) Size in 2016	.065	.139**	.096*	.106*	.040	1		
7.(Control) Region	-.067	-.084	-.060	-.035	.317	-.001	1	
8.(Control) # Task Scope in 2016	.211**	.175**	.132**	.185**	.095*	.220**	.132**	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Dependent Variable. A significant correlation was found among the dependent variable with one of the four independent variables, % female sergeants in 2016, and one of the three control variables, task scope. There is a weak positive correlation of .096 between the COP specialized unit in 2020 and % of female sergeants in 2016 at the significant level of 0.05 (i.e., as COP specialized units existed, the percentage of female sergeants increased). Another positive correlation of .211 was found between COP specialized units in 2020 and task scope at 0.01 level (i.e., as COP specialized units exist, the number of task scope of an agency increased).

Independent Variables. Size and task scope indicated statistically significant correlations with three independent variables. Size showed correlations with % of female line staff ($r=.139$, $p=0.01$), % of female sergeants ($r=0.96$, $p=0.05$), and % of female intermediate supervisors ($r=.106$, $p=0.05$). The larger departments were associated with having a greater representation of female officers in line staff, sergeants, and intermediate supervisors. Task scope also indicated correlation with all four independent variables: % of female line staff ($r=.175$, $p=0.01$), % of

female sergeants ($r=.132$, $p=0.01$), and % of female intermediate supervisors ($r=.185$, $p=0.01$). and female chief ($r=.095$, $p=0.05$). The more specialized unit departments were associated with having a greater representation of female officers across all ranks.

Control Variables. Task scope showed statistically significant correlations with two other control variables: size and region. Both size and region showed weak positive correlations of .220 and .132, respectively, at the 0.01 significant level. Task scope displayed the most correlations with other variables presented in this study.

Variance Inflation Factor

The VIF was conducted to detect the multicollinearity of the variables. The range of VIF was 1.023 through 1.257, which is the acceptable output as the general rule for VIF is not to exceed 10 (Belsley et al., 1980). All the statistics were rounded to three decimal points.

Table 4. Statistics Variance Inflation factor (VIF)

Variables	VIF
(IV) Female Line Staff in 2016 (%)	1.257
(IV) Female Sergeants in 2016 (%)	1.098
(IV) Female Intermediate Supervisors in 2016 (%)	1.236
(IV) Female Chief in 2016 (1)	1.023
(Control) Size in 2016	1.066
(Control) Region (1)	1.042
(Control) Task Scope in 2016	1.130

Logistics Regression

Logistic Regression was performed to analyze the effects and relationships of women representation on community policing implementation while controlling for contextual variables. All the statistics were rounded to three decimal points.

Table 5. Logistic Regression Analysis

Variables	B	S.E.	Wald	p	Exp(B)
(IV) Female Line Staff in 2016 (%)	-1.001	2.137	.219	.639	.367
(IV) Female Sergeants in 2016 (%)	1.317	1.363	.934	.334	3.731
(IV) Female Intermediate Supervisors in 2016 (%)	.204	1.444	.020	.888	1.226
(IV) Female Chief in 2016 (1)	-.398	.582	.466	.495	.672
(Control) Logged Size in 2016	.344	.204	2.846	.092	1.410
(Control) Region (1)	.352	.276	1.623	.203	1.422
(Control) # Task Scope in 2016	.073	.025	8.354	.004	1.076

The overall model was statistically significant when compared to the null model ($X^2(7) = 27.371, p < 0.001$), explained 8.9% (Nagelkerke r^2) of the variation of having COP specialized units in 2020, and correctly predicted 73.0% of cases. The key independent variables showed statistical insignificance: % female line staff ($B=-1.001, p=.639$), % female sergeants ($B=1.317, p=.334$), % female intermediate supervisors ($B=.204, p=.888$), and sex of chief ($B=-.398, p=.495$). However, task scope ($B=.073, p=.004$) was statistically significant. With a one unit increase in the number of task scope, the odds of having a COP specialized unit increase by 1.076 at $p=.004$. This means that for each additional special unit an agency has, the odds of having a COP specialized unit increase by 7.6%. The relationships of the two are not likely to be by random chance, as there is a statistical significance of .004. Looking at the 7.6% seems minor,

but it may become substantially significant in cumulative contexts because the odds of having a COP specialized unit will substantially increase as several task scopes are added. In addition to the fact that none of the key independent variables were statistically significant, size ($B=.344$, $p=.092$) and region ($B=.352$, $p=.203$) were also not statistically significant. In sum, as evidenced in Table 5, all the independent variables were not statistically significant, while one of the three control variables, task scope ($B=1.076$, $p=.004$), was statistically significant.

DISCUSSION

The purpose of this study was to determine if women representation across the ranks of a department in 2016 is associated with the presence of a community policing (COP) specialized unit in 2020. Four hypotheses were generated in this study that controlled for size, region, and task scope using Law Enforcement Management and Administrative Statistics (LEMAS) surveys from 2016 and 2020: a higher percent of female line staff representation will be associated with COP implementation, a higher percent of female sergeants will be associated with COP implementation, a higher percent of female intermediate supervisors will be associated with COP implementation, and having a female chief will be associated with COP implementation. I expected female representation could impact the presence of community policing because female officers can better facilitate collaborative partnerships between officers and citizens using their distinctive attributions, such as utilizing soft communication skills and preventive approaches.

The findings of this study highlight that only task scope showed significance relationship with the dependent variable. In fact, it is interesting that task scope is correlated with all variables because it suggests that task scope could be an important element when addressing community policing implementation. This study found that the more specialized units an agency has, the more likely it is for an agency to have a COP specialized unit, which better supports the assumptions that if police agencies have other specialized units, they are more likely to implement community policing specialized unit because strategies and blueprints for creating specialized apparatus already exist.

The findings are supported by previous literature as historically, police departments formed specialized units and hired new officers with skills to correspond to the newly emerging social issues (e.g., bias crimes, cybercrimes) and development of technology (e.g., automated

fingerprints, computerized systems) (Maguire, 1997). Moreover, Bond and Gabriele (2018) state that specialized units are created to address the community concerns and the organization's priorities. In 2016 LEMAS surveys, about 62% of large, local police agencies reported having a community policing specialized unit, whereas based on Table 2, community policing specialized units were present among about 72% of police agencies in the 2020 LEMAS dataset. There was about a 10% increase in the presence of community policing specialized units within four years because recent police agencies emphasized addressing and solving community problems with the assistance of community members (Reisig & Giacomazzi, 1998; Chuck, 2017) and community policing practices and programs are far more evident among police agencies, with community policing specialized units present (Namgung, 2018). The creation and existence of specialized units can also contribute to increased public perception of policing because specialized units can imply that police agencies are aware of the problems and develop means to address them (Namgung, 2013).

Interestingly, none of the key independent variables assessing female representation in law enforcement significantly impact the adoption of a COP specialized unit. Specifically, variables showed no association with community policing implementation as % female line staff ($p=.639$), % female sergeants ($p=.344$), % intermediate supervisors ($p=.888$), and female chief ($p=.495$). Furthermore, two control variables, size ($p=.092$) and region ($p=.203$), were also statistically insignificant. Yet, it is worth noting that the mean percentage of female sergeants might mean more to community policing implementation than other female officers' ranks in bivariate analysis as the percent of female sergeants showed a statistically significant correlation ($r=.096$, $p=.0.05$), but the statistical significance went away in logistic regression ($B=1.137$, $p=.334$) when controlled for size, region, and task scope. The % female sergeants and

community policing implementation might be directly associated, as those two variables showed statistical significance in bivariate analysis. However, the potential role of indirect effect or other influential variables could have played a role in discovering the true relationship between the two variables since the statistical significance disappeared in multivariate analysis.

The theory of representative bureaucracy was also not supported by the findings. The results do not support the passive representation because this study not only did not examine the increased number of female officers across the rank over time, but it also did not find statistically significant relationships between female officers and community policing implementation. Even though this study failed to support passive representation, Bishu and Kennedy (2020) imply that the findings of the studies on gender representation have challenges, as the selection of samples, policies, and locations can influence the results. Furthermore, the 30x30 Initiative is grounded on the belief that at least 30% of women representation must be achieved to influence organizations' cultures ("The History of 30x30," 2024). The mean percent of female officers in each rank was about 13%, 9%, 9%, and 6% in ascending rank order. Since the percentage of female officers across the ranks is far below 30%, it may not be high enough to influence change, as the 30x30 Initiative stated. Therefore, it could potentially imply that the connection between women's representation and community policing implementation is not apparent in this study because there is not enough women's representation in the current police force to affect change. As it is evident that there are active efforts and movements to increase women representation in policing, for example, the 30x30 Initiative, research studies can be conducted similar to this study's purpose when the higher mean percentage of women representation across the ranks is present for more acceptable and reliable results. Unfortunately, although the importance of having 30% women representation to influence the police organizational culture is mentioned in several

areas, much work remains to be done as there is a lack of discussion and research studies supporting the 30% representation. Thus, there are limits to the ability to test and confirm the theory.

There are at least four potential limitations concerning the lack of relationships in results. A first limitation is that the results could have failed to support the hypotheses of this study because there is a weak to no relationship between women representation and community policing units when using LEMAS data. Even though Ahmad (2001) did not measure community policing in the same way as this study did, the author examined the relationship between support for the community policing model and attitudes toward female officers. The result of this study aligns with findings from Ahmad (2001) that a weak correlation between female officers' effectiveness and community policing was found, whereas male officers' support for community policing was statistically significant. The weak correlation with a low explanatory power that the author found in his study implies that, generally, there is a slow acceptance of community policing and women in policing (Ahmad, 2001). However, abundant literature suggests that workforce diversity is essential to community policing (Schuck, 2014). Even though this study failed to find relationships between women representation and community policing implementation, diversity could go beyond gender representation. Diversity includes many forms and characteristics, for example, but not limited to, gender diversity, racial/ethnicity diversity, and cultural diversity. By striving for workforce diversity, improved understanding and approaching methods toward communities can be achieved (President's Task Force on 21st Century Policing, 2015).

A second potential limitation is that the results fail to support the hypotheses due to measurement issues in used datasets. The LEMAS surveys were not designed to answer the

current study's research questions, meaning that having total control over the qualities of the surveys was not possible. There was a total of 564 large, local agencies in 2016 and 638 large, local agencies in 2020, and in terms of this study's sample representation, it accounts for about 76% large, local agencies in 2016 and 68% in 2020. Moreover, since the LEMAS surveys were self-reported by each police agency, answers may have been affected by several factors, potentially resulting in false responses. The reasons for inaccurate descriptions can vary; for example, departments could be uncomfortable sharing their private details and, therefore, provide exaggerated or inaccurate answers, or other issues could occur. This issue is likely to matter less when indicating whether an agency has a dedicated community policing specialized unit with full-time personnel; however, it still pertains to this study because each agency was responsible for reporting a number of officers in each rank. Hickman and Poore (2016) indicate that LEMAS surveys fail to provide accurate and reliable answers under certain circumstances due to measurement issues. Specifically, the author addresses the question of validity and reliability involving law enforcement agencies' conduct and citizen complaints (Hickman & Poore, 2016). Moreover, police agencies with smaller sizes tend to have higher response rates, as larger agencies have more tasks that need to be completed (Rosenbaum et al., 2011). Even though this study dropped cases with non-response in large, local agencies, if smaller size agencies were selected, there could have been a larger sample size with a higher response rate, possibly impacting the results.

A third potential limitation is that measurement issues can be present in selected variables. This study targeted large, local police departments that completed the LEMAS surveys for both 2016 and 2020. Not only could the 255 missing or unavailable cases have affected the sample representations, but different types of biases, such as incorrect responses, may have also

influenced outcomes. As mentioned in the method section, the percentage of female officer representation was calculated by hand; thus, there is room for errors when incorrect answers are present among selected sample representation. While the number of female sergeants, intermediate supervisors, and the sex of the chief were given by LEMAS surveys, neither the number of line staff nor the percentage of women representation across the ranks was provided in the LEMAS surveys. Thus, this study had to come up with two equations. One is for acquiring the number of women line staff ($\# \text{ of women sworn officers} - (\# \text{ women sergeants} + \# \text{ women intermediate supervisors} + \text{woman chief})$). The second is to acquire the percentage of women represented across the ranks; the percentage of female line staff was calculated by dividing the number of women line staff by the number of total line staff: ($\# \text{ women line} / \# \text{ men and women line}$). Therefore, errors in the original LEMAS data will impact the newly computed variables using the above equations, resulting in more errors. These research paper specifically targeted large, local police agencies that showed complete answers in female officer representation across the ranks and the existence of community policing units, but if the same question is given to sheriff agencies or local agencies of different sizes, there is no guarantee that outcomes will be similar. Although this study found no association between higher female representation and greater prevalence of specialized community policing units, it does not necessarily mean female representation has no relation to the process of adoption because they show other benefits, such as less usage of force, soft communication skills, and prioritizing partnerships, as described in the literature. Additional factors might contribute to adopting community policing units and women representation within large local police agencies. Wilson (2006) mentions that experiencing changes in the leadership and environment of police agencies can affect community

policing; as such, an increase in female personnel alone may not be sufficient to explain the causes.

A fourth potential limitation is that there may be measurement and representation issues with the dependent variable, community policing implementation. Community policing implementation has "opened up a new set of challenges for measuring police tactics and outcomes in the community-policing strategy" (Kelling & Coles, 2017, p. 39). This study operationalizes the dependent variable into binary outcomes, such as whether an agency has a community policing specialized unit or not. More specifically, this study only indicated agencies that had a specialized unit with personnel assigned full-time to address community policing in LEMAS surveys as (1), and the other four options, which are mentioned in methods under measures, were indicated as (0). Including other options from LEMAS surveys of having specialized units may provide answers on how community policing implementation differs by the degree of addressing the task. It is important to note that not having a specialized unit does not necessarily mean that a department is entirely absent from implementing community policing. As there were five options to indicate the spectrum of having specialized units in LEMAS surveys, some agencies might have designated personnel and capacity to address community issues without having a community policing specialized unit. The process of adopting specialized units in agencies may vary as the process is dynamic, flexible, and requires "ongoing input, evaluation, and feedback from both inside and outside the police organization" (Office of Justice Programs, 1994, p. 28).

In terms of future research, it would be useful to extend research studies to address different forms of community policing, as this study only looks at implementation in the form of specialized units. Therefore, different results could be present when future research studies

examine the relationship between women representation and different forms of community policing implementation. Again, measuring the mere existence of community policing specialized units not only does not capture all forms of community policing, but it also may not be the best representation of community policing implementation as it depends on various factors.

In addition, future research studies can look into whether police agencies with community policing specialized units are effective and efficient. The quality of community policing specialized units is not considered in this study as it merely measures the existence of the community policing specialized units in each agency. An assumption that the existence of community policing specialized units with dedicated personnel in police agencies will have a relationship with community policing implementation may not always be accurate. Moreover, an abundance of other factors, such as the number of dedicated officers and community policing activities offered, can impact the specialized unit's effectiveness and efficiency (Robinson, 2003). For example, police agencies that provide multiple community policing programs were not distinguished from those with one or two offered programs. To fully understand what, why, and how community policing specialized units are operating, the priority should be looking at the community policing specialized unit as a whole to measure its success in activities, programs offered, etc. Overall, not only is there a limited understanding of specialized units' effectiveness and produced outcomes because specialization is used more often as a dependent variable rather than an independent variable (Namgung, 2013), but there is also limited knowledge of women representation in specialized units. Therefore, further research studies might better explain organizational outputs by using specialization as the independent variable and women representation as the dependent variable.

This also relates to the inability to determine the prevalence of female officers in the specialized COP unit. Even if COP specialized units are present in the police agencies, female officers' unique attribution and benefits cannot be evaluated if there are no female officers in the units, which will be discussed further below. Gender differences will continue to be an area to explore because males and females are unique "biologically, physically, psychologically, in the way they think, behave, and talk" (Suciu, 2013, p. 7). Therefore, further assessing the different biopsychosocial traits of female and male officers is encouraged, as well as understanding how these differences can impact police agencies. As mentioned above, this study looks into women representation and its association with the mere existence of community policing specialized units. Further research studies can look into the breakdown of officers within the units by sex, which can provide distinguishable insights into diversity. Some agencies could show higher representation of women without community policing specialized units, or vice versa. Community policing implementation is a challenging task; it requires a substantial amount of time and effort from both community members and police officers, as well as active communication and involvement within police agencies to build trust and partnership (Frank, 2023). For example, qualitative research design resident surveys can measure the community members' satisfaction with community policing officers and programs. This study utilizes the LEMAS data collected from police agencies; therefore, resident surveys can provide a contrasting perspective by surveying the receivers of community policing. Both qualitative and quantitative research studies can be beneficial, and further research related to women representation and community policing is highly encouraged to advance policing as a whole.

Lastly, discussing potential roles of growth and interaction of level and growth of women representation in community policing can further provide insights. The growth can measure the

changes in the percentage of women representation across the ranks over two different periods and understand whether the percent changes in two periods impact the level of community policing implementation. Understanding the growth is important because this study focuses on women representation in 2016 and community policing implementation in 2020; thus, it could not predict changes to women representation and community policing over time. It is important to look at trends and strategies in hiring to understand the long-term impacts and potential lagged effects because “past success in hiring diversity begets subsequent success” (Nowacki et al., 2021b, p. 60). However, note that some agencies can experience an increase in female officer representation over time, whereas some agencies will experience a decline in number. The interaction effect can measure if women representation across the rank and level of community policing implementation depends on representation growth over time. The study has three control variables, yet it does not address the possibility of additional independent variables affecting the results, such as the effectiveness of existing units and internal cultures. Through interaction, the strength of the association between women representation and community policing can be statistically calculated as it informs whether the changes depend on the third variable and direct future research plans.

In summary, this study found no significant relationship in having COP specialized units in 2020 and women representation across the ranks in 2016 (i.e., line staff, sergeants, intermediate supervisors, and chief). This study hypothesized that the representation of women across rank is associated with implementation through COP specialized unit. However, sex of officers across the ranks did not matter as it failed to make the connection between community policing specialized units and the level of women representation across the ranks. This study is not absent from the limitations discussed above; therefore, other community policing elements

that were not tested in this study could be responsible for the higher influence of women on community policing. As community policing can be impacted by other factors, such as officer age, race, experiences, etc. (Namgung, 2018; Shupard & Kearns, 2019), assessing the relationship between women representation and community policing using additional variables and other perspectives is highly encouraged.

CONCLUSION

In conclusion, results from this study did not indicate that greater female representation at various ranks increases the likelihood of a department having specialized community policing units. However, it is important to note the unique traits of males and females, and developing means to utilize those strengths would be beneficial not only for community policing but also for the future of policing as a whole, as it may lead to fulfilling the hope of diversifying the representations within the police agencies (Gibbs, 2021; Nowacki et al., 2021a). Acknowledging the capacity of females and providing job positions where they can flourish would be promising for increasing their recruitment and improving their overall job satisfaction, which would promote their retention. Moreover, further research studies are encouraged in these related areas because complications and limitations are always present in any existing studies for improvements. Compared to other policing topics, research on female police officers is generally lacking, and further research studies are highly encouraged (Calabro & Meisenholder, 2023). Females' characteristics demand more recognition and adaptation in various positions in police agencies because female officers can succeed outside community policing settings.

REFERENCES

- Ahmad, J. (2001). *Congruence between police officers' acceptance of community policing concepts and their attitudes toward women police officers and women in the workplace*. Sam Houston State University.
- Archbold, C. A., Huynh, C. M., & Mrozla, T. (2022). Traditional and Contemporary Policing Strategies. In *Policing: The Essentials* (pp. 21–39). SAGE Publications, Inc.
- Bain, A., Robinson, B. K., & Conser, J. (2014). Perceptions of policing: Improving communication in local communities. *International Journal of Police Science & Management*, 16(4), 267-276.
- Beetles, A., & Crane, A. (2005). Mapping out the field of gender and buyer-seller relationships: Developing a new perspective. *Journal of Marketing Management*, 21(1-2), 231-250.
- Belsley, D. A., Kuh, E. & Welsch, R. E. (1980). *Regression Diagnostics: Identifying Influential Data and Sources of Collinearity*. New York: John Wiley.
- Bishu, S. G., & Kennedy, A. R. (2020). Trends and gaps: A meta-review of representative bureaucracy. *Review of Public Personnel Administration*, 40(4), 559-588.
- Bond, B. J., & Gabriele, K. R. (2018). Research and planning units: An innovation instrument in the 21st-Century police organization. *Criminal Justice Policy Review*, 29(1), 67-88.
- Bradbury, M., & Kellough, J. E. (2011). Representative bureaucracy: Assessing the evidence on active representation. *The American Review of Public Administration*, 41(2), 157-167.
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York: Guilford Press.
- Buehner, M. J. (2012). Understanding the past, predicting the future: Causation, not intentional action, is the root of temporal binding. *Psychological science*, 23(12), 1490-1497.
- Calabro, T., & Meisenholder, T. (2023, January 4). *Beyond Recruitment: Barriers to Promotion among Women in Law Enforcement*. Police Chief Online.
<https://www.policiechiefmagazine.org/beyond-recruitment/>
- Clary, K. (2020). Recruiting and retaining women police officers—The message your organization sends matters. *Perspectives on research and evidence-based policing: Articles from NIJ's leads scholars*.
- Clerkin, C. (2017). What Women Want--And Why You Want Women--In the Workplace. Research Report. *Center for Creative Leadership*.
- Cordner, G. (2014). Community policing. *The Oxford handbook of police and policing*, 148-171.

- Cordner, G. W. (1997). Community policing: Elements and effects. *Critical issues in policing: Contemporary readings*, 5, 401-418.
- Cordon, J. R., Sánchez, N. E., & Navas, J. M. M. (2020). Female officers on board: Prejudices, stereotypes and the leadership role. *Ann Cogn Sci*, 4(1), 174-184.
- Crowl, J. N. 2017. "The Effect of Community Policing on Fear and Crime Reduction, Police Legitimacy and Job Satisfaction: An Empirical Review of the Evidence." *Police Practice and Research* 18(5): 449–62.
- Dash, K. K., Dash, S. K., & Satpathy, S. (2021). A Study on Gender Differences in Workplace Communication across Organizations. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 13(3), 1-10.
- De Vries, M. S., & Van der Zijl, A. H. (2001). Quality, trust and authority from the perspective of community policing. *The Police Journal*, 74(4), 279-291.
- DeJong, C., Mastrofski, S. D., & Parks, R. B. (2001). Patrol officers and problem solving: An application of expectancy theory. *Justice Quarterly*, 18(1), 31-61.
- Den Heyer, G. (2014). Examining police strategic resource allocation in a time of austerity. *Salus Journal*, 2(1), 63-79.
- Dewar, R., & Hage, J. (1978). Size, Technology, Complexity, and Structural Differentiation: Toward a Theoretical Synthesis. *Administrative Science Quarterly*, 23(1), 111–136.
<https://doi.org/10.2307/2392436>
- Donohue Jr, R. H. (2021). Shades of blue: A review of the hiring, recruitment, and selection of female and minority police officers. *The Social Science Journal*, 58(4), 484-498.
- Eagly, A. H., & Johnson, B. T. (1990). Gender and leadership style: A meta-analysis. *Psychological bulletin*, 108(2), 233.
- Engel, R. S. (2003). How police supervisory styles influence patrol officer behavior. *Critical issues in policing: Contemporary readings*, 6.
- Erstad, W. (2021, August 16). Police ranks: Breaking down 8 different law enforcement positions. Rasmussen University. <https://www.rasmussen.edu/degrees/justice-studies/blog/police-ranks/>
- Ford, J. K. (2007). Building capability throughout a change effort: Leading the transformation of a police agency to community policing. *American journal of community psychology*, 39, 321-334.
- Frank, P. (2023). Community Policing: The Challenges of Implementation in The United States.
- Gibbs, J. C. (2021). Preventing attrition among women and minority police applicants. *Policing: A Journal of Policy and Practice*, 15(2), 1029-1045.

- Gill, C., Weisburd, D., Telep, C. W., Vitter, Z., & Bennett, T. (2014). Community-oriented policing to reduce crime, disorder and fear and increase satisfaction and legitimacy among citizens: A systematic review. *Journal of experimental criminology*, 10, 399-428.
- Goldstein, H. (1987). Toward community-oriented policing: Potential, basic requirements, and threshold questions. *Crime & Delinquency*, 33(1), 6-30.
- Goodison, S. E. (2022). Local police departments personnel, 2020. *Bureau of Justice Statistics Bulletin*, November 2022.
- Greene, J. R. (2000). Community policing in America: Changing the nature, structure, and function of the police. *Criminal justice*, 3(3), 299-370.
- Hall, D. L. (1990). *Community policing: An overview of the literature*. New York State Division of Criminal Justice Services, Office of Justice Systems Analysis, Bureau of Program & Policy Analysis.
- Hawdon, J. E., Ryan, J., & Griffin, S. P. (2003). Policing tactics and perceptions of police legitimacy. *Police Quarterly*, 6, 469-491.
- Heaston, R. (2021, February 9). *The Great Gender Debate*. Professional Builder. <https://www.probuilder.com/great-gender-debate>
- Hickman, M. J., & Poore, J. E. (2016). National data on citizen complaints about police use of force: Data quality concerns and the potential (mis) use of statistical evidence to address police agency conduct. *Criminal Justice Policy Review*, 27(5), 455-479.
- Huff, J. (2021). Understanding police decisions to arrest: The impact of situational, officer, and neighborhood characteristics on police discretion. *Journal of criminal justice*, 75, 101829.
- Johnson, J. P. (2015). *Law enforcement innovation and diffusion: A network analysis of police accreditation*. City University of New York.
- Jurek, A. L., Matusiak, M. C., & Matusiak, R. E. (2017). Structural elaboration in police organizations: an exploration. *Policing: An International Journal of Police Strategies & Management*, 40(2), 351-365.
- Kelling, G. L., & Coles, C. M. (2017). Community policing in the 21st century: A framework for measuring performance. *Urban Policy Frontiers*, 29.
- Kennedy, A. R., Bishu, S. G., & Heckler, N. (2020). Feminism, masculinity, and active representation: A gender analysis of representative bureaucracy. *Administration & Society*, 52(7), 1101-1130.
- Korhonen, V. (2023, October 10). *Gender distribution of full-time U.S. law enforcement employees 2021*. Statista. <https://www.statista.com/statistics/195324/gender-distribution-of-full-time-law-enforcement-employees-in-the-us/>

- Langton, L. (2010). Women in law enforcement, 1987-2008.
- Langworthy, R. H. (1999, July). Measuring what matters: A policing research institute. In *Measuring What Matters: Proceedings from the Policing Research Institute Meetings*(pp. 1-35).
- Langworthy, R. H. & Travis, L. F. (1994). *Policing in America: A balance of forces*. New York: Macmillan.
- Leaper, C. (1991). Influence and involvement in children's discourse: Age, gender, and partner effects. *Child development*, 62(4), 797-811.
- Lee, J. S., Lee, H. D., & Zhao, J. S. (2023). Community-oriented policing (COP): An empirical study of its effectiveness on fear of crime. *Social Science Quarterly*, 104(5), 988-1005.
- Liederbach, J., & Frank, J. (2003). Policing Mayberry: The work routines of small-town and rural officers. *American Journal of Criminal Justice*, 28, 53-72.
- Lonsway, K., Wood, M., & Spillar, K. (2002). Officer gender and excessive force. *LAW AND ORDER-WILMETTE THEN DEERFIELD-*, 50(12), 60-66.
- Los Angeles. (2023, February 9). *Rank structure*. LAPD Online. <https://www.lapdonline.org/training-division/join-the-team/rank-structure/>
- Maguire, E. R. (1997). Structural change in large municipal police organizations during the community policing era. *Justice quarterly*, 14(3), 547-576.
- Maguire, E. R. (2003). *Organizational structure in American police agencies: Context, complexity, and control*. Suny Press.
- Maguire, E. R., Kuhns, J. B., Uchida, C. D., & Cox, S. M. (1997). Patterns of community policing in nonurban America. *Journal of Research in Crime and Delinquency*, 34(3), 368-394.
- Martin, S. E. (1989). Women on the move?: A report on the status of women in policing. *Women & Criminal Justice*, 1(1), 21-40.
- Mastrofski, S. D., Willis, J. J., & Kochel, T. R. (2007). The challenges of implementing community policing in the United States. *Policing: a journal of policy and practice*, 1(2), 223-234
- Matusiak, R. E., & Matusiak, M. C. (2018). Structure and function: Impact on employment of women in law enforcement. *Women & Criminal Justice*, 28(4), 313-335.
- McCarthy, D., & O'Neill, M. (2014). The police and partnership working: Reflections on recent research. *Policing: A Journal of Policy and Practice*, 8(3), 243-253.

- McGough, M. (2023, July). *The 30×30 Initiative: How more women officers can help America's policing crisis*. Policing Staffing Observatory.
- McQuiston, D. H., & Morris, K. A. (2009). Gender differences in communication: Implications for salespeople. *Journal of Selling & Major Account Management*, 9(1), 54.
- Meeker, B. F., & Weitzel-O'Neill, P. A. (1977). Sex roles and interpersonal behavior in task-oriented groups. *American Sociological Review*, 91-105.
- Merchant, K. (2012). How men and women differ: Gender differences in communication styles, influence tactics, and leadership styles.
- Morabito, M., & Shelley, T. O. C. (2015). Representative bureaucracy: Understanding the correlates of the lagging progress of diversity in policing. *Race and Justice*, 5(4), 330-355.
- Mosher, F. C. (1968). *Democracy and the public service*. Oxford, England: Oxford University Press.
- Murphy, B. (2023). The female chief communication officer: An exploration into her leadership traits. *Public Relations Inquiry*, 12(1), 113-133.
- Murphy, D. (2020, July 22). *From Crisis to Community Policing*. Policechiefmagazine.org. <https://www.policechiefmagazine.org/from-crisis-to-community-policing/>
- Namkung, H. (2013). *How do specialized units affect the outputs of police organizations?: Investigating the effect of community policing units on community policing activities in local police departments*. University of Missouri-Saint Louis.
- Namkung, H. (2018). How can police agencies implement community policing? Create specialized units!. *International Journal of Law, Crime and Justice*, 52, 144-154.
- Noppe, J., Verhage, A., & Van Damme, A. (2017). Police legitimacy: an introduction. *Policing: An International Journal*, 40(3), 474-479.
- Novak, K. J., Alarid, L. F., & Lucas, W. L. (2003). Exploring officers' acceptance of community policing: Implications for policy implementation. *Journal of criminal justice*, 31(1), 57-71.
- Nowacki, J., Schafer, J. A., & Hibdon, J. (2021a). Workforce diversity in police hiring: The influence of organizational characteristics. *Justice Evaluation Journal*, 4(1), 48-67.
- Nowacki, J., Schafer, J., & Hibdon, J. (2021b). Gender diversification in police agencies: is it a zero-sum game?. *Policing: An International Journal*, 44(6), 1077-1092.
- Office of Justice Programs. (1994). *Understanding Community Policing: A Framework for Action*. Bureau of Justice Assistance.

- Poeschl, G. (2021). A Hundred Years of Debates on Sex Differences: Developing Research for Social Change. *Journal of Social and Political Psychology*, 9(1), 221-235.
<https://doi.org/10.5964/jspp.6399>
- President's Task Force on 21st Century Policing. (2015). *Final report of the president's task force on 21st century policing*. Office of Community Oriented Policing Services.
- Reisig, M. D., & Giacomazzi, A. L. (1998). Citizen perceptions of community policing: are attitudes toward police important?. *Policing: An International Journal of Police Strategies & Management*, 21(3), 547-561.
- Riccucci, N. M., Van Ryzin, G. G., & Lavena, C. F. (2014). Representative bureaucracy in policing: Does it increase perceived legitimacy?. *Journal of public administration research and theory*, 24(3), 537-551.
- Rich, K., & Seffrin, P. (2014). Birds of a feather or fish out of water? Policewomen taking rape reports. *Feminist Criminology*, 9(2), 137-159.
- Roberts, A., & Roberts Jr, J. M. (2007). The structure of informal communication between police agencies. *Policing: An International Journal of Police Strategies & Management*, 30(1), 93-107.
- Roberts, A., & Roberts Jr, J. M. (2009). Impact of network ties on change in police agency practices. *Policing: an international journal of police strategies & management*, 32(1), 38-55.
- Robinson, A. L. (2003). The impact of police social capital on officer performance of community policing. *Policing: An International Journal of Police Strategies & Management*, 26(4), 656-689.
- Rosenbaum, D. P., & Lurigio, A. J. (1994). An inside look at community policing reform: Definitions, organizational changes, and evaluation findings. *Crime & delinquency*, 40(3), 299-314.
- Rosenbaum, D., Skogan, W., Fridell, L., Mastrofski, S., Hartnett, S., Cordner, G., & McDevitt, J. (2011). Measuring police organizations and their "life course": The National Police Research Platform. *NPRP Rep*.
- Rosenberg, H., Sigler, R. T., & Lewis, S. (2008). Police officer attitudes toward community policing: A case study of the Racine Wisconsin Police Department. *Police Practice and Research: An International Journal*, 9(4), 291-305.
- Rushin, S. (2021). Masculinity in policing: The need to recruit more women in American police departments. *Geo. Wash. L. Rev.*, 89, 1512.
- Sadd, S., & Grinc, R. M. (1996). Implementation challenges in community policing. *NIJ Research in Brief*.

- Schuck, A. M. (2014). Female representation in law enforcement: The influence of screening, unions, incentives, community policing, CALEA, and size. *Police quarterly*, 17(1), 54-78.
- Schuck, A. M. (2017). Female officers and community policing: Examining the connection between gender diversity and organizational change. *Women & Criminal Justice*, 27(5), 341-362.
- Schuck, A. M., & Rabe-Hemp, C. (2005). Women police: The use of force by and against female officers. *Women & Criminal Justice*, 16(4), 91-117.
- Shoub, K., Stauffer, K. E., & Song, M. (2021). Do female officers police differently? Evidence from traffic stops. *American journal of political science*, 65(3), 755-769.
- Shupard, M., & Kearns, E. M. (2019). Why do officers support community policing? A cross-departmental and cross-temporal comparison. *Behavioral Sciences & the Law*, 37(6), 665-680.
- Skoczek, P. B. (2023). *Understanding the Lack of Communication Between Communities and Law Enforcement Through a Community Policing Program* (Doctoral dissertation, Walden University).
- Skogan, W. G., & Roth, J. A. (2004). *Community Policing Can It Work?* Skogan.org. Retrieved February 23, 2024, from http://skogan.org/files/Comm_Policing-Can_it_Work_Introduction.pdf.
- Skolnick, J. H., & Bayley, D. H. (1988). Theme and Variation in Community Policing. *Crime and Justice: Review of Research*, 10, 1-38.
- Socia, K. M., Morabito, M. S., Bond, B. J., & Nader, E. S. (2021). Public perceptions of police agency fairness and the willingness to call police. *The American Review of Public Administration*, 51(5), 360-373.
- Sozer, M. A., & Merlo, A. V. (2013). The impact of community policing on crime rates: Does the effect of community policing differ in large and small law enforcement agencies?. *Police practice and research*, 14(6), 506-521.
- Suciu, G. (2013). Why Don't You Understand? Male and Female Communication. *The Round Table: Partium Journal of English Studies*.
- The History of 30x30: A movement built on decades of advocacy*. 30x30 Initiative. (2024, April 12). <https://30x30initiative.org/about-30x30/>
- Theobald, N. A., & Haider-Markel, D. P. (2009). Race, bureaucracy, and symbolic representation: Interactions between citizens and police. *Journal of Public Administration Research and Theory*, 19(2), 409-426.

- Todak, N. (2017). The decision to become a police officer in a legitimacy crisis. *Women & criminal justice*, 27(4), 250-270.
- Trojanowicz, R., & Bucqueroux, B. (1990). Community policing. *Anderson, Cincinnati, OH*.
- U.S. Department of Justice. (2014). *Community Policing Defined*. COPS.
<https://portal.cops.usdoj.gov/resourcecenter/RIC/Publications/cops-p157-pub.pdf>
- United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. Law Enforcement Management and Administrative Statistics (LEMAS), 2016. ICPSR37323-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [producer and distributor], 2020.
- United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. Law Enforcement Management and Administrative Statistics (LEMAS), 2020. ICPSR38651-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2020.
- Van Damme, A. (2017). The impact of police contact on trust and police legitimacy in Belgium. *Policing and society*, 27(2), 205-228.
- Verma, N., & Dombrowski, L. (2018, April). Confronting social criticisms: Challenges when adopting data-driven policing strategies. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems* (pp. 1-13).
- Vito, G. F., Walsh, W. F., & Kunselman, J. (2005). Community policing: The middle manager's perspective. *Police Quarterly*, 8(4), 490-511.
- Webeck, S., & Lee, H. (2022). The behavioral foundations of representative bureaucracy. *Perspectives on Public Management and Governance*, 5(3), 209-221.
- Weiss, A. (1992). *The innovation process in public organizations: Patterns of diffusion and adoption in American policing*. Doctoral dissertation, Northwestern University
- Wilson, J. M. (2006). *Community policing in America*. NY: Routledge.
- Wilson, J. M., & Grammich, C. A. (2022). Staffing composition in large, US police departments: benchmarking workforce diversity. *Policing: An International Journal*, 45(5), 707-726.
- Yarwood, R. (2016). Whose blue line is it anyway? Community policing and partnership working in rural places. In *Rural Policing and Policing the Rural* (pp. 93-106). Routledge.
- Yim, Y. (2009). Girls, why do you want to become police officers? Career goals/choices among criminal justice undergraduates. *Women & Criminal Justice*, 19(2), 120-136.
- Yuksel, Y., & Tepe, F. (2013). Citizen satisfaction with police and community policing. *European scientific journal*, 9(14).