

SUMMARY OVERVIEW

UNDERSTANDING THE ORGANIZATIONAL FACTORS THAT IMPACT POLICE- COMMUNITY RELATIONS

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Executive Summary

There has been a significant amount of attention refocused on problems surrounding police and the community. The most consistent remedy identified has been reforming police departments, which is an organizational-level solution. However, only minimal strides have been made in empirical research to understand the organizational and managerial correlates of police-community relations. Thus, this research investigated the impact that police departments' organizational and managerial characteristics had on police-community relations. The key contributions of this research to the literature are three-fold. First, a composite indicator of police-citizen conflict was developed by compiling a large nationwide dataset of local police departments. This multidimensional indicator included citizen complaints, police use of force, assaults against police officers, and civilian deaths by police. When comparing cities with high and low police-citizen conflict, there were differences in levels of poverty, unemployment, violent crime, median income, median age, and owner-occupied housing. Second, the role that specific organizational characteristics—community-oriented policing, passive representation, professionalism, and control mechanisms—had on police-community relations was estimated using ordinary least squares regression analyses of over 250 police departments. The findings portrayed that only specific (and very few) organizational and managerial characteristics of police departments impact police-community relations. Specifically, police departments that had formal partnerships with the community, dedicated beat patrol officers, and minority representation were found to have lower levels of use of force. Police departments with higher percentages of officers dedicated to problem-solving activities in the community had lower levels of citizen complaints; in contrast, departments that were more formalized had higher levels of citizen complaints. Lastly, to understand the causal mechanisms undergirding organizational factors and police-community relations, an in-depth case study was conducted in Hartford, Connecticut. The case study included (a) 88 interviews with police officers, public officials, and community leaders, (b) 67.7 hours of participant observations, and (c) a review of secondary sources. A thematic content analysis of the data underscored the importance of police departments cultivating soft skills, investing in human resources, and being intentional about engaging the community. Specifically, police departments influence police-community relations by directly impacting (a) officer attitudes and behavior (operating at the individual-level) and (b) the level and quality of service provision (operating at the organizational-level). Taken as a whole, this study demonstrates the impact that both the organization and the individual have on service provision amongst police departments. Further, it contributes to our understanding of the effectiveness of managerial characteristics impacting outcomes, while applied to a specific occupational setting.

I. Introduction

Police-community relations have been a topic of debate for decades, particularly surrounding the question of how to improve relationships that are characterized by “animosity” and “distrust” (Brunson & Gau, 2015, p. 214). Historically, the relationship between the police and minority communities, in particular, has been negative, hostile, and even deadly. Over the past few years, in various locations, such as Ferguson, Baltimore, and Staten Island, there have been notable police shootings of African-American males that resulted in community unrest. Likewise, in New York and Dallas, there have been assaults against law enforcement officers that resulted in officer fatalities in the line of duty.

Academics, practitioners, policy-makers, and activists have each been discussing the need to improve police relations with various communities; however, there is a lack of empirical research dedicated to understanding what specific factors cause positive and/or negative relations. Numerous suggestions have been made to transform police agencies and their organizational cultures, some of which include hiring more minority officers, requiring police officers to conduct foot or bike patrol, and employing community-oriented policing strategies (Gill, Weisburd, Telep, Vitter, & Bennett, 2014). Despite these recommendations, a dearth of scholarly research investigating the organizational factors that impact such relations persists.

This research sought to examine the impact that police departments’ organizational and managerial characteristics¹ had on police-community relations. First, a composite indicator of police-community relations was developed by compiling a large nationwide dataset of local police departments. Second, the role that specific organizational characteristics—community-oriented policing, passive representation, professionalism, and control mechanisms—had on police-community relations was estimated using ordinary least squares regression analyses. Lastly, to understand the causal mechanisms undergirding organizational factors and police-community relations, an in-depth case study was conducted in Hartford, Connecticut. The case study included semi-structured interviews with police officers and community leaders, participant observations, and a review of secondary sources.

II. Relevant Literature and Previous Research

Police-Community Relations

In 1972, Robert C. Trojanowicz claimed that there was little agreement as to what police-community relations (PCR) actually meant and that the term was elusive and ambiguous. This sentiment still holds true today. However, three key features of police-community relations are that they are (a) continuous and not constant, (b) multifaceted including both positive and negative aspects of policing, and (c) reciprocal (adapted from Hunter & Barker, 2010). Due to the many issues pertaining to race during the 1960s and onwards, “one of the specific goals [of PCR was] to reduce tension through communication between the police and minority groups within the community” (Trojanowicz, 1972, p. 401). Although perceptions by the public are not the only indicator of PCR, perceptual measures have been amongst the most common identifiers utilized. Factors that impact the public’s perception of the police include, but are not limited to, race, negative interactions with the police, police behavior, mass media reporting on police

¹ Organizational and managerial characteristics may also be referred to as solely organizational characteristics throughout this report, but the two phrases are used interchangeably.

misconduct, and neighborhood crime and policing patterns (see Weitzer, Tuch, & Skogan, 2008 for in-depth discussion). In addition to measuring perceptions as a gauge for police-community relations, a small number of studies have assessed “police-citizen² conflict” as a means to understand negative PCR (see Gustafson, 2010; Johnson, 2013; Long, 2012; Shjarback & White, 2015; and Trochmann & Gover, 2016). Though police-citizen conflict may not be representative of the majority of police-citizen interactions, these incidents have detrimental impacts on the relationships between communities and the police. It has often been these conflict situations—entailing police use of force or assaults against law enforcement—that have fueled much of the uproar and protest surrounding police-community relations.

The Effects of Organizational and Managerial Characteristics

It has been stated that “the inadequate implementation or the lack of organizational mechanisms designed to ameliorate police-minority tensions within communities are said to be the primary cause of unnecessary violence against minority populations” (Smith & Holmes, 2014, p. 84). Scholars have long advocated for measuring the organizational impacts of police agencies (see Bayley, 1992; Sherman, 1980). For instance, in 1980, Sherman noted that there is “a managerial assumption that [policing] is influenced by the way police departments are organized and administered” (p. 85). However, only recently has the application of organizational theory to policing gained significant attention (Brooks, 2015; Maguire, 2009; Mazeika et al., 2010). Few scholars have examined organizational or managerial impacts on specific policing outcomes such as arrest rates, clearance rates, and citizen complaints (e.g. Alpert & MacDonald, 2001; Chappell, MacDonald, & Manz, 2006; Eitle, D’Alessio, & Stolzenberg, 2014; Worden, 1995). However, the findings have neither demonstrated conclusive evidence nor how and why such characteristics impact police-community relations (Klahm & Tillyer, 2010; Maguire, 2009; Weitzer, 2014). Yet, recommendations for police reform persist despite the lack of concrete evidence of effectiveness.

III. Research Questions

The purpose of this study was to further scientific knowledge on police organizational dynamics impacting police-community relations. Specifically, this research sought to answer two research questions: 1) What are the organizational and managerial factors that impact police-community relations? and 2) Why and how do organizational and managerial factors impact police-community relations?

IV. Conceptual Framework and Hypotheses

This research employed a “top-down” theoretical approach that “police-community relationships are entwined with macro-level context...wherein it is the characteristics of a police department and its surrounding community that primarily affects the relationships between police and citizens of color” (Brunson & Gau, 2015, p. 219). This study was further informed by organizational management theories. The organizational management literature focuses on the structural and managerial characteristics of police agencies that impact police behavior (see Smith, 1984; Tittle & Paternoster, 2000; Worden, 1995). Two specific theoretical linkages were

² The word “citizen” is not used here in the legal sense, but rather its usage is inclusive of all civilians and residents.

used to understand police-community relations: (a) community-oriented policing and (b) administrative responsibility and accountability. Community-oriented policing is a philosophy that refocuses the attention on citizens and the community in an effort to improve relationships (Cordner, 2014; Reisig, 2010; Skogan, 2006). Specifically, the philosophy advocates for working in close partnership with the community, engaging in proactive problem-solving activities, and building familiarity with the community. Administrative responsibility and accountability focus on how to ensure that governments and bureaucrats are accountable to the citizens they serve in order to prevent abuses of authority (Bunn, 1961). The literature often discusses two primary means by which such accountability can occur. First, there is subjective responsibility, which necessitates investing in the quality and empowerment of the workforce (via education and training for instance) with the underlying assumption that such investments will yield promising employee behavior (Friedrich, 1935, 1940). Second, there is objective responsibility, which argues for providing rules and consequences to guide bureaucrat behavior and ensure that problematic behavior is deterred (Finer, 1941).

Based on the theoretical framework, this research hypothesized that indicators of community policing, subjective responsibility, and objective responsibility would all be negatively correlated with police-citizen conflict. Thus, as police departments focus more attention and resources to overall community policing and administrative responsibility and accountability mechanisms there would be more positive police-community relations.

V. Research Methods

Research Design

This research was conducted in three phases using a mixed methods approach. The first phase of this research involved the construction of a composite indicator in order to gain a better understanding of the context and distribution of police-citizen conflict (used as an indicator of negative police-community relations). The second phase of this research used cross-sectional data to perform an ordinary least squares regression analysis in order to identify the organizational and managerial correlates of negative police-community relations. The last phase was comprised of an in-depth case study to address why and how organizational and managerial characteristics impact police-community relations through qualitative analysis.

Phase 1: Composite Index

In phase 1, data was taken from a variety of sources and merged together in order to measure police-citizen conflict. The unit of analysis was at the organizational-level (i.e., the police department) and the sample included the subset of city police departments in the Bureau of Justice Statistics Law Enforcement Management and Administrative Statistics (LEMAS) 2013 database that had 100 or more full-time sworn employees ($n = 481$). Four indicators of police-citizen conflict were used: police use of force, police killings of civilians (aka deaths by police), violence against the police (aka assaults against law enforcement), and citizen complaints about use of force. Data on police use of force was taken from the 2013 Law Enforcement Administrative and Management Statistics (LEMAS) survey and operationalized as the number of total use of force incidents reported by a police department per 100,000 population. Police killings of civilians were retrieved from the Fatal Encounters database and operationalized as the

total number of deaths caused by law enforcement from 2011 to 2013 per 100,000 population. Data on violence against the police was taken from the Law Enforcement Officers Killed and Assaulted (LEOKA) database and included all assaults against law enforcement. Lastly, citizen complaints about use of force were compiled from the 2007 LEMAS survey and included the total number of complaints filed (including those sustained and those not) per 100 officers.

Phase 2: Cross-Sectional Data

In phase 2, the cross-sectional sample included only city police departments with 100 or more full-time sworn police officers. This sample was taken from the Bureau of Justice Statistics' Law Enforcement Management and Administrative Statistics (LEMAS) survey's 2013 and 2007 sampling frame of 463 and 481 departments, respectively (following suit of Barrick, Hickman, & Strom, 2014; Hickman & Piquero, 2009; MacDonald, 2002; Shjarback & White, 2015; Wilson & Zhao, 2008). The variables of interest were created by merging five data sources together: the 2007 and 2013 Bureau of Justice Statistics LEMAS surveys, the National Association of Civilian Oversight of Law Enforcement (NACOLE) list of cities with civilian oversight, the FBI's statistics on Law Enforcement Officers Killed and Assaulted (LEOKA) from 2011 to 2013, the FBI's Uniform Crime Report (UCR) Offenses Known database for the year 2012, and the United States' Census' American Community Survey (ACS) 2012 five-year estimates. Data from each source was merged using unique police department originating agency identifier (ORI) codes or by using the police department's name and corresponding city when ORI codes were not available.

For the regression analysis, there were three main dependent variables used as indicators of police-citizen conflict: police use of force, citizen complaints, and assaults against officers. The officer use of force rate was measured as the total number of force incidents that occurred for the year per 100,000 population.³ The citizen complaint rate was measured as the total number of citizen complaints about officer use of force for the year per 100 officers. The officer assault rate was calculated as a weighted three-year average of total assaults per 100 officers. There were 12 hypothesized independent variables included in each model, which were grouped by conceptual relevance into four categories: community policing, representative bureaucracy, professionalism, and control mechanisms. Additional control variables were included in each model, most of which were city-level measures that prior research indicated to be important correlates (see Table 1 for variable operationalizations).

Phase 3: Qualitative Case-Study

In phase 3 of this research, qualitative analyses were utilized in order to answer the "why" and "how" questions. An explanatory case study of police-community relations in

³ Police departments report use of force in terms of the number of incidents of force reported and/or the number of separate reports filed per officer in each incident. The number of incidents of use of force is used in order to avoid counting duplicate incidents when using the reported number of separate reports. Some police departments reported both types of force, whereas other police departments only reported the total number of unique incidents or the number of separate reports. After cleaning the data, the reported use of force incident number and separate report number were highly correlated ($r = 0.9744$), thus for police departments that only reported separate report measures a regression analysis was used to estimate the number of reported force incidents for police departments.

Hartford, CT was conducted during the summer of 2017 (see Figure 1 for timeline). There were multiple levels of criteria used to identify the case study site. First, the police-citizen conflict index (outlined in phase 1) was used to identify police departments with the highest police-citizen conflict. Second, only cities serving populations with 30% or more identifying as Black and/or Hispanic were included due to the historical tensions between communities of color and the police. Third, the sample was further limited to police departments serving populations of 100,000 or more residents in order to allow for potential neighborhood variation. After restricting the sample based on the aforementioned characteristics, the three police departments with the highest ranked police-citizen conflict were Oakland (CA), Hartford (CT), and Wichita Falls (TX). A subsequent online search for historical and current events was conducted to better understand the context of each police department, which revealed the Hartford Police Department as the ideal case study site location.

The primary data collection methods employed in the case study included semi-structured interviews, participant observations, and a review of secondary sources—all of which serve as a way to triangulate data across sources (Berg & Lune, 2012). A total of 88 semi-structured interviews were conducted with police and community representatives alike. A semi-structured interview guide was used during the interviews to guide the discussion while also allowing for flexibility. The interview guide included questions pertaining to demographics, community policing and engagement, diversity, training, financial issues, neighborhood variations, and others (see Table 2 for further details on the interview guide). Interviews were audio recorded (where permissible) and professionally transcribed. All interview participants were assured confidentiality. A variety of sampling strategies were utilized beginning with judgment sampling, then snowball sampling, and, seldom with law enforcement, volunteer sampling. The interviews were conducted face-to-face ($n = 85$) and over the phone ($n = 3$), varying in length from 25 to 135 minutes. There was a total of 92 interviewees because 4 (of the 88) interviews had 2 people present. A total of 58 respondents represented the police department and the remaining 34 represented the community. There was a broad range of diversity captured across interview participants (see Table 3).

Participant observations were used to build rapport and understand the current context of Hartford's police-community relations. To ensure adequate context variability the observations were conducted across a variety of settings, days and times. Approximately 67.7 hours of direct participant observations took place, with over 40 hours of observations occurring during nine police ride-alongs. Other observations included attendance at four police rolls calls, four police-community events, three internal police meetings, and five community meetings (see Table 4 for an in-depth breakdown of observation sites). During observations, informal conversations supplemented some of the content provided in the formal semi-structured interviews. Field notes were taken during observations, where permissible, as well as mental notes, which were subsequently written up at the end of each day. There was also permission granted to take pictures during some of the police-community engagements.

A review of secondary sources was undertaken in order to provide historical insight and background information on police-community relations in Hartford. A total of 15 documents were given directly from the Hartford Police Department, whereas an additional 7 documents were taken from the police department's official website. These documents included job advertisements, maps of the city, academy training documents, organizational charts, and personnel demographics. There were 19 documents collected from community representatives in addition to a number of secondary sources found via online searches of Hartford's PCR.

Table 1

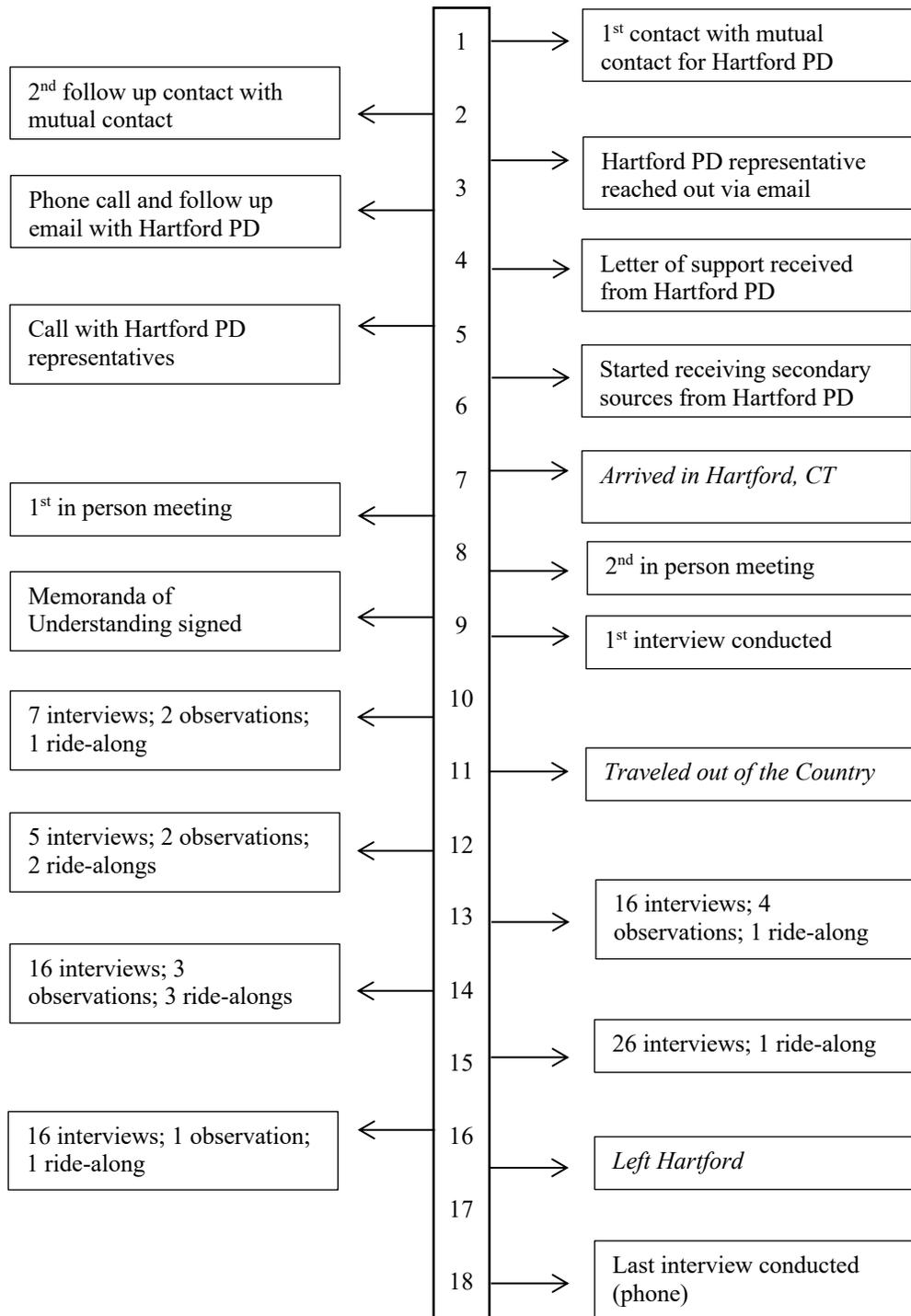
Variable Operationalizations

Categories	Variable Name	Operationalization
Dependent Variables	Force Rate	Number of force incidents per 100,000 population (estimated)
	Complaint Rate	Number of total citizen complaints about use of force per 100 officers
	Assault Rate	Average number total police assaults per year per 100 officers (weighted)
Community Policing	Community Partnerships	Dichotomous variable to measure if the department had a problem-solving partnership or written agreement with any community organizations
	Beat Officers	Percentage of patrol officers assigned to a specific geographic area or beat
	SARA/Problem-Solving Officers ^a	Percentage of patrol officers engaged in SARA problem-solving projects
	Community-Technology Interaction/Engagement	Additive summated score that measures the level of engagement/interaction the PD has via technology with the community
Professionalism	Educational Standards	Dichotomous variable to measure 2- or 4-year educational requirement versus no college requirement
	Hiring Standards	An additive variety score of the hiring standards (screening) that the police department uses
	Community Policing Training: In-Service	Dichotomous variable to measure if full-time officers receive at least 8 hours of in-service community policing training
	Community Policing Training: Recruits	Dichotomous variable to measure if full-time officers receive at least 8 hours of recruit community policing training
Passive Representation	Gender Representation	Percentage of sworn female police officers out of total sworn police officers
	Minority Representation	Ratio of minority officers in a police department to the minority population of corresponding city
Control Mechanisms	Formalization	An additive variety score of the number of formal policy directives or written rules/requirements
	Civilian Review Board	Dichotomous variable to measure the presence of a civilian review board
Control Variables	Police Density ^a	Number of full-time sworn officers per 1,000 population
	Percent Black (city)	Percentage of Blacks (not Hispanic) in the population
	Percent Hispanic (city)	Percentage of Hispanics in the population
	Population Size	Count variable to measure the size of population
	Poverty Level (city)	Percentage of families below the poverty level
	Violent Crime Rate ^a	Average violent crime rate per year per 100,000 (weighted)
	United States Region	Region of the United States where the police department (S, NW, NE, W)
	Force Estimate	Dummy variable to identify if the force rate was estimated or actually reported by the police department <i>(variable only included in Force Model)</i>

Note. ^a means these variables were transformed using the natural logarithm to correct for non-linearity and to reduce skew.

Figure 1

Case Study Timeline (weeks from April 30-September 2, 2017)



The documents collected from community members included, for example, reports on community health and crime, legal court cases, independent reviews of the police department, police leadership training information, community-police engagement events, and notes from committee meetings on public safety. Examples of the online documents included community and neighborhood policing plans, a police staffing and deployment analysis, a collaboration plan between the police department and the board of education, program implementation and evaluations, historical reports on Hartford, and various news articles pertaining to police-community issues. When the secondary sources were used to address the research question the time frame was limited to documents that spanned the years 2010 to 2017. Specific attention was devoted to identifying information that addressed organizational elements or structures that needed to be changed in the police department, the proposed mechanisms by which to improve police-community relations, and/or potential reasons for negative relations.

VI. Analytic Techniques

Phase 1: Composite Index Creation

Two statistical procedures were utilized and compared to create the composite indicator: multiplicative scoring (aka geometric aggregation) and principal components analysis. To calculate the geometric aggregation index, the raw rates for each indicator variable were used. Three of the four indicator variables were increased to a baseline of 1 (instead of 0) so that the multiplicative nature of the index would not be overpowered by an indicator having a 0. The four indicators were then multiplied, and the fourth root was taken of the product: $PCCI_i = (FR_i \times CR_i \times AR_i \times KR_i)^{1/4}$, where $PCCI_i$ represents the first composite police-citizen conflict index value of the i city composed of the geometric mean of the police use of force rate, FR_i , citizen complaint rate, CR_i , rate of assaults against police, AR_i , and the rate of killings by police KR_i , for each city, i .

To create the index using principal components analysis (PCA), an additive model was used with a weighted score calculated based on the two components' cumulative significance. Two components with eigenvalue > 1 were extracted from the original four police-citizen conflict variables. The cumulative variance of the two components totaled 57.27%. The values of the respective weights reflected the magnitude of variance across cities given the data. In order to create the composite measure, the percent of total variance accounted for by each component was used as a weight. Thus, the following index based on a weighted sum of the two component scores was calculated as: $PCC2_i = (31.72\% \times I_{1i}) + (25.55\% \times I_{2i})$, where $PCC2_i$ is the second composite police-citizen conflict index value of the i city composed of the weighted percent of predicted scores based on Component 1, I_{1i} , and Component 2, I_{2i} .

A higher score on the index was indicative of more police-citizen conflict and thus negative police-community relations. After each police-citizen conflict score was created a corresponding rank was assigned to each city police department. The scores and their relative rankings were then compared across the index creation method and with key socioeconomic variables using Pearson's correlation coefficient, r . This comparison served as a sensitivity check. Lastly, the police-citizen conflict scores were mapped, using ArcGIS, based on standard deviations from the mean to help understand their relative distributions. There were six levels of conflict scores that ranged from the lower end of 1.0 or more standard deviation below the mean to the upper end of 1.5 standard deviations or more above the mean.

Table 2

*Interview Guide*⁴

Categories	Questions	CR	FLR	MUM	PUB
Background	Can you tell me a little about your position and what you do?	X	X	X	X
	What are some things the police department does well?	X	X		
	What are some challenges for the police department?	X	X		
Overview of police-community relations	Can you provide me with your definition of police-community relations?	X	X	X	X
	Can you tell me about the current state of police-community relations in Hartford?	X	X	X	X
	What are some of the reasons that you think police-community relations are this way?		X	X	X
	What have been some of the challenges in promoting positive police-community relations?		X	X	
Organizational Factors	What are the organizational practices that impact police-community relations?	X			
	What has the police department done right in terms of promoting positive police-community relations (or trying to improve)?	X	X	X	X
	What are the reasons you think these police practices impact the relationships with the community?	X	X	X	X
	What can/could the police department do better or different in regard to police-community relations?	X	X	X	X
	What do you think the reasons are that certain organizational practices lead to negative police-community relations?	X			X
Community Engagement	Can you tell me what specific community policing efforts are done well in Hartford in terms of impacting police-community relations?	X	X		X
	What made these efforts have a positive impact on police-community relations?	X	X		X
	Can you tell me about what community policing/engagement efforts could be done differently to better impact police-community relations?	X	X		
Diversity (Gender and Race)	Can you tell me about gender differences related to policing in Hartford? (e.g. behavior differences)	X	X	X	X
	What impact does ethnic/racial diversity (more minorities) have for this PD/on police-community relations? (examples)	X	X	X	X

⁴ This is a summarized and condensed version of the interview guide used in this study. The semi-structured nature of the interview format allowed for deviations from and/or additions to questions.

Categories	Questions	CR	FLR	MUM	PUB
Outside Investigation	How do you think having a citizen complaint review board has promoted or hindered police-community relations?	X			X
	How do you think having a firearm discharge review board has promoted or hindered police-community relations?	X			X
Training	What trainings have the most direct impact on police behavior?		X	X	
	What trainings have been beneficial in terms of impacting police-community relations?		X	X	
	What trainings could be done differently (to have a more meaningful impact)?		X	X	
Financial Issues	Can you tell me about the current financial state of the PD and the impacts thereof? (impacting officers, police-community relations, etc.?)			X	X
Hiring Standards/. Screening Techniques	What are some of the current hiring standards or practices that are in place that have improved police-community relations? (e.g. psychological evaluation, personality test)			X	
	How do these standards impact the police force and improve relations with the community?			X	
Technology	Can you tell me about the transparency mechanisms in place in this department? (e.g. via social media, news)			X	
	Can you tell me about how smart policing/C4 has impacted police activities?			X	
Moving Beyond Traditional Policing: Geographic/Locale	Can you tell me how assigning specific patrol officers to specific beats/geographic areas (permanent cars) has impacted police-community relations, whether good or bad?	X	X	X	
	How is having a specific unit devoted to community policing different than having community policing practices/ideals infused throughout the entire police department?			X	
	How do officers coming from or living in Hartford impact the PD and the community, whether good or bad?	X	X	X	X
Neighborhood Police-Community Relations	How does policing (or police practices) differ by neighborhoods in Hartford?		X		
	How do police practices impact police-community relations?		X		
	What are possible reasons for better police-community relations in certain areas compared to others?	X			
Organizational Solutions	Imagine you were the head of a Police Department, what would you do differently to enhance and sustain positive police-community relations in Hartford?	X	X	X	X
Wrap Up	Do you have any final thoughts you would like to share, maybe something that I have not thought to ask about?	X	X	X	X

Note. CR = Community Respondents; FLR = Front-line Respondent; MUM = Mid-to-Upper Management Respondents; PUB = Public Official Respondents

Table 3

Interviewee Sample Characteristics

	Full Sample (N=92)	Community Sample (n=34)	Police Sample (n=58)
<i>Race</i>			
Hispanic	23	9	14
Non-Hispanic ¹	69	25	44
White	38	11	27
Black	27	13	14
Asian	1	0	1
Multi-Racial	2	0	2
Other	1	1	0
<i>Gender</i>			
Female	25	13	12
Male	67	21	46
<i>Education/Degree</i>			
High School or less	7	2	5
Some College	22	5	17
Associates	11	2	9
Bachelors	25	8	17
Graduate	18	10	8
Professional	9	7	2
<i>Hartford Origin</i>	36	15	21
<i>Hartford Residency</i>	32	26	6
<i>Age in years</i>			
21-25	3	0	3
26-30	5	1	4
31-35	13	5	8
36-40	14	3	11
41-45	15	3	12
46-50	19	5	14
51-55	5	3	2
56-60	9	5	4
61-65	4	4	0
65+	5	5	0

Note. ¹ this category includes 6 respondents who did not specify an ethnic category, but did identify as a particular race

Table 4

Observation Sites and Types

Observation Site	Estimated Hours	Who was observed	Examples of what was observed
Ride-alongs (n=9)	43.17	police; community members; local business owners; homeless people	Police-citizen interactions; people getting arrested and booked; police officers interacting with other police officers; police writing reports; different parts of the city both affluent areas and blighted areas; parks; community businesses; libraries; car chases; people receiving tickets; people's living areas
Roll Calls (n=4)	1	police management; patrol officers	Police management going over key events from the shift prior, checking who is in attendance
Police-Community Events (n=4)	8.5	police; youth; community leaders and members; state police; local politicians; business representatives	Positive interactions between police and the community; shoe drive; athletic outdoors day with youth; basketball event where police and youth played together
Police meetings (n=3)	9	police recruits; police command staff; police administration	Interactions between police command staff and new recruits; real-time crime center; casual conversations occurring in command staff offices or front desk/lobby area
Community meetings (n=5)	6	community leaders and volunteers, city government officials, police representatives	Community members having informal discussions over coffee; civilian police review board meeting; city commission meeting; mayor town hall meeting; live viewing of local news segment with community members

Phase 2: Quantitative Analytic Techniques

First, Pearson's r was used to assess the bivariate correlations across independent variables and each of the three dependent variables. Second, to identify the correlates of police-citizen conflict ordinary least squares (OLS) regression was used with STATA's cluster function (by state), which accounted for those police departments nested within similar states. Missing data were handled with listwise deletion of cases in order to maintain true values. After the reduction in sample size, one-sample t -tests were used to compare the means (on key variables) of each regression sample to the original population of interest from the LEMAS database. In only one model (the complaint model) there was significant differences when comparing the regression sample to the sampling frame. In this model, the only difference to reach statistical significance at the 5% threshold was the mean percent of police departments located in the Western United States when comparing the regression sample to the overall LEMAS sampling frame.

Several diagnostic techniques were assessed prior to running the OLS regression analysis. Pairwise correlations and variance inflation factors revealed no issues pertaining to multicollinearity across the three models. Non-normality of residuals was found using statistical tests (i.e., the skewness-kurtosis test and the Shapiro-Wilk test) as well as by assessing graphical displays (i.e., standardized normal probability plots, normal quantile-quantile plots, and kernel density plots). Thus, each dependent variable was log-transformed to correct for non-normality. In testing heteroscedasticity, the residuals versus fitted/predicted values plot and the Breusch-Pagan test both revealed that the error term held constant variance for each model. Outliers were reserved in order to limit the amount of data manipulations and retain actual values. However, the use of transformations and the robust standard errors (from STATA's cluster function) helped with reducing potential bias from the inclusion of outliers. Lastly, three independent variables—SARA/problem-solving officers, police density, and violent crime rate—were log-transformed to correct for non-linearity and to reduce skew (see *note* in Table 1). The final regression equation for each dependent variable was as follows:

$$\begin{aligned} \log(\text{Police} - \text{Citizen Conflict Indicators})_i = & \beta_0 + \\ & \beta_1(\text{Community Policing Indicators})_i + \beta_2(\text{Professionalism Indicators})_i + \\ & \beta_3(\text{Passive Representation Indicators})_i + \beta_4(\text{Control Mechanism Indicators})_i + \\ & \beta_5(\text{Control Variables})_i + \varepsilon_i \end{aligned}$$

Phase 3: Qualitative Analytic Techniques

The qualitative data was gathered through voice recording, note-taking, a collection of secondary sources, and pictures (albeit sparingly). After the voice recordings were professionally transcribed they were then reviewed and edited for accuracy. Afterward, the transcripts were manually coded based on a set of pre-identified codes (i.e., words or concepts) utilizing NVivo 10 software for Mac. NVivo is used for in-depth qualitative data analysis (of transcriptions, videos, audio, and pictures) and for sorting, identifying, and testing relationships. The pre-identified codes were based on the semi-structured interview questions as well as the existing literature on organizational correlates of police-community relations. These *a priori* codes included collaboration, engagement, financial state, manpower, communication, respect,

humanizing, understanding, transparency, responsiveness, accountability, being present, hiring residents, media, training, personal interaction, diverse representation, and gender differences.

The two primary content analysis techniques employed were thematic analysis and explanation building. Thematic analysis was used to identify and analyze patterns within the data, which subsequently become noted as “themes” that helped to describe the data (Braun & Clarke, 2006). Explanation building was used primarily to identify causal links and derive explanations for phenomena (Yin, 2009). These two methods were employed using NVivo 10 to understand how the codes and themes were related to each other in complex and nuanced ways. The findings represent key themes based on a close reading and interpretation of the content derived from the codes that were most prevalent or frequent in the data. Careful attention was devoted to ensuring that the themes were grounded in the data. Key quotes were then chosen to illustrate each theme.

VII. Key Findings

Phase 1. Composite Index Findings

There were unique findings associated with each phase of the aforementioned research methodology. The first phase of research was devoted to creating the composite indicator. The creation and comparison of the two composite indices revealed that although there were some slight variations in index score rankings across methods (geometric aggregation index or principle components index) there were more similarities than differences. Creating and comparing the two index creation methods served primarily as a sensitivity analysis. In assessing Pearson’s correlation coefficient, r , the index scores were highly correlated ($r = 0.8893$, $p < 0.0001$) as well as the relative rankings assigned from each score ($r = 0.9195$, $p < 0.0001$). Further, the range for the geometric aggregation index was from a low police-citizen conflict of 1.874 (Hoover Police Department in Alabama) to a high police-citizen conflict of 37.347 (Oakland Police Department in California), with a mean of 11.392 ($SD = 5.513$) for all city police departments included in the sample. The principal components index ranged from a low police-citizen conflict of -1.295 (Hoover Police Department in Alabama) to a high police-citizen conflict of 1.395 (Oakland Police Department in California), with a mean of 0.012 ($SD = 0.437$) for all cities included in the sample. Table 5 presents side-by-side comparisons of the police departments with the top five highest and lowest police-citizen conflict scores for each index creation method. Of the top five highest police-citizen conflict scores across both indices, three police departments were consistently identified: Oakland, Wilmington, and Hartford. Of the top five departments with the lowest police-citizen conflict scores across both indices, four police departments were consistently identified as having low police-citizen conflict: Hoover, Rio Rancho, Peoria, and Richardson.

In assessing the geographical distributions and characteristics of police-citizen conflict, only the geometric aggregation index was used—namely as a practical measure for replicability in policy and/or practice. Of the 278 total police departments included in the sample, approximately 44% served populations of 100,000 or more and 33% served populations between 100,000 and 200,000. The majority of police departments had average police-citizen conflict levels, as indicated by police-citizen conflict scores that fell within 0.5 standard deviations above or below the mean level (see Figure 2 for a graphical representation of police-citizen conflict across US cities). There were 22 police departments that had police-citizen conflict scores of 1.5

standard deviations or greater above the mean and were thus labeled as having the most conflict. On the other hand, there were 34 police departments with scores that were 1.0 standard deviations or more below the mean and were thus labeled as having the least conflict. Table 6 compares the departments with the highest versus the least police-citizen conflict across key socioeconomic characteristics. This table displays that police departments with the highest (compared to the lowest) police-citizen conflict serve cities with higher poverty, unemployment, violent crime, and female-headed housing, whereas departments with the lowest police-citizen conflict serve cities with higher median income levels, median age, and owner-occupied housing levels.

Table 5

Listing Police Departments with the Highest and Lowest Police-Citizen Conflict Scores

Geometric Aggregation Index		Principal Component Analysis Index	
<i>Highest Police-Citizen Conflict Scores</i>			
1	Oakland Police Department (CA)	1	Oakland Police Department (CA)
2	Wilmington Police Department (NC)	2	Wilmington Police Department (NC)
3	Farmington Police Department (NM)	3	Wichita Falls Police Department (TX)
4	Rapid City Police Department (SD)	4	Hartford Police Department (CT)
5	Hartford Police Department (CT)	5	College State Police Department (TX)
<i>Lowest Police-Citizen Conflict Scores</i>			
1	Hoover Police Department (AL)	1	Hoover Police Department (AL)
2	Union City Police Department (NJ)	2	Richardson Police Department (TX)
3	Rio Rancho Police Department (NM)	3	Peoria Police Department (AZ)
4	Peoria Police Department (AZ)	4	Boca Raton Police Department (FL)
5	Richardson Police Department (TX)	5	Rio Rancho Police Department (NM)

Phase 2. Quantitative Analysis Findings

The second phase of research focused on addressing the first research question of interest, which was *what are the organizational characteristics and managerial strategies of police departments that impact police-citizen conflict?* First, presenting solely the relationships between the dependent variables of interest and the hypothesized correlates, bivariate relationships were found between the level of minority representation on the police force and the use of force rate ($r = -0.21$), the presence of a civilian review board and the assaults against officers' rate ($r = 0.10$), and the percent of problem-solving officers and citizen complaint rate ($r = -0.12$). Tables 7 and 8 displays a full correlation matrix for all variables included in each model. The OLS regression analyses displayed more nuanced findings between correlates and outcomes (see Table 9 for the results from each model).

In Model 1 the predictors explained about 23% of the variance in the use of force rate ($R^2 = 0.23$, $F(21,46) = 10.30$, $p < 0.01$). Among the key variables hypothesized about there were three statistically significant variables associated with use of force. The presence of partnerships between the police and the community ($\beta = -0.11$; $p < 0.05$), the percent of officers assigned to patrol specific geographic areas ($\beta = -0.12$; $p < 0.10$), and the level of minority representation ($\beta = -0.19$; $p < 0.01$) were each negatively correlated with police departments' use of force rates.

Several control variables were also significantly correlated with use of force rates. Police departments that served cities with larger Hispanic populations had lower use of force rates ($\beta = -0.11$; $p < 0.10$); however, cities with higher violent crime rates ($\beta = 0.32$; $p < 0.05$) and larger police densities ($\beta = 0.25$; $p < 0.01$) had higher use of force rates, holding all other variables constant.

In Model 2 the predictors explained about 22% of the variance in the rate of assaults against law enforcement officers ($R^2 = 0.22$, $F(20,46) = 6.69$, $p < 0.01$). There were no variables measured under any of the hypotheses that exhibited statistically significant findings. However, three control variables were significantly correlated with the rate of assaulted officers. Specifically, police departments that served cities with larger Black populations ($\beta = -0.16$; $p < 0.10$) and larger police densities ($\beta = -0.16$; $p < 0.05$) had lower assault rates, whereas cities with higher violent crime rates had higher rates of assaults ($\beta = 0.52$; $p < 0.01$).

In Model 3 the predictors explained about 13% of the variance in the rate of citizen complaints about use of force ($R^2 = 0.13$, $F(20,45) = 14.43$, $p < 0.01$). Two key variables hypothesized were significant correlates of citizen complaint rates. The percent of problem-solving officers on the police force was negatively correlated with complaint rates for police departments ($\beta = -0.15$; $p < 0.01$), whereas the level of formalization (i.e., departments with more rules and policies limiting or directing officer behavior) was positively correlated with complaint rates ($\beta = 0.07$; $p < 0.10$). Lastly, one control variable, the poverty level, was positively associated with complaints ($\beta = 0.05$; $p < 0.01$).

Phase 3. Qualitative Analysis Findings

The last phase of this research addressed the second research question which was *why and how organizational characteristics and managerial strategies impact police-community relations?* The qualitative case study of Hartford's police-community relations revealed numerous findings. "Police-community relations" was acknowledged as being a phenomenon that encapsulated mutuality between the police and the community. A police manager stated "it's a partnership. It's give and take. It's understanding and appreciating each other. Appreciating each other's needs and what we can and cannot do." Yet, one caveat is that police-community relations are primarily impacted by police conduct, but ultimately judged and evaluated by the community. During the time of the case study, the current state of relations in Hartford had reached a point of relative improvement compared to historical tensions previously experienced in the city. A community leader emphasized "the community relations have improved tremendously quite frankly. I think that there are many more residents who actually know who their police officers are and respect what the police officers do." Despite the progress made in police-community relations over time, interviewees often hinted towards the future in noting that continual work still needed to be done. One community respondent declared "we are headed positively to a better future. But is there a gap? Absolutely." Likewise, a front-line police respondent acknowledged that police-community relations are "something that you don't just get, you have to constantly work toward, you have to constantly evolve." Geographical comparisons were also made as a benchmark for performance assessments. For example, a police manager stated, "the police-community relations [are] not terrible, but it is not Ferguson." However, there was not one overarching state of relations for the city. Rather, the current state heavily depended upon the specific sub-group or neighborhood being referenced as well as the specific officer(s); thus, portraying within-city differences. For instance, a community respondent clarified that

Figure 2

Police-Citizen Conflict and Communities of Color Across the Contiguous United States

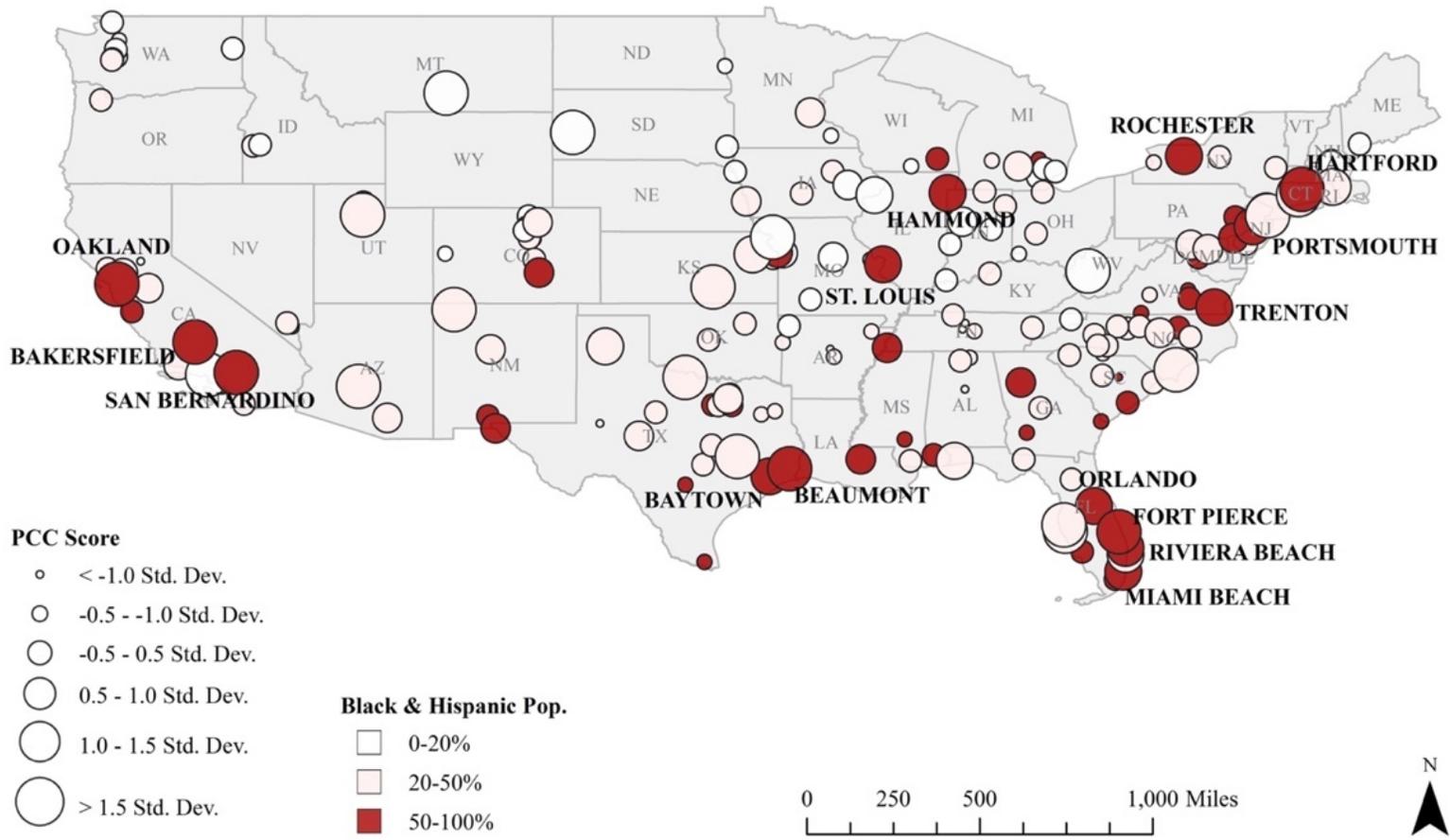


Table 6

Comparing Police Departments with High and Low Police-Citizen Conflict Scores

	Highest PCC (n = 22)			Lowest PCC (n = 34)			Full Sample (N = 278)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Poverty Level (%)	19.99	11.30	37.50	12.25	4.00	29.50	18.03	3.90	39.70
Unemployment Rate (%)	10.50	4.00	19.30	8.55	4.00	14.90	10.10	4.00	25.50
Violent Crime Rate	724.64	220.59	1917.33	336.29	89.98	1215.15	564.41	80.21	2301.24
Female-Headed Household (%)	15.28	7.20	30.70	12.39	7.90	24.90	14.92	6.00	30.70
Median Income	46126.90	27719.00	72271.00	61073.50	29762.00	87894.00	50077.80	26328.00	108998.00
Median Age	34.93	22.50	43.40	36.96	27.60	48.20	34.80	22.50	48.40
Owner-Occupied Housing (%)	53.44	24.70	69.00	62.16	19.50	86.30	55.25	19.50	86.30
Black Population (%)	13.77	0.69	46.95	12.98	1.15	48.78	17.74	0.39	79.33
Hispanic Population (%)	20.66	1.37	59.68	18.04	2.62	82.79	19.97	1.37	82.79

Note. Highest and Lowest PCC scores are in terms of standard deviations above and below the means.

Table 7

Bivariate Correlations for Force and Assault Rate

FORCE AND ASSAULTS		Y1	Y2	X1	X2	X3	X4	X5	X6	X7
Y1	Force Rate (log)	1								
Y2	Assault Rate (log)	0.15*	1							
X1	Gender Representation	0.03	-0.02	1						
X2	Minority Representation	-0.21*	0.02	0.35*	1					
X3	Education Standards	-0.07	0.00	0.12*	0.05	1				
X4	Hiring Standards	-0.08	-0.06	-0.01	0.06	0.02	1			
X5	Community Policing Training Recruits	-0.01	0.03	0.02	0.03	-0.02	-0.03	1		
X6	Community Policing Training In-Service	0.09	-0.07	0.10*	0.12*	-0.01	0.02	0.29*	1	
X7	Formalization	-0.06	-0.02	0.17*	0.17*	0.06	0.10*	0.11*	0.13*	1
X8	Civilian Review Board	0.06	0.10*	0.27*	0.15*	0.07	0.16*	0.06	0.07	0.10*
X9	Community Partnerships	-0.07	-0.02	0.07	0.02	0.00	0.03	0.11*	0.11*	-0.16*
X10	Beat Officers	-0.05	-0.03	0.07	-0.10*	-0.03	0.12*	0.04	0.02	-0.01
X11	SARA/Problem-Solving Officers (log)	-0.10	0.07	0.04	0.00	0.05	0.17*	-0.01	-0.08	0.02
X12	Community-Technology Engagement	-0.02	0.07	0.16*	0.02	0.15*	0.22*	0.12*	0.11*	0.14*
X13	Percent Black	0.14*	-0.13*	0.39*	0.18*	-0.13*	-0.12*	0.05	0.10*	0.09*
X14	Percent Hispanic	-0.22*	0.15*	-0.15*	0.26*	-0.07	0.06	0.04	-0.05	0.03
X15	Poverty Level	0.17*	0.04	0.09	0.12*	-0.19*	-0.06	0.00	0.04	-0.01
X16	Violent Crime Rate (log)	0.31*	0.20*	0.26*	0.18*	-0.19*	-0.08	0.07	0.06	0.06
X17	Police Density (log)	0.24*	-0.11*	0.26*	0.27*	-0.06	-0.20*	0.10	0.15*	0.16*
X18	Northeast	0.05	-0.05	-0.14*	-0.05	-0.09*	-0.21*	-0.01	-0.04	0.02
X19	Midwest	0.16*	0.08	0.01	-0.17*	0.07	0.01	-0.08	-0.03	-0.13*
X20	South	-0.05	-0.17*	0.14*	0.12*	-0.01	-0.10*	0.07	0.08	0.07
X21	West	-0.12*	0.15*	-0.06	0.05	0.03	0.28*	0.00	-0.03	0.06
X22	Force Estimate	0.02	-0.10	-0.02	-0.04	0.13*	-0.11	-0.04	-0.04	0.03

Note. * $p < 0.05$

Table 7

Continued

	FORCE AND ASSAULTS	X8	X9	X10	X11	X12	X13	X14	X15	X16
X8	Civilian Review Board	1								
X9	Community Partnerships	0.07	1							
X10	Beat Officers	0.02	0.01	1						
X11	SARA/Problem-Solving Officers (log)	0.05	0.06*	0.16*	1					
X12	Community-Technology Engagement	0.13*	0.16*	0.16*	0.15*	1				
X13	Percent Black	0.09*	0.02	-0.01	-0.17*	-0.15*	1			
X14	Percent Hispanic	-0.06	-0.06	-0.14*	0.01	-0.09*	-0.33*	1		
X15	Poverty Level	0.16*	0.01	-0.06	-0.15*	-0.20*	0.50*	0.18*	1	
X16	Violent Crime Rate (log)	0.28*	0.03	0.01	-0.07	-0.09	0.56*	0.01	0.68*	1
X17	Police Density (log)	0.18*	0.05	-0.11*	-0.15*	-0.13*	0.58*	-0.21*	0.51*	0.60*
X18	Northeast	0.03	-0.00	-0.25*	-0.17*	-0.21*	0.00	0.09	0.12*	0.03
X19	Midwest	0.12*	-0.01	0.04	-0.03	0.03	-0.01	-0.26*	0.04	-0.04
X20	South	-0.17*	-0.00	0.12*	-0.04	-0.04	0.38*	-0.11*	0.06	0.18*
X21	West	0.11*	0.02	0.04	0.21*	0.19*	-0.38*	0.25*	-0.24*	-0.19*
X22	Force Estimate	-0.08	0.08	-0.11*	-0.08	-0.06	0.03	-0.05	-0.04	-0.00

Table 7

Continued

	FORCE AND ASSAULTS	X17	X18	X19	X20	X21	X22
X17	Police Density (log)	0.18*	0.05	-0.11*	-0.15*	-0.13*	0.58*
X18	Northeast	0.03	-0.00	-0.25*	-0.17*	-0.21*	0.00
X19	Midwest	0.12*	-0.01	0.04	-0.03	0.03	-0.01
X20	South	-0.17*	-0.00	0.12*	-0.04	-0.04	0.38*
X21	West	0.11*	0.02	0.04	0.21*	0.19*	-0.38*
X22	Force Estimate	-0.08	0.08	-0.11*	-0.08	-0.06	0.03

Table 8

Bivariate Correlations for Complaint Rate

COMPLAINTS		Y3	X1	X2	X3	X4	X5	X6	X7	X8
Y3	Complaint Rate (log)	1								
X1	Gender Representation	0.03	1							
X2	Minority Representation	0.06	0.44*	1						
X3	Education Standards	0.01	0.10*	-0.05	1					
X4	Hiring Standards	-0.03	-0.00	0.03	0.06	1				
X5	Community Policing Training Recruits	0.00	0.10*	0.02	0.04	0.13*	1			
X6	Community Policing Training In-Service	-0.01	0.08	0.05	0.04	0.09*	0.23*	1		
X7	Formalization	0.09	0.18*	0.19*	-0.01	0.09*	0.18*	0.09	1	
X8	Civilian Review Board	0.09	0.25*	0.16*	0.03	0.16*	0.02	-0.03	0.11*	1
X9	Community Partnerships	0.05	0.05	0.04	0.02	0.12*	0.10*	0.11*	0.10*	0.03
X10	Beat Officers	0.03	0.12*	0.03	0.03	0.14*	0.11*	0.07	-0.01	0.00
X11	SARA/Problem-Solving Officers (log)	-0.12*	0.02	-0.02	0.05	0.18*	0.26*	0.13*	0.01	0.04
X12	Community-Technology Engagement	-0.01	0.25*	0.17*	0.22*	0.24*	0.16*	0.09*	0.24*	0.13*
X13	Percent Black	0.17*	0.39*	0.20*	-0.12*	-0.11*	0.14*	-0.01	0.19*	0.14*
X14	Percent Hispanic	0.01	-0.22*	0.18*	-0.15*	0.06	-0.08	-0.05	-0.03	-0.10
X15	Poverty Level	0.23*	0.09	0.17*	-0.19*	-0.07	0.03	-0.01	0.02	0.16*
X16	Violent Crime Rate (log)	0.15*	0.22*	0.23*	-0.22*	-0.07	0.09	0.03	0.07	0.28*
X17	Police Density (log)	0.15*	0.20*	0.20*	-0.13*	-0.18*	0.09*	0.02	0.18*	0.18*
X18	Northeast	0.10	-0.20*	-0.14*	-0.12*	-0.20*	0.02	-0.07	0.03	0.03
X19	Midwest	0.04	0.02	-0.11*	0.09	0.00	-0.09*	0.03	-0.14*	0.11*
X20	South	0.03	0.21*	0.16*	0.04	-0.10*	0.06	0.04	0.08	-0.16*
X21	West	-0.15*	-0.06	0.05	-0.05	0.28*	0.00	-0.03	0.05	0.10*

Note. * $p < 0.05$

Table 8

Continued

	COMPLAINTS	X9	X10	X11	X12	X13	X14	X15	X16	X17
X9	Community Partnerships	1								
X10	Beat Officers	0.20*	1							
X11	SARA/Problem-Solving Officers (log)	0.19*	0.30*	1						
X12	Community-Technology Engagement	0.16*	0.22*	0.20*	1					
X13	Percent Black	0.02	-0.02	-0.20*	-0.01	1				
X14	Percent Hispanic	-0.02	-0.04	-0.01	-0.15*	-0.28*	1			
X15	Poverty Level	0.00	0.02	-0.15*	-0.15*	0.47*	0.26*	1		
X16	Violent Crime Rate (log)	0.04	0.04	-0.07	-0.04	0.59*	0.02	0.66*	1	
X17	Police Density (log)	0.09*	-0.04	-0.14*	-0.11*	0.63*	-0.19*	0.52*	0.58*	1
X18	Northeast	0.02	-0.21*	-0.16*	-0.29*	0.08	0.05	0.15*	0.03	0.30*
X19	Midwest	-0.06	-0.01	-0.04	-0.10*	0.05	-0.26*	0.01	-0.05	-0.04
X20	South	0.00	0.10*	-0.04	0.16*	0.35*	-0.07	0.11*	0.19*	0.24*
X21	West	-0.04	0.08	0.22*	0.13*	-0.40*	0.23*	-0.27*	-0.19*	-0.44*

Table 8

Continued

	COMPLAINTS	X18	X19	X20	X21
X18	Northeast	1			
X19	Midwest	-0.18*	1		
X20	South	-0.32*	-0.34*	1	
X21	West	-0.22*	-0.24*	-0.42*	1

Table 9

Ordinary Least Squares Regression Results

	(1) Force Rate (log)		(2) Assault Rate (log)		(3) Complaint Rate (log)	
	<i>b</i> (<i>SE</i>)	β	<i>b</i> (<i>SE</i>)	β	<i>b</i> (<i>SE</i>)	β
Community Policing						
Community Partnerships	-0.21 (0.10)**	-0.11	-0.05 (0.08)	-0.03	0.03 (0.35)	0.01
Beat Officers	-0.00 (0.00)*	-0.12	-0.00 (0.00)	-0.08	0.00 (0.00)	0.00
Problem-Solving Officers (log)	0.04 (0.03)	0.07	0.04 (0.03)	0.08	-0.09 (0.03)***	-0.15
Community-Tech. Engagement	0.00 (0.01)	0.01	0.01 (0.01)	0.03	-0.01 (0.03)	-0.02
Professionalism						
Education Standards	0.03 (0.10)	0.02	-0.01 (0.12)	-0.00	0.01 (0.24)	0.00
Hiring Standards	-0.00 (0.02)	-0.00	-0.04 (0.03)	-0.10	-0.02 (0.03)	-0.04
Comm. Pol. Training Recruits	-0.04 (0.10)	-0.02	0.19 (0.12)	0.10	0.11 (0.22)	0.04
Comm. Pol. Training In-Service	0.12 (0.09)	0.06	-0.12 (0.10)	-0.06	0.02 (0.21)	0.01
Passive Representation						
Gender Representation	-0.00 (0.01)	-0.02	-0.02 (0.01)	-0.08	-0.02 (0.02)	-0.10
Minority Representation	-0.71 (0.18)***	-0.19	0.24 (0.17)	0.06	0.25 (0.29)	0.05
Control Mechanisms						
Formalization	-0.02 (0.02)	-0.03	0.01 (0.02)	0.00	0.07 (0.04)*	0.12
Civilian Review Board	-0.20 (0.16)	-0.09	-0.00 (0.10)	-0.00	0.15 (0.18)	0.06
Control Variables						
Percent Black (city)	-0.00 (0.01)	-0.09	-0.01 (0.00)*	-0.16	-0.00 (0.01)	-0.02
Percent Hispanic (city)	-0.01 (0.00)*	-0.11	0.00 (0.00)	0.05	0.00 (0.00)	0.00
Poverty (city)	-0.00 (0.01)	-0.01	-0.02 (0.01)	-0.14	0.05 (0.02)***	0.25
Violent Crime Rate (log)	0.43 (0.19)**	0.32	0.67 (0.11)***	0.52	-0.17 (0.19)	-0.09
Police Density (log)	0.65 (0.23)***	0.25	-0.41 (0.18)**	-0.16	0.23 (0.39)	0.07
Regional Fixed Effects	Yes		Yes		Yes	
Force Estimate	-0.00 (0.09)	-0.00
Constant	2.55 (0.97)	.	-0.52 (0.61)	.	0.97 (1.26)	.
F test		10.30***		6.69***		14.43***
R-squared		0.23		0.22		0.13
Observations		289		331		269

Note. Entries are unstandardized coefficients (*b*), standardized coefficients (β), and robust standard errors in parentheses (*SE*). 46-47 state clusters across all models. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

“it depends on who you ask [...] having relationships with pseudo-political figures many a times is not having a good relationship with [...] the residents or the family members or the community members.” Likewise, a front-line police respondent acknowledged geographical differences in that “the South [has] a larger Hispanic community [...] that...] tend to call and rely on police more,” whereas “in the North end, people are more hesitant to call the police.”

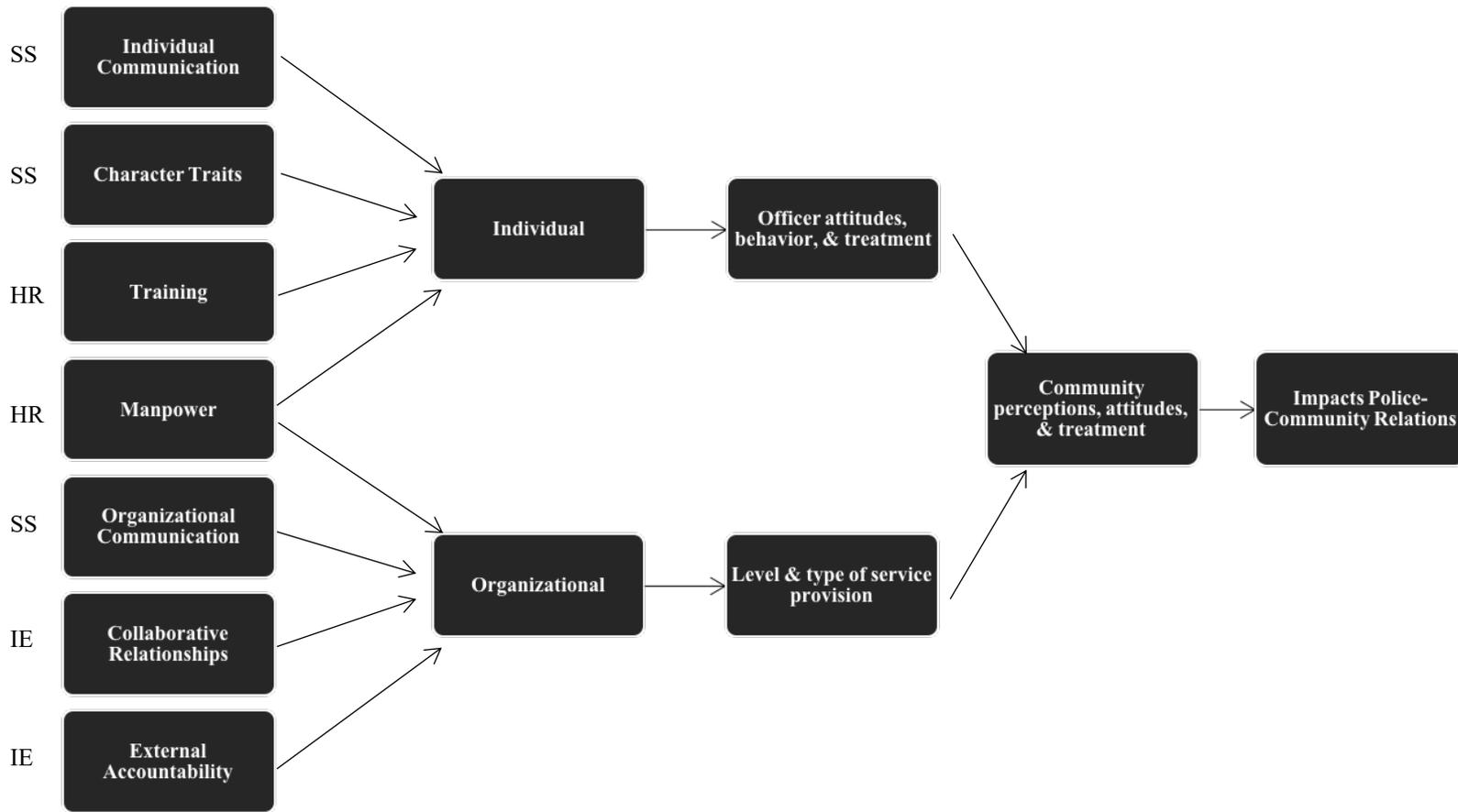
Three main themes emerged as impacting factors of police-community relations in Hartford: (a) cultivating soft skills, (b) investing in human resources, and (c) intentionally engaging—each of which has various subcomponents. These factors impacted police-community relations either through (a) directly impacting officer attitudes and/or behavior or (b) increasing the overall level and/or quality of service provision by the police department. Both of these mechanisms were consequential for shaping the perceptions and attitudes of citizens who ultimately evaluate police-community relations. Figure 3 displays the subcomponents of the three main themes and the processes by which they impact police-community relations, which are further elaborated below.

“Soft skills” impact police-community relations particularly during individual police-citizen interactions, which have immediate impacts on citizens within a given situation. The specific soft skills that were referred to included communication with the community and an officer’s character. Both individual-level communication (via incidents or interactions) and organizational-level communication (via dissemination of information) were deemed as impacting factors of police-community relations. For instance, referring to individual communication, a front-line police respondent candidly remarked “community relations is communication,” which is a way to “win the community one person at a time.” Effective communication can serve as a way to engage the community, humanize the police, and as a de-escalation mechanism useful in tense situations—all of which allow for community trust to develop. A community respondent also confirmed that the police have “a good percentage of trust [...] only coming through communication.” Further, direct communication from the police to the community was noted to have a “calming impact” and “it makes a big difference in terms of how people deal with the police in general” (community respondent). Key character traits that were mentioned included officers being compassionate, caring, and respectful, all of which subsequently impact police behavior and community perceptions. A community resident emphasized “care about your neighborhood, where you’re working, care enough to have passion to build relationships with community residents” and then the community is “more willing to open up and have relationships.” Treatment was often mentioned as an indicator of respect. For instance, a community respondent shared that when “people are not treated with respect, as a result, you have the folks in a community [with] a bad attitude towards the police.”

Investing in human resources was particularly important because building positive police-community relations is labor-intensive. Thus, impactful hands-on training and sufficient levels of manpower (i.e., staffing) are both requisite. Cultural sensitivity training and crisis intervention training were often discussed as impactful due to their interactive and engaging format. These trainings provided officers with heightened interpersonal skills and broadened their understanding of the diverse populations in the city. In reflecting on the religious diversity training provided at the police department, a front-line police respondent stated, “I’m Puerto Rican, and I can relate to some of the [stuff] that he’s saying” and he further added that “it kind of gave me a different point of view.” On the other hand, not having adequate staffing levels to effectively and efficiently service the city was a resounding concern. Inadequate staffing impacts officers’ workloads, increases response times, heightens officer stress and reduces community

Figure 3

The Processes by Which Organizational and Managerial Factors Impact Police-Community Relations



Note. “SS” refers to soft skills, “HR” refers to human resources, and “IE” refers to intentional engagement

resources—all of which negatively impact police-community relations. One community respondent noted, “the more officers you have, the more you can dispatch. So that would help [...] in some of the behavior, maybe they are not so tired, so drained, so short tempered that maybe they would behave better.”

Lastly, there must be intentional engagement between the police and the community in order to build positive relationships. “Intentional engagement” includes both collaborative relationships as well as external accountability mechanisms. Collaborative relationships include police engaging the community in internal activities, police engaging externally in the community, and joint cooperative partnerships between the police and the community. All three of these foster positive relationships by allowing for familiarity between the police and community to develop, portraying to the community that the police department cares, and building mutual trust. For example, the police department routinely held “Public CompStat” where the community was invited to attend meetings to learn about crime statistics. A police manager elaborated on this event’s impact saying it “shows our transparency [...] Because they feel as though the information is going back and forth and it’s a two-way street” and thus “it makes the community a lot more comfortable with what we’re doing.” Contrarily, while external accountability mechanisms involved the community in a formal capacity to hold police responsible for their conduct, the lack of effective implementation often led to negative perceptions in the community. The three external accountability mechanisms present in the city of Hartford included a court-ordered consent decree, a civilian complaint review board, and a firearms discharge committee. However, the issues pertaining to implementation were often discussed as resulting in ineffectiveness and being potentially detrimental to police-community relations. For instance, in discussing the civilian review board, a community respondent noted it had “not been at full strength for a long time and a lot of things have fallen [through] the cracks.”

VIII. Major Conclusions and Recommendations

Summary of Research Findings

This research identified (a) which organizational and managerial factors of police departments impacted police-community relations, and (b) why and how these factors affected such relations. A mixed methods approach, combining quantitative and qualitative research methodologies, was utilized to provide a robust analysis linking police-community relations to organizational characteristics and managerial strategies. The majority of police departments included in the analysis maintained average police-citizen conflict levels, with 8% of the sample having “high” police-citizen conflict scores (i.e., at least 1.5 standard deviations above the mean) and 12% of the sample having “low” police-citizen conflict (i.e., at least 1.0 standard deviations below the mean). Cities labeled with “high” police-citizen conflict also had larger communities of color and higher poverty rates, unemployment rates, and violent crime rates when compared to cities labeled with “low” police-citizen conflict.

In assessing the correlates of police-citizen conflict, the organization and management of police departments may not necessarily provide the most meaningful understanding of police-citizen conflict. Specific variables were found to be significantly correlated with use of force and citizen complaints, yet none were identified for assaults against law enforcement. Three variables were negatively associated with police use of force rates: the presence of partnerships between the police and the community, the percent of officers assigned to patrol specific geographic

areas, and the level of minority representation. Two variables were significantly associated with complaint rates: the percent of police officers dedicated to problem-solving responsibilities displayed negative correlations, whereas the extent to which a police department was formalized exhibited positive correlations. Based on the small number of statistically significant correlates found (out of the 12 hypothesized variables), only modest support can be offered for the organizational theories tested herein to explain police-community relations. Further, there were no variables that held equivalent impacts across the three police-citizen conflict outcomes measured. Thus, it may be that the relevance of specific organizational and managerial factors depends on the specific outcome being measured.

In regard to the “how” and “why” of organizational and managerial impacts on police-community relations, there were three overarching themes that emerged from the qualitative findings (each with associated sub-themes). The first main theme revolved around cultivating soft skills (sub-themes: communication and character traits), the second was investing in human resources (sub-themes: hands-on training and manpower), and the third theme was intentional engagement (sub-themes: collaborative relationships and external accountability). Two primary mechanisms were identified by which organizational- and individual-level factors impact police-community relations (see Figure 3). First, officer communication skills, character traits, hands-on training, and manpower each operate at the individual-level and directly impact police officer attitudes and their subsequent behavior. Second, organizational communication, collaborative relationships, external accountability, and manpower operate at the organizational-level) and affect the level and quality of services provided by the police department as a whole.

Integrating the Findings

The findings of the three separate phases of this research speak to and build upon each other in two important ways. First, the question must be asked: can police-citizen conflict and positive police-community relations co-exist? The police-citizen conflict index created in the first phase of this research was used in the decision-making process for the qualitative case study selection (which was the last phase of the research). Hartford (CT) was chosen partly because of its high police-citizen conflict levels. Yet, the Hartford Police Department devoted significant efforts to improve police-community relations, despite these statistics. High police-citizen conflict levels may not necessarily preclude relationships from being built and fostered. It could be that police-citizen conflict (as measured by the behavioral indicators of violence between civilians and police) and police-community relations (as measured by the perceptual responses from interview respondents) can co-exist. Thus, negative statistics may not necessarily equate to poor interpersonal relationships.

The second question that must be asked is: why aren't organizational and managerial correlates significantly impacting police-citizen conflict outcomes (as indicated by the findings from phase 2 of this research)? Phase 2 of this research depicted only few and specific organizational and managerial characteristics being statistically and substantively significant correlates of police-citizen conflict outcomes. The lack of overall findings may be attributed to one of two reasons: (a) organizational and managerial factors simply may not matter as much as theorized or (b) the correlates included in the analysis were not fully operationalized to understand implementation mechanisms. The qualitative findings from phase 3 of this research provide further insights here. First, the case study portrayed that, in addition to organizational-level factors, individual-level factors pertaining to police officers also impact police-community

relations (e.g., officer communication and character traits), which were not fully accounted for in the regression models. Second, the case study revealed two organizational-level factors that impair police-community relations: the lack of sufficient staffing and inadequate implementation of external accountability mechanisms. These findings may speak directly to the lack of significance for two variables included in the regression model: (a) whether community policing training is incorporated during recruitment and/or in-service training and (b) the presence of civilian review boards—both of which were coded as binary (i.e., dummy) variables. The binary operationalizations do little to inform about ground-level implementation. However, the case study revealed that inadequate staffing increases officer workloads, which redirects manpower away from community engagement activities toward responding to calls for service. Thus, even if departments do incorporate community policing training, a shortage of resources and time can inhibit the effectiveness of such training efforts. Likewise, merely having external accountability mechanisms in place will not suffice to positively impact police-community relations without appropriate enforcement. Accordingly, measuring the mere presence of a civilian review board does not shed light on implementation.

On one hand, a portion of this study was able to compare across several organizational contexts and, on the other hand, this study was able to explore individual perspectives within one specific organizational context. Therefore, this research demonstrates that both the police department, as an organization, as well as the police officers who are responsible for directly interacting with the community, are important in terms of impacting police-community relations. The findings also highlight the importance of appropriately accounting for the implementation or enforcement of organizational and managerial factors.

Recommendations

This research and its associated findings suggest seven key recommendations for policy, practice, and data collection. First, hands-on and interactive training, such as cultural diversity and crisis intervention training, can broaden officers' understanding of and interaction with diverse populations to help prepare them when responding to calls for service. Second, in the hiring phase, police departments can test for individual interpersonal skills and proficiency, such as communication skills and desirable character traits (like respect and empathy). Such tests should not necessarily rule out potential candidates, but it can provide useful insight on officers who may need further training and mentoring. Third, police departments need support and resources in order to engage in community problem-oriented policing practices—particularly those departments with high service demands operating in resource-constrained communities. This research has shown that fostering community partnerships, building collaborative relationships, and having officers dedicated to problem-solving roles as well as patrolling specific geographical beats all impact police-community relations. Fourth, strategic investments should be made in the recruitment, hiring, and promotion of diverse and representative personnel to match the demographic and socioeconomic makeup of the community. Fifth, external accountability mechanisms should only be mandated when coupled with appropriate support for implementation as well as the evaluation of effectiveness. Sixth, there is a need for better data collection and reporting on police-civilian encounters and their associated outcomes over time. Additional data is needed to understand the more frequent and daily encounters that occur between police officers and civilians, apart from police-citizen conflict incidents which may be rare. Lastly, in order to adequately explain the variance in police-community relations, the needle

must be moved beyond merely measuring the presence or absence of certain organizational and managerial features in police departments. Rather, more nuanced details regarding the implementation of organizational imperatives and managerial priorities should be incorporated.

Strengths and Limitations

This work represents the first attempt to create a composite police-citizen conflict index as an indicator of police-community relations and a measure of relative organizational performance. In addition, compared to other studies that have often examined the impact of specific and isolated organizational factors on policing outcomes, this study compared the impact of multiple factors across three different police-citizen conflict outcomes (police use of force, civilian complaints, and assaults against officers). Overall, this study used a mixed methods approach, incorporating both quantitative (phases 1 and 2) and qualitative (phase 3) research, to understand how the organization impacts relationships between police and communities. In particular, the qualitative component enhanced scientific knowledge in that it revealed potential causal mechanisms between organizational characteristics and managerial strategies, on one end, and police-community relations, on the other end.

While this research proposed a robust mixed methods approach, three major limitations remain. In regard to data availability, compiling secondary data from several sources limited the number of cities included in the analysis. Since the unit of analysis was at the city-level, insights cannot be provided for police departments serving smaller towns or entire counties. Finally, the qualitative component was an analysis of one case, which revealed a wealth of intricate findings that were context-specific and thus not necessarily generalizable. However, the findings may still provide useful insights to police departments serving populations with similar demographic, socioeconomic, and/or historical profiles. The findings from the case study can also enhance the understanding of larger theoretical processes and conceptualizations of bureaucrat-citizen relations, more generally, and police-community relations, specifically.

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