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## How perceptions of the institutional environment shape organizational priorities: findings from a survey of police chiefs

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### ABSTRACT

A long tradition of research has examined the influence of organizational environments on criminal justice agencies. Based on survey data from a sample of local police chiefs, this study explores the effects of the institutional environment on police agency priorities. Specifically, we investigate how the perceived importance of different sectors of the institutional environment influences police agency priorities, as reported by police chiefs. The analyses reveal that certain sectors of the institutional environment exert greater influence on police organizational priorities than others. Moreover, the influence of institutional sectors differs according to the specific type of priority. Our findings reveal that institutional considerations exert more consistent effects on the importance of maintaining relationships with constituents than on maintaining law and order or adopting innovative practices. We draw on institutional theory in explaining the study's findings.

### KEYWORDS

Police chief; institutional environment; institutional theory

### Introduction

Nearly a half-century ago, Wilson (1968) posited that the behavior of local police agencies was influenced by the structure and culture of local politics. Though now dated, Wilson's classic study of police agencies in eight cities remains one of the most influential academic works in criminal justice (Maguire and Uchida 2000; Zhao, He, and Lovrich 2006; Zhao, Ren, and Lovrich 2010) and has inspired numerous empirical tests (e.g., Crank 1990; Hassell, Zhao, and Maguire 2003; Langworthy 1985; Liederbach and Travis 2008; Matusiak 2014; Slovak 1986). Wilson's study was published at a pivotal time in the development of two bodies of research and theory, one focusing on complex organizations and the other on criminal justice. Within the former, older closed-systems models of organizations were being replaced by an open-systems perspective that acknowledged the powerful influence of the environment in which organizations are situated (Lawrence and Lorsch 1967; Thompson 1967). Scholars married this new open-systems perspective on organizations with the growing academic interest in the structures and behaviors of police and other criminal justice agencies (e.g., Clark, Hall, and Hutchinson 1977; Reiss, Jr. and Bordua 1967). Wilson's study served as the catalyst for generations of subsequent research focused on explaining interagency variations in policing from a variety of theoretical perspectives (e.g., Katz 1997; Katz, Maguire, and Roncek 2002; Langworthy 1985; Matusiak 2013; Smith and Holmes 2003; Stucky 2005; Zhao 1994).

One of the most fruitful areas of research to emerge from the open-systems perspective has been the study of how police organizations are influenced by their institutional environments. As Crank and Langworthy (1992, 341) note, policing occurs ‘in an environment saturated with institutional values.’ The institutional environment is home to a variety of entities with the ability to influence the well-being of police organizations. Crank and Langworthy (1992, 342) emphasize that police agencies derive legitimacy by conforming to ‘institutional expectations of what the appropriate structures and activities for a police department are.’ The study of this aspect of organizational environments is based on institutional theory, which stems from the pioneering work of Meyer and Rowan (1977), DiMaggio and Powell (1983), and other notable organizational scholars. Institutional theory has had a profound influence on organizational scholarship across multiple disciplines. A growing body of scholarship has applied this perspective to understanding the impact of the institutional environment on police organizations (Crank 2003; Crank and Langworthy 1992, 1996; Giblin 2006; Giblin and Burruss 2009; Giblin, Schafer, and Burruss 2009; Katz 2001; Matusiak 2013).

The present study builds on previous applications of institutional theory to the study of police organizations by testing the influence of police chiefs’ perceptions of the institutional environment on agency priorities. We focus on seven sectors of the institutional environment: federal and state law enforcement agencies, national media, local media, police officer associations, elected officials, other criminal justice agencies, and emergency medical service providers. Drawing on survey data from a sample of police chiefs, we estimate a structural equation model that links perceptions of the institutional environment with agency priorities. We begin by providing a brief overview of institutional theory in the study of organizations. We review previous scholarship that has applied institutional theory to the study of policing. Then, we present our data, methods, findings, and conclusions.

## Literature review

### *Institutional theory*

According to institutional theory, organizations are heavily influenced by the institutional environments in which they are embedded (Donaldson 1995). The institutional environment for police agencies is comprised of various elements that establish norms and expectations about what a good police agency should look like. Powerful entities in the institutional environment – sometimes referred to as institutional sovereigns – can exert considerable influence over the structures and operations of police organizations. Sovereigns may be local, state, national, or international. They include police professional organizations (such as the International Association of Chiefs of Police), state and national accreditation bodies, state training and certification boards, other criminal justice agencies, and organizations responsible for related functions, such as emergency response. Sovereigns may also include elected officials, the media, community groups, and special interest groups. These entities are important because they are able to confer or withhold legitimacy. Thus, a key aspect of being a skilled leader is learning how to navigate the institutional environment and satisfy the demands of numerous constituencies to preserve legitimacy.

Legitimacy provides an organization with numerous benefits. According to Maguire (2014):

[L]egitimacy helps to establish autonomy, generate additional political and civic support, and maximize the flow of resources. This primal concern with legitimacy also leads police agencies to adopt policies, practices, and structures considered *de rigueur* in the policing industry. These features may not suit their unique contexts or needs; yet adopting them enables the agency to appear progressive. (87–88)

Organizations in highly institutionalized environments acquire legitimacy by adopting certain signs and symbols of technical proficiency – such as having the right types of programs, policies, or special units – rather than by providing any actual evidence that these structural or operational elements improve performance. This preoccupation with the appearance of being progressive explains, for instance, how a police agency that is not facing a serious gang problem might end up establishing a specialized gang unit (Katz 2001). Legitimacy is built through an interactive process between organizations and

their environments (Aldrich 1999; Donaldson 1995). Organizations that are most responsive and most adept at meeting the expectations of their institutional environments (for example, by changing their structure in ways widely believed to be socially acceptable) are granted greater legitimacy and are therefore more likely to gain access to crucial resources. On the other hand, organizations that are deemed unresponsive to their environments may be 'more vulnerable to claims that they are negligent, irrational, or unnecessary' (Meyer and Rowan 1977, 349).

Institutional environments are complex and may give rise to competing demands on organizations. Moreover, demands from the institutional environment often conflict with those arising out of concerns with technical proficiency. As a result, organizations in heavily institutionalized environments must find a way to address a mix of competing institutional and technical demands in order to preserve legitimacy, effectiveness, and efficiency. One way organizations can resolve this conflict is by decoupling visible policies and structures from routine operating practices (Meyer and Rowan 1977). In this way, organizations can buffer their technical core (where the majority of the organization's work gets done) from external pressures imposed by the environment (Thompson 1967). Decoupling enables the core work of the organization to continue undisturbed while more peripheral elements of the organization generate the appearance of being responsive to demands from the institutional environment. The decoupling phenomenon helps explain why so much of what passes as police reform is really just 'symbolic reform at the edges' (Maguire, Uchida, and Hassell 2015, 90).<sup>1</sup>

### ***Institutional theory in policing***

Policing scholars have embraced institutional theory despite formidable challenges in the operationalization and measurement of key concepts (Maguire 2014). Building upon Crank and Langworthy's (1992) initial application of institutional theory to the police, researchers have explored how police agencies seek to establish legitimacy by adapting to the expectations of key actors or entities in their institutional environments. For example, studies have reported on the legitimacy implications of agencies adopting – or failing to adopt – community-oriented policing (Maguire and Katz 2002; Zhao, Lovrich, and Robinson 2001), Compstat (Willis 2011; Willis and Mastrofski 2011; Willis, Mastrofski, and Weisburd 2007), green policing (Worrall 2010), special units (Katz 2001), and a variety of other phenomena. Overall, police agencies seem to benefit when they adopt innovations that are viewed favorably within certain influential sectors of their institutional environments. Other researchers have addressed the importance of stakeholder perceptions (Maguire and King 2007; Vitale 2005) in determining legitimacy. Responding to public sentiment demonstrates to powerful outside constituents that police organizations are responsive to their concerns (Crank 2003). At the same time, police agencies that are not responsive to concerns or expectations arising from their institutional environments may end up paying a hefty price in terms of lost legitimacy or resources. Taken to the extreme, legitimacy crises can ultimately lead to the disbanding of a police agency, especially for smaller agencies (King 2014).

During the 1990s, police departments in the USA came under considerable pressure to adopt community policing. Many responded by establishing specialized community policing units or positions that left the core work of the agency to continue policing as usual. This enabled police leaders to report that they were doing community policing, thus satisfying demands from their institutional environment without disrupting routine operating practices (Maguire 1997; Zhao, Lovrich, and Robinson 2001). Research on the adoption of community policing in American police departments is consistent with propositions from institutional theory. For instance, some research suggests that police agencies may have claimed to practice community policing to enhance their eligibility for federal funding (Maguire and Katz 2002; Maguire and Mastrofski 2000). According to Crank (1994), community policing emerged largely out of concerns with police legitimacy. He argues that community policing resulted from two myths. The first was the myth that communities are comprised of like-minded individuals who share similar histories and perceptions and have similar expectations of police. The second was the historically romanticized myth of police officers as watchmen who look out for their community's best interests.

Taken together, these myths served as the basis for community policing and provided a legitimating mechanism that enabled police organizations to ‘ceremonially regain the legitimacy’ they lost in the 1960s (Crank 1994, 347).

Researchers have also applied institutional theory to the widespread diffusion of the Compstat model (Willis 2011; Willis and Mastrofski 2011; Willis, Mastrofski, and Weisburd 2007). Compstat and similar initiatives are a source of legitimacy for police organizations because they demonstrate that police are doing the ‘right things’ to control crime. Willis, Mastrofski, and Weisburd (2007) found that in the three agencies they studied, the implementation of Compstat was motivated by the need for the organization to appear more progressive to its constituents, not by a genuine desire to improve performance. Willis and Mastrofski (2011, 86) note that:

[T]he display of crime statistics and electronic maps at regular Compstat accountability meetings sent a powerful message that the organization was taking crime seriously whether or not these data had a significant influence on the selection of effective crime prevention strategies.

Incorporating new technologies often allows police agencies to demonstrate that they are being responsive to demands from the environment, whether or not such changes improve technical proficiency.

The application of institutional theory to the study of policing has also focused on the process of organizational change. When organizations implement changes in response to pressures or demands from the institutional environment, they are said to become more ‘isomorphic’ (consistent or concordant) with their environment. Institutional theorists argue that isomorphic pressures tend to take three primary forms: coercive, mimetic, and normative (DiMaggio and Powell 1983). Coercive isomorphism occurs when an organization is forced through legal or contractual obligations to make certain changes. For instance, courts may order police agencies to adopt certain changes to protect people’s civil liberties. Mimetic isomorphism occurs when an organization copies or mimics the structures or practices of other organizations. Previous research has demonstrated the importance that police officials attribute to the practices of other police organizations (Giblin 2006; Matusiak 2013). Finally, normative isomorphism occurs as a result of the diffusion of norms and standards throughout an organizational field. It is a process of homogenization that results from shared cultural understandings within an organizational field (such as within the policing field) about which structures and practices are most appropriate, regardless of whether there is evidence to support these beliefs (DiMaggio and Powell 1983).

Some scholars have considered the impact of the institutional environment on the diffusion of innovation among police agencies. For instance, Roberts and Roberts, Jr. (2009) found that police departments were more likely to incorporate the use of computers for crime mapping if they had contact with people in other departments employing the same technologies. Similarly, Giblin (2006) investigated the role of institutional isomorphism in the diffusion of crime analysis units. While he did not find *quantitative* evidence of mimetic isomorphism in organizational structures, *qualitative* evidence revealed that police agencies tend to emulate their peers with regard to crime analysis activities and practices, but not with regard to ‘the structure of the crime analysis function’ (Giblin 2006, 660). Funding and crime rates were largely irrelevant, but accreditation had a marginally significant impact on the creation of crime analysis units (Giblin 2006). These findings suggest that crime analysis units may have been established, in part, in response to legitimacy concerns. Police organizations are more likely to adopt innovations when the innovations are supported by the institutional environment (Burruss and Giblin 2014).

Institutional theory presents a variety of challenges for empirical research, not the least of which is difficulty in operationalizing many of its key concepts. Various scholars have emphasized the need for empirical tests of institutional theory (Katz, Maguire, and Roncek 2002; Maguire and Uchida 2000; Willis, Mastrofski, and Weisburd 2007). For instance, Willis, Mastrofski, and Weisburd (2007, 153) conclude that while the literature ‘offers an intriguing and provocative perspective of the structures and practices of policing, it does not offer thorough and conclusive empirical tests of the superiority of institutional theory.’ The present study seeks to contribute to this body of research by examining how police chiefs perceive various sectors of their institutional environments and how these perceptions shape agency priorities.

While existing research has documented numerous examples of institutional environments influencing the structures and operations of police agencies (Burruss and Gibling 2014; Gibling 2006; Hassell, Zhao, and Maguire 2003; Katz 2001; Roberts and Roberts, Jr. 2009; Willis and Mastrofski 2011; Zhao, Lovrich, and Robinson 2001), the precise conduits through which these effects are transmitted are not yet well understood. By what process, exactly, does the institutional environment influence the goals, structures, and behaviors of police organizations? Police chiefs serve as the principal boundary spanners in police agencies, holding a unique and crucial position at the intersection of the organization and its environment. Researchers have highlighted the crucial role of police chiefs:

A police chief is the instrumental actor at the nexus of police tradition and antagonistic external interests. More or less influential individually, the chief is, in any case, a reference point for organizing the complex processes by which the principles of police legitimacy and modes of their expression are socially constructed. (Hunt and Magenau 1993, 84)

Despite widespread acknowledgment of the importance of police chiefs as boundary spanners between police agencies and their environments, little is known about how they perceive their institutional environments or how they weigh the relative influence of various environmental sectors. In this paper, we explore the proposition that different sectors of the institutional environment may exert differential impacts on agency priorities as reported by chiefs. We draw primarily on research and theory on the relationships between organizations and their institutional environments to frame our approach.

Much has been written about police chiefs in general, as well as their likely prospects for effecting change and being good leaders (Schafer 2013). Rather than viewing police chiefs as omnipotent leaders who have a free hand to run their organizations as they see fit, researchers emphasize the considerable constraints that chiefs face in their efforts to alter the status quo in police organizations. For instance, Mastrofski (1998, 183) notes that the job of a police chief, particularly in large urban departments, is not so different from a rodeo cowboy 'who with great skill manages merely to stay astride his bucking bronco until the bell sounds.' Little, however, has been written about how chiefs perceive the institutional environment and how these perceptions shape their decisions and behaviors. We contend that the influences exerted by the institutional environment on police agency priorities operate primarily through police chiefs. Put differently, police chiefs represent a central conduit through which institutional environments exert influence over police agencies. Testing the association between police chiefs' perceptions of the institutional environment and the priorities of police agencies provides a partial test of the extent to which institutional environments influence police organizations.

## Data and methods

Data for the current study were drawn from a survey of police chiefs who participated in the Texas Police Chiefs Leadership Series (TPCLS) program. The TPCLS is mandated by the State of Texas, which requires that chiefs from all local and special law enforcement agencies participate in 40 hours of continuing education every 2 years. The TPCLS is administered by the Law Enforcement Management Institute of Texas, which is located in Huntsville. Participating chiefs completed self-administered, paper surveys between October 2011 and July 2013. Surveys were administered to 994 participants, with 926 chiefs providing completed surveys (a 93.2% response rate). Fourteen of these respondents were later deemed ineligible based on our selection criteria, leaving 912 useable survey responses from 898 unique police agencies.<sup>2</sup>

Data from the 2008 Census of State and Local Law Enforcement Agencies (CSLLEA) indicate that there are approximately 1913 law enforcement agencies in Texas. However, the TPCLS does not service all of these agencies. Constable/marshal agencies ( $n = 605$ ) and county sheriffs' departments ( $n = 254$ ) are not included in TPCLS programs because they are led by elected officials, which makes them unique relative to police chiefs, who are typically appointed, not elected (Falcone and Wells 1995). Additionally, chiefs in major cities (population greater than 100,000) ( $n = 32$ ) participate in a special continuing education program separate from the TPCLS that is directed specifically toward issues affecting larger municipalities. Therefore, of the approximately 1022 remaining agencies whose chiefs are mandated

to participate in the TPCLS, our survey was administered to 977 (95.6%) of them. We collected useable data from 898 unique agencies (87.9% of the eligible agencies in Texas).

The survey gathered data on three types of variables useful for understanding the relationships between police chiefs and their institutional environments. First, the survey asked police chiefs to rate the importance of a variety of agency functions. We treated the responses to these survey items as indicators of the organization's priorities. Based on these indicators, we computed three composite measures of organizational priorities that serve as the *dependent* variables in this study. Second, the survey asked police chiefs to rate the potential influence of a variety of entities (such as elected officials and local media outlets) located in different sectors of the institutional environment. Measures of the perceived influence of seven sectors of the institutional environment serve as the key *independent* variables in this study. Third, demographic characteristics of police chiefs (such as age, education, and tenure), and basic descriptive information about the police agency (e.g., agency size) serve as control variables in this study.

### **Dependent variables**

The dependent variables in this study are three composite measures of organizational priorities constructed from 13 survey items using confirmatory factor analysis (CFA). These composites are intended to measure three different dimensions of organizational priorities: maintaining law and order, maintaining positive working relationships with constituents, and adopting innovations. For each of the 13 items, police chiefs were asked to rate the importance of agency priorities on an ordinal scale ranging from 0 (not important at all) to 5 (extremely important). The 13 survey items are listed in Table 1 along with the dimensions they are intended to measure and the factor loadings for each item. Factor loadings ranged from a low .66 to a high of .93, with a mean of .80. The model fit the data well according to multiple criteria.<sup>3</sup> The three composite measures have strong positive correlations with one another (ranging from .50 to .71), but the correlations are not large enough to raise concerns about discriminant validity.<sup>4</sup>

### **Independent variables**

The main independent variables of interest in this study are composite measures rating the influence of seven sectors of the institutional environment. Each measure is an unweighted additive index comprised of multiple survey items with ordinal response options. The seven sectors include federal/state law enforcement (6 items), national media (4 items), local media (2 items), police employee associations (4 items), elected officials (3 items), local criminal justice organizations (5 items), and local

**Table 1.** Confirmatory factor analysis results for three measures of organizational priorities.

Indicators	Loadings
<i>Maintain law and order</i>	
Enforce laws and local ordinances	0.660
Control or have low rates of violent crime	0.897
Control or have low rates of nonviolent crime	0.916
Maintain order	0.786
<i>Maintain relationships with constituents</i>	
Ensure that police employees are satisfied with their jobs	0.710
Keep the agency running smoothly – everyone should get along	0.695
Maintain a good working relationship with my officers and employees	0.719
Have a positive image in the local media	0.864
Have positive relationships with local politicians	0.791
Have positive relationships with local residents	0.806
<i>Adopt innovations</i>	
Adopt innovations/programs/tactics other agencies have adopted	0.913
Adopt innovations/programs/tactics publicized by state or federal agencies	0.927
Adopt innovations/programs/tactics because they can be funded by grant money	0.749

emergency response organizations (2 items). Each item required police chiefs to rank the potential influence, whether positive or negative, of a particular constituency. Participating chiefs ranked each constituency on an ordinal scale ranging from 0 (not important at all) to 5 (extreme importance). The survey items used to measure the perceived importance of each sector are listed in Appendix 1.<sup>5</sup>

In addition to the independent variables included in the model for substantive purposes, we also controlled for the influence of a variety of individual-level and agency-level characteristics of the respondents. We included five individual-level characteristics of the respondents as independent variables in the model: sex, race, education, years of experience in law enforcement, and whether the chief was hired from inside or outside the agency. For purposes of this study, sex (female = 0, male = 1) and race (nonwhite = 0, white = 1) were both treated as binary variables. Participants were primarily male (96.7%) and the majority of participants were white (79.0%). Education is an ordinal variable that ranges from 1 (high school diploma or GED) to 7 (PhD).<sup>6</sup> More than half (57.4%) of the respondents reported having an Associate's degree or beyond. Years of experience in law enforcement is a continuous variable that ranges from 1 to 47 years, with a mean of 26 years. Whether the chief was hired from inside or outside the agency is a binary variable (external = 0, internal = 1). More than half of the participating chiefs (54.9%) were hired for their current position from outside of the agency.

We also included three independent variables to control for jurisdictional/agency characteristics. Two dummy variables were included in the model to control for the nature of the jurisdiction (urban, suburban, or rural): one for whether the department serves an urban jurisdiction (no = 0, yes = 1) and one for whether the department serves a rural jurisdiction (no = 0, yes = 1). In both cases, suburban agencies serve as the reference category. Approximately 40.5% of chiefs reported that their agencies serve rural communities, with 26.5% serving suburban areas and 33% serving urban areas. Finally, we included a measure of agency size based on the number of full-time sworn officers with arrest powers. Agency size is a continuous variable that ranges from 0 to 474, with a mean of approximately 20 and a median of 9 full-time sworn officers.<sup>7</sup>

## Results

We estimated a single structural equation model to test the effects of the independent variables on the dependent variables. The model included three dependent variables measuring organizational priorities as articulated by participating police chiefs, and 15 independent variables (7 measuring the respondent's assessment of the importance of different sectors of the institutional environment, 5 measuring individual-level characteristics of respondents, and 3 measuring agency/jurisdictional characteristics). Because the three dependent variables are specified as latent variables, the model includes both a measurement (CFA) component and a structural (regression) component. The whole model was estimated simultaneously using a robust mean and variance-adjusted weighted least squares estimator in Mplus (Muthén and Muthén 1998–2012). The model fit the data well according to several fit measures ( $\chi^2 = 727.03$ ,  $df = 265$ ,  $p < .000$ ; RMSEA = .046; CFI = .973; TLI = 0.964; WRMR = 1.17).<sup>8</sup> Table 2 contains standardized linear regression coefficients and associated  $p$ -values for the structural portion of the model.<sup>9</sup>

Taken together, the independent variables in the model explained 24.5% of the variation in police chiefs' ratings of the importance of *maintaining law and order*. Three of the seven institutional sectors (local media, local criminal justice organizations, and local emergency medical organizations) exerted a statistically significant effect on ratings of the importance of maintaining law and order. Three of the control variables (sex, race, and education) also exerted significant effects on these ratings. Respondents who were male, white, and more educated were *less* likely to view maintaining law and order as important.

The independent variables explained 33.1% of the variation in police chiefs' ratings of the importance of *maintaining relationships with constituents*. Six of the seven institutional sectors (all but federal/state law enforcement agencies) exerted statistically significant effects on ratings of the importance of maintaining relationships with constituents. Two of the control variables (race and education) also exerted



**Table 2.** Linear regression results.

	DV1: Maintain law & order		DV2: Maintain relationships		DV3: Adopt innovations	
	$\beta$	<i>p</i>	$\beta$	<i>p</i>	$\beta$	<i>p</i>
<i>Institutional sectors</i>						
Federal/state law enforcement	.088	.082	.025	.638	.309	<b>.000</b>
National media	−.040	.371	−.096	<b>.031</b>	−.040	.331
Local media	.103	<b>.007</b>	.077	<b>.034</b>	.031	.355
Police employee associations	.072	.080	.220	<b>.000</b>	.224	<b>.000</b>
Elected officials	−.002	.957	.108	<b>.005</b>	−.026	.455
Local criminal justice organizations	.241	<b>.000</b>	.204	<b>.000</b>	−.002	.966
Local emergency medical organizations	.091	<b>.022</b>	.100	<b>.014</b>	.164	<b>.000</b>
<i>Controls (individual-level)</i>						
Years in law enforcement	−.034	.419	.024	.569	−.030	.427
Sex (male = 1)	−.129	<b>.007</b>	−.069	.093	−.103	<b>.002</b>
Race (white = 1)	−.109	<b>.010</b>	−.189	<b>.000</b>	−.294	<b>.000</b>
Education	−.148	<b>.001</b>	−.203	<b>.000</b>	−.110	<b>.009</b>
Hired from inside (yes = 1)	−.007	.872	−.032	.457	−.016	.680
<i>Controls (agency-level)</i>						
Urban jurisdiction (yes = 1)	.058	.232	.082	.105	.033	.455
Rural jurisdiction (yes = 1)	.010	.849	.004	.931	−.002	.956
Agency size (full-time sworn)	.044	.396	−.023	.629	.036	.419
Explained variance ( $R^2$ , %)	24.5		33.1		37.6	

Notes: Model fit statistics:  $\chi^2 = 727.03$ ,  $df = 265$ ,  $p < .000$ ; RMSEA = .046; CFI = .973; TLI = 0.964; WRMR = 1.17. Bold values represent statistically significant relationships.

significant effects on these ratings. White respondents and those who were more educated were *less* likely than others to view maintaining relationships with constituents as important.

Taken together, the independent variables explained 37.6% of the variation in police chiefs' ratings of the importance of *adopting innovations*. Three of the seven institutional sectors (federal/state law enforcement, police employee associations, and local emergency medical organizations) exerted a statistically significant effect on ratings of the importance of adopting innovations. Three of the control variables (sex, race, and education) also exerted significant effects on these ratings. Respondents who were male, white, and more educated were *less* likely to view adopting innovations as important.

## Discussion

All organizations are embedded in environments with which they must interact regularly. For most organizations, the environment is not a homogeneous entity. Instead, it is complex, dynamic, and in some cases, turbulent. Moreover, the environment is not merely a source of clients, raw materials, funding, and other tangible resources; it is also a source of legitimacy. Certain types of organizations, like police departments, operate in highly institutionalized environments that exert considerable pressure on them to adopt certain structures, policies, or practices. These pressures do not result from 'technological or material imperatives, but rather from cultural norms, symbols, beliefs, and rituals' (Suchman 1995, 571). In such environments, organizations that are responsive to these institutional pressures acquire legitimacy and enhance their prospects for survival 'independent of the immediate efficacy of the acquired practices and procedures' (Meyer and Rowan 1977, 340).

Due to the powerful influence of institutional environments on organizations, wise leaders scan the environment for information that may be useful for the organization's well-being. Environments vary in complexity but are typically comprised of various sectors. The greater the degree of uncertainty within and across these sectors, the greater the intensity of environmental scanning (Choo 2002). As a result of these scanning activities, leaders are able to incorporate information from the environment into the organization's goals, priorities, and other elements. As noted more than a half-century ago by

Thompson and McEwen (1958, 23), determining organizational priorities is a matter of 'defining desired relationships between an organization and its environment.'

In the present study, we focused on the effects of police chiefs' perceptions of the influence of seven environmental sectors on three measures of organizational priorities. Of the 21 resulting regression coefficients, 12 were statistically significant.<sup>10</sup> Perceptions of all seven institutional sectors had a significant effect on at least one measure of organizational priorities. Taken together, these findings suggest that perceptions of the environment may play a role in shaping organizational priorities as reported by police chiefs. Several of the control variables also exerted significant effects on organizational priorities. For instance, police chief race and education were significant in all three models; white chiefs and those who are more educated rated all three agency priorities as less important than nonwhite chiefs and those who are less educated. Female chiefs gave significantly higher ratings to two of the three agency priorities (maintaining law and order and adopting innovations) than male chiefs. Finally, agency size and urbanization were unrelated to all three organizational priorities.

Our findings suggest that police chiefs' assessments of the potential influence of their external environments have an effect on agency priorities. When police chiefs perceive certain environmental sectors as influential, including local media, local criminal justice organizations, and local emergency medical organizations, they are more likely to prioritize the traditional core functions of policing such as law enforcement, crime control, and order maintenance. This finding is consistent with Wilson's (1968) research on local political culture and police agency adaptation. It also highlights the relative lack of influence of other sectors of the environment (such as federal and state law enforcement, the national media, police unions, and politicians) on the extent to which police chiefs prioritize traditional policing functions.

Although only three of the seven environmental sectors had a significant influence on the importance that police chiefs attached to maintaining law and order, six sectors had a significant influence on the importance attached to maintaining positive interactions with constituents. According to institutional theory, legitimacy derives from many sources. For leaders, maintaining legitimacy means routinely interacting with a wide variety of constituents and forming positive relationships with those who are perceived to be influential. These relationship maintenance activities help establish goodwill and prevent misunderstandings or antagonism that could threaten the survival or well-being of the agency. Maintaining positive interactions with constituents is quintessential leadership behavior for those leaders who understand and appreciate the importance of the institutional environment. The only environmental sector that did not influence the importance attached to maintaining positive interactions with constituents was federal and state law enforcement agencies. One possibility for this finding is that among the chiefs of the mostly small police agencies in our sample, federal and state law enforcement agencies may not be particularly salient in their day-to-day work, especially in comparison with key *local* stakeholders.

Three of the seven environmental sectors – federal/state law enforcement agencies, police employee associations, and local emergency medical organizations – had a significant influence on the importance police chiefs attached to adopting innovations. Little is known about the specific role of various sectors of the environment in promoting or inhibiting the adoption of innovation in police agencies. The measures of innovation adoption used in this study focus primarily on those that are copied or diffused from other agencies or funded through external grants. These mechanisms for diffusing innovation are inherently institutional in nature. Future research should seek to clarify the precise causal pathways through which these institutional mechanisms penetrate police organizations and promote the adoption of innovation. Qualitative research would seem to be especially helpful for documenting these linkages between police agencies and their environments.

Qualitative research methods may be particularly helpful for understanding the extent to which institutional processes lead organizations within a particular field to become increasingly homogeneous 'in structure, culture, and output' as hypothesized by DiMaggio and Powell (1983, 147). The fact that we observed cross-sectional heterogeneity across agencies with regard to organizational priorities does not allow us to draw direct inferences about the nature or extent of these homogenization processes.

The presence of significant variation within an organizational field means that if agencies are becoming more homogeneous, the process is not yet complete. However, homogenization is a temporal process that should be studied using longitudinal methods, whether quantitative, qualitative, or some combination of the two.

While findings from our analysis of cross-sectional data do not allow for direct inferences about these temporal processes, they do reveal that different sectors of the organizational environment may exert different pressures on police agencies. For instance, it is possible that police agencies, as public organizations, must react to demands from multiple competing institutional environments. They may face pressure to address the immediate needs of various sectors of the local institutional environment while also maintaining legitimacy within the broader regulatory environment of policing (Scott 2008). Police leaders may not only need to contend with a singular institutional environment; they may be faced with competing demands from an overlapping multitude of institutional environments (Scott 1987). The findings of our current research highlight the importance of the local environment surrounding police organizations. However, further research using a variety of methodologies is necessary to parse out the effects of institutional environmental sectors upon police agencies.

Though not directly related to the theoretical issues motivating this paper, our findings with regard to agency size are also noteworthy. Agency size did not have a significant effect on any of the dependent variables in this study. This is an intriguing finding, given that most studies of organizations, whether police agencies or other types of organizations, find that size exerts a powerful influence on a wide variety of organizational characteristics. The agencies in our sample are relatively small, especially when compared with those included in other studies of police agencies. Most quantitative research on police organizations uses data from agencies with 100 or more full-time sworn officers (Matusiak, Campbell, and King 2014). The agencies included in the present study are considerably smaller, with a mean of 20 and a median of 9 full-time sworn officers. The effects of agency size on organizational characteristics may be nonlinear, such that size effects may be more readily observable within certain size ranges. If the effects of agency size are nonlinear, studies like ours that are based primarily on samples of small agencies may not detect size effects.

There are strong reasons to suspect that these differences in size across studies may also be important from a theoretical perspective. For instance, King (2014, 686–687) argued that small police agencies may lack sufficient buffers to protect the agency from intrusion by external constituents. Larger agencies can respond to demands from the institutional environment by establishing symbolic structures such as special units that serve as powerful signals to constituents that the agency is taking their concerns seriously (Katz 1997, 2001). Smaller agencies may not have sufficient slack resources to adopt these types of symbolic responses, therefore they may be more vulnerable to legitimacy crises arising from the external environment. The present findings suggest that police chiefs in smaller agencies are aware of the various sectors in their external environments and that these perceptions influence agency priorities. It is unclear whether these same relationships would persist within a sample of larger agencies.

There are several limitations associated with the current research. First, although the sample represents almost 90% of municipal police agencies in Texas, it is not representative of all police agencies in the USA. Despite this limitation, we cannot think of any compelling reason why the patterns observed in this study would be unique to Texas. Nonetheless, future research should draw on a wider sample of police organizations that is representative of all geographic regions of the USA. The current sample of police chiefs also exhibits a lack of gender and racial diversities. Although female chiefs rated two of the three agency priorities significantly more highly than their male counterparts, female chiefs were a clear minority among Texas chiefs. Overall, research has demonstrated that females make up a small proportion of law enforcement chief executives (Schulz 2003). Future research should seek to clarify the differences between male and female police chiefs with regard to decision-making, leadership styles, and other phenomena. Finally, while the current research is useful for delineating which environmental sectors are perceived by police chiefs as most and least influential, it is unable to explain *why* these perceptions exist. For instance, the data used here do not make it clear what specific demands are placed

on police leaders from different environmental sectors. Our findings suggest that chiefs rate certain environmental sectors as more influential than others, but we do not know why. Qualitative methods may be especially useful for clarifying these issues.

## Conclusion

Police chiefs, as boundary spanners between their agency and its environment, must be attuned to demands from key constituencies with the power to influence organizational legitimacy. Institutional theory suggests that the most successful boundary spanners are those who routinely scan the environment and are responsive to its cues (Choo 2002). Attending carefully to the needs of the various constituencies in the external environment can help preserve the agency's resources and minimize the extent to which it is targeted by those seeking to criticize, undermine, or otherwise harm it. The present study contributes to a growing body of research on the various mechanisms through which the institutional environment influences police agencies and those who lead them.

## Notes

1. Drawing on institutional theory, several researchers have applied the concept of 'loose coupling' to police organizations (see Burruss and Giblin 2014; Crank and Langworthy 1996; Maguire and Katz 2002; Mastrofski, Ritti, and Hoffmaster 1987; Zhao, Lovrich, and Robinson 2001).
2. For purposes of this study, the population of eligible participants included current police chiefs in jurisdictions meeting the TPCLS selection criteria. Among the 14 respondents deemed ineligible for inclusion in the present study, 9 were retired chiefs and 5 were chiefs in major cities when they completed the survey. This left 912 useable responses. Due to leadership transitions in some agencies during the time period covered by the study, more than one chief from the same agency may have participated in the training and completed a survey. As a result, the 912 useable survey responses represent 898 unique agencies.
3. We estimated a measurement model containing only the three latent dependent variables and their indicators. The model fit the data well according to several fit measures ( $\chi^2 = 279.4$ ,  $df = 59$ ,  $p < .000$ ; root mean square error of approximation [RMSEA] = .064; confirmatory fit index [CFI] = .987; Tucker-Lewis Index [TLI] = 0.983; WRMR = 1.08). Model estimation and model fit issues are discussed in more detail later in the paper.
4. The zero-order correlations between latent variables are as follows: maintaining relationships and adopting innovation ( $r = .68$ ); adopting innovation and law/order ( $r = .50$ ); law/order and maintaining relationships ( $r = .71$ ).
5. Most composite measures in the social sciences are based on the assumption that the indicators are effects of the underlying latent variable being measured. The logic underlying factor analysis and various measures of reliability is that items sharing a common cause (the latent variable) should be highly correlated with one another. This approach is known as 'reflective' measurement because the items are said to *reflect* the underlying concept being measured. However, in some cases, the latent variable is thought to be caused by the items rather than the other way around. This approach is known as 'formative' measurement because the items are said to *form* the underlying concept being measured. In such instances, conventional approaches to measurement such as factor analysis and internal consistency tests no longer make sense because they are based on the assumption that the items share a common cause. Here, we assume that assessments of the importance of each individual constituency can be combined to form composite measures of the importance of seven sectors of the environment. We do not report measures of reliability because these constructs are based on formative rather than reflective logic (Bollen 2002; Bollen and Lennox 1991). We rely on additive indices because the specification of formative models in a CFA framework raises a number of complex challenges associated with model identification and multicollinearity (Diamantopoulos, Riefler, and Roth 2008).
6. We tested alternative coding schemes for education, including both binary and ordinal specifications. The ordinal response format provided the best fit.
7. Agencies reporting zero full-time sworn officers employed one or more *part-time* sworn officers.
8. Though it is standard to report  $\chi^2$  in structural equation models, its diagnostic value as a fit statistic has been questioned because it is often too strict (Bowen and Guo 2012). For the RMSEA, values ranging from .01 to .06 constitute close fit (Browne and Cudeck 1993; Hu and Bentler 1999). For the CFI and the TLI, values of .95 or greater indicate close fit (Hu and Bentler 1999). For WRMR, simulation evidence suggests that values below 1 are indicative of good fit (Yu 2002). Here, the model fits the data well according to CFI, TLI, and RMSEA, but the WRMR is slightly inflated.

9. We computed variance inflation factors (VIFs) for every independent variable to test for collinearity. Only two VIFs exceeded 2 and none exceeded 3, suggesting that collinearity was not problematic in this analysis (see Belsley, Kuh, and Welsch 1980).
10. The regression analysis resulted in 45 coefficients, 21 of which were associated with variables measuring police chiefs' perceptions of the 7 environmental sectors and 24 of which were associated with the control variables included in the model.

## Disclosure statement

No potential conflict of interest was reported by the authors.

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## Appendix 1. Items used to construct composite measures of seven environmental sectors

### Federal/state law enforcement

State law enforcement agency  
 Federal law enforcement agency  
 Federal Department of Justice  
 Department of Homeland Security  
 State Attorney General  
 Texas Department of Criminal Justice

### National media

New York Times  
 Washington Post  
 Wall Street Journal  
 National TV or Radio News

### Local media

Small or local newspaper  
 Local TV news

### **Police employee associations**

Officers' union  
Combined Law Enforcement Associations of Texas  
Texas Municipal Police Association  
Fraternal Order of Police

### **Elected officials**

Local, elected representative  
State, elected representative  
Federal, elected representative

### **Local criminal justice organizations**

Local law enforcement agencies  
Local county sheriff  
Municipal/Justice of the Peace Court  
County prosecutor  
Local/Regional crime lab

### **Local emergency medical organizations**

EMS or Fire services  
Local hospitals