



# Feeling Blue: Officer Perceptions of Public Antipathy Predict Police Occupational Norms

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Received: 8 September 2018 / Accepted: 16 October 2018 / Published online: 27 October 2018  
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## Abstract

Recent protests against law enforcement have spurred claims by practitioners and editorialists that public antipathy toward the police may influence police occupational norms. A number of classic police ethnographies also suggest a link between perceived public antipathy and police culture, but limited empirical research has examined this claim. Using a sample of 12,376 sworn law enforcement officers who participated in the National Police Research Platform, and a series of ordinary least squares regressions, this study examines whether officers' perceptions of public support predict their cultural orientations. Results reveal that officers perceiving greater public antipathy report higher levels of social isolation, work-group solidarity, cynicism toward the public, and coercive attitudes. We identify practical implications and potential organizational remedies to address these perceptions, and situate these findings within theoretical arguments of early police ethnographers and contemporary claims of the "Ferguson Effect."

**Keywords** Police culture · Ferguson effect · Cynicism · Coercion · Police perceptions

Following public condemnations and criticisms, including protests in urban communities, the Black Lives Matter movement, and U.S. Department of Justice investigations (Bever, 2014; Day, 2015; USDOJ Civil Rights Division, 2017), some members of the law enforcement community argued that law enforcement may be compromised when officers perceive substantial public hostility toward them. St. Louis Police Chief Sam Dotson coined the term "Ferguson Effect" to describe officers' hesitancy to enforce the law due to fears of public and legal scrutiny (Byers, 2014). MacDonald (2015)

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**Electronic supplementary material** The online version of this article (<https://doi.org/10.1007/s12103-018-9459-1>) contains supplementary material, which is available to authorized users.

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similarly argued that “agitation” against law enforcement led to low police morale, officer disengagement, and rising crime rates. The FBI Director at the time, James Comey, similarly suggested that a “viral video effect”—fear of being recorded and criticized by members of the public—was discouraging police officers from engaging with the public (Lichtblau, 2016). What these claims all share is the proposition that perceived public hostility toward the police may have unintended consequences for the ways police think, feel, and behave.

Although the term “Ferguson Effect” is relatively new, the claim that officers’ perceptions of public sentiments affect officers’ approaches to policing is not. Policing researchers have long argued that officer perceptions of public antipathy or hostility toward them influence several aspects of police culture, including isolation from the public, work-group solidarity (Skolnick, 2011), cynicism toward the public (Niederhoffer, 1967), and favorability toward coercive strategies (Muir, 1977). Since early ethnographic research on police culture in the 1960’s and 1970’s, however, few studies have systematically tested whether officers who perceive a lack of public support are more likely to subscribe to these aspects of police culture. These cultural norms are antithetical to transparency, police-community partnerships, and de-escalation of force—all cornerstones of modern police reform (President’s Task Force on twenty-first Century Policing, 2015). Given the current climate of police protests and criticism directed toward police, understanding normative consequences of perceived public antipathy and criticism of the police is a meaningful and timely topic for criminological inquiry (Nix & Wolfe, 2016; Nix & Pickett, 2017).

To that end, the current study examines whether officers’ perceptions of public support predict their cultural orientations. We specifically ask four research questions: (1) Do perceptions of public antipathy increase police isolation from the public?; (2) Do perceptions of public antipathy increase police solidarity?; (3) Do perceptions of public antipathy increase officers’ cynicism toward the public?; and (4) Do perceptions of public antipathy increase officers’ willingness to use coercive force in the course of their duties? To answer these questions, we use a sample of 12,376 sworn law enforcement officers who participated in the National Police Research Platform and a series of ordinary least squares regressions. In addressing these questions, our goal is to evaluate police ethnographers’ claims that police-public conflict is a fundamental source of the police culture. We begin by defining and characterizing police culture.

## Police Culture

Occupational culture consists of the collective values, outlooks, and guiding principles that materialize from the unique tasks and demands of a vocation (Cockcroft, 2013). Occupational and organizational environments unique to police work contribute to attitudinal and behavioral patterns emerging from uncertainty, danger, and bureaucratic demands (Skolnick, 2011). Various called “traditional police culture,” the “working personality” and “the police personality,” the policeman’s disposition is characterized in many ways (Cockcroft, 2007). Manning (1989, p. 360), for instance, emphasizes behavioral comportment when he defines police culture as “accepted practices, rules, and principles of conduct that are situationally applied.” Others stress normative adaptation to occupational strains, describing police culture as “a layer of informal

occupational norms and values operating under the apparently rigid hierarchical structure of police organizations” (Chan, 1997, p. 43) and “a patterned set of understandings which help to cope with and adjust to the pressures and tensions which confront the police” (Reiner, 1992, p. 109).

Fundamentally, police culture consists of a constellation of values and norms that inform police conduct and emerge in response to unique occupational and organizational conditions of police work. The distinguishing features of the police culture are broadly characterized by an “us vs. them” mentality and include isolation and solidarity; distrust and suspicion; cynicism and pessimism; and authoritarianism and coercion (Crank, 2014; Reiner, 2010). There are a number of sources which influence police culture. Components of police culture (e.g., isolation, cynicism, coercion) emerge in response to the strains experienced in police work, which include bureaucratic demands, danger, and public antipathy. The strains associated with police work are augmented by organizational and work group characteristics, as well as the communities in which officers serve, and the experiences of individual officers (e.g., Silver, Roche, Bilach, & Ryan, 2017; Ingram, Paoline, & Terrill, 2013; Ingram, Terrill, & Paoline, *in press*). Existing evidence suggests that the occupational strains associated with policing contribute to widely shared coping mechanisms, attitudes, and behaviors among officers. Together, these coping mechanisms, attitudes, and behaviors constitute the traditional police culture (Paoline & Gau, 2018; Paoline & Terrill, 2014).

The traditional police culture appears to be, in part, the consequence of officers’ experiences with, or perceptions of, a hostile public. There is evidence that officer perceptions of public support and public cooperation contribute to officers’ self-legitimacy, which in turn contributes to commitment to democratic policing styles (Bradford & Quinton, 2014). Studies utilizing clustering techniques to identify distinct police cultures find that an officer’s cultural orientation is frequently predicted by his or her perception that citizens are willing to contact and assist the police (e.g., Shjarback, 2016; Terrill, Paoline, & Manning, 2003). Beyond these studies, there appear to be few quantitative studies measuring police-reported perceptions of police-community relationships, and fewer still which explore the relationship between these perceptions and self-reported cultural norms.

Prominent among ethnographic depictions of law enforcement and police culture is the relevance of police-public conflict for officers’ cultural orientations. Police work is characterized by loneliness and friendlessness (Van Maanen, 1973a, b), creating “a close-knit group of men, sharing a life style and general outlook on the world which includes intense feelings of being misunderstood and misrepresented by outsiders, hence requiring absolute secrecy as well as suspicion towards all such outsiders” (Lefkowitz, 1975, p. 9). Officers perceive that citizens deceive, mischaracterize, and antagonize the police (Whitaker, 1964; Ahern, 1972); in response, officers develop a contemptuous distrust of human motive and behavior, which manifests as cynicism toward the public (Niederhoffer, 1967; Regoli, 1977). In a hostile environment, the police become hypervigilant, perceiving small cues of language, behavior, or attire as “prelude to violence,” and respond with suspicion and coercion toward members of the public (Skolnick, 2011, p. 41; see also Muir, 1977). In sum, there is much in the ethnographic literature to suggest that when officers perceive antagonism from the public, they become insular, cynical, and coercive. We elaborate on these linkages in greater depth, in the following sections.

## Isolation & Solidarity

Isolation and solidarity are the “distinguishing characteristics” of police culture (Punch, 1983, p. 224) and are frequent themes in police culture research (Banton, 1964; Cain, 1973; Harris, 1973; Manning, 2006; Reiss & Bordua, 1967; Westley, 1970). Isolation reflects difficulties forming relationships and interacting with members of other social groups (Kappeler, Sluder, & Alpert, 2015, p. 92). Solidarity refers to a sense of camaraderie and loyalty to one’s group members, characterized by inclusiveness, shared identity, and mutual defense (Skolnick, 2011). Most officers report that their occupation leads to difficulty establishing and maintaining friendships (Clark, 1965). The isolation that police work often brings is so acute that many officers conceal their vocation from others because it tends to compromise relationships (Skolnick, 2011). Officers tend to ‘otherize’ non-police into reductive but cognitively manageable outgroups. The classification of others as “symbolic assailants” (Skolnick, 2011) or “assholes” (Van Maanen, 1978) rather vividly illustrates officers’ perceived estrangement from the public. Meanwhile, officers form strong fraternal bonds with each other as they become isolated from non-police. Interviews with police indicate that “unstinting loyalty to fellow officers” is among the most cherished values held by patrol officers (Brown, 1981, p. 82). This solidarity is “seen as the result of a need for insulation from perceived dangers and rejection by the community” (Kappeler et al., 2015, p. 93).

There are both structural and cultural sources of these phenomena. Police work often requires working nights, weekends, holidays, overtime, and rotating shifts, limiting officers’ opportunities to socialize with others who enjoy a more conventional schedule (Swanton, 1981). Further exacerbating the physical separation of police from others are restrictive departmental policies that delineate the contours of off-duty social life. Although police who propose to marry are no longer required to submit their fiancé’s name to commanders for approval to wed (Banton, 1964), modern police departments still limit officers’ private associations. For instance, the New York Police Department delineates over two dozen acts that, even off-duty, constitute “Prohibited Conduct of Public Contact,” including discussing police business, identifying one’s employer or rank on social media monikers, joining a political club in one’s jurisdiction, or associating with any person who has ever committed a crime (NYPD, 2017).

Public sentiment also contributes to officer’s sense of separateness from the public. Public criticism and antipathy sever the policeman’s bonds to the civilian world, and he retreats into fraternity, where he finds both physical and psychic security from a hostile public (Reuss-Ianni, 1983). Skolnick (2011) noted that even the relatively benign enforcement of traffic laws and public order crimes engenders resentment in the public, creating estrangement between those with authority and those upon whom authority is exercised (see also Clark, 1965; Swanton, 1981). Such resentment produces a group-defense reaction in the police, a culture of solidarity: “I’m for the guys in blue! Anybody criticizes a fellow copper that’s like criticizing someone in my family; we have to stick together” (Brown, 1981, p. 82). Officers learn that mistakes are unavoidable in a chaotic and uncertain work environment, but that they will be harshly criticized for these mistakes by the public and the media; the only protection from such criticisms is the blue brotherhood (Van Maanen, 1973b).

## Cynicism toward the Public

Cynicism refers to “an attitude of contemptuous distrust of human nature and motives” (Graves, 1996). Niederhoffer (1967) argued that cynicism is a core component of the police personality, and many other scholars have also described cultural elements of contemptuous distrust, even if they use terms other than cynicism (Skogan & Frydl, 2004). Officers may exhibit cynicism toward organizational functions, the police mission, the loyalty of his fellow officers, training and education, or the general public (Regoli, 1976). Of these, officers’ suspicion and distrust of the public may be particularly acute. Officers often suspect that citizens manipulate the police, whether to file fraudulent reports, avenge their enemies, or protect their allies (Crank, 2014), and they often view the general public as “stupid, fallible, greedy, lustful, immoral, and hypocritical” (Manning, 1978, p. 83).

Reiner (2010) argued that one source of police cynicism was the contradiction inherent in the police mission. The police feel that they serve an indispensable social function, protecting society from moral and physical threats on all sides. These ubiquitous threats, such as they exist in the officer’s psyche, reify the officer’s perception that mankind is hedonistic, self-centered, and untrustworthy. However, these views are contradictory—he cannot save man from evil if man *is* evil. For his cause to be worthy, mankind is contemptible by necessity. Police cynicism toward the public is the “Janus face of commitment” (Reiner, 2010, p. 120), a reference to the Roman god of duality. Officers must be cynical toward the public for their cause to be just. Public hostility toward law enforcement simultaneously reaffirms officers’ views that the public is contemptible and that their order-maintenance mission is indispensable.

Other research suggests that cynicism toward the public is more simply a reciprocated distrust between police and the public, illustrating that officer perceptions of public sentiment influence police culture. Officers are inclined to perceive citizen activism as motivated by malevolence rather than goodwill: 92% of officers believe that recent protests are driven by longstanding anti-police bias, and only a minority believe they are motivated by a sincere effort at accountability and reform (Morin, Parker, Stepler, & Mercer, 2017). A comparison of resident attitudes and police attitudes in Chicago finds that about half of citizen respondents feel the police are untrustworthy; however, only about 7.3% of officers agree that “the community that I police trusts the police,” and as a sign of reciprocity, about a quarter feel that “police officers have reason to be distrustful of most citizens” (Fontaine, Leitson, Jannetta, & Paddock, 2017).

The police maintain silence and secrecy because they believe the media and the public deliberately distort police actions to serve their own agendas (Crank, 2014). The police fiercely protect their “secret knowledge” (Fielding, 1988, p. 185) or “sacred canopy” (Manning, 1977, p. 5), demonstrating their cynicism toward the public and anticipating the public’s cynicism toward the police. Manning (1977) argued that the police culture is a public performance: front stage, officers emphasize their moral mandate, pre-emptively invalidating citizens’ challenges to their motives and intent; the back stage, however, obscures many of the ugly realities of policing from those who would denigrate the police. The existence of a back stage suggests that officers conceal many aspects of their work out of the contemptuous distrust they have for their audience’s intentions. In a word, their secrecy is evidence of their cynicism for the

public, who would, presumably, use even benign evidence of police culture and practice to manipulate and discredit law enforcement.

### **Coercion/Aggression**

What distinguishes police work from other occupations is the authority of officers to use physical coercion in the course of their duties (Brown, 1981). Klockars (1985) noted that the entire justification for law enforcement relies on this coercive authority: their primary function is to immediately resolve situations that citizens have been unable to resolve peacefully on their own, and only coercive authority (whether exercised or not) ensures the immediate neutralization of real or potential opposition. Officers, however, demonstrate substantial variation in their inclination to use physical force to resolve problems (Muir, 1977). Some officers appear to endorse the use of excessive force, justifying it with a sense of mission in which ends justify means, and this may be particularly problematic where officers perceive that they are soldiers in the moral crusade of the war on crime (Westley, 1970; Skolnick & Fyfe, 1993). Therefore, the research suggests that, although coercion is a universal feature of police work, coercive attitudes are normative, cultural values that demonstrate substantial variability and have a number of proposed sources.

Both qualitative and quantitative research has suggested that officers' coercive attitudes are influenced by their perceptions of hostile citizens. In his ethnographic study of coercion in police work, Muir emphasized the reciprocal nature of coercion between police and the public, what he calls "an extortionate relationship" (1977, pp. 44–45):

[T]he reality, and the subtle irony, of being a policeman is that, while he may appear to be the supreme practitioner of coercion, in fact he is first and foremost its most frequent victim. The policeman is society's "fall guy," the object of coercion more frequently than its practitioner. Recurrently he is involved in extortionate behavior as victim, and only rarely does he initiate coercive actions as victimizer. If he is vicious, his viciousness is the upswing of the vicious cycle inherent in an extortionate relationship.

The police, despite their official authority, are relatively powerless when low public support undermines their authoritative legitimacy (Bottoms & Tankebe, 2012). Lacking the support or legitimacy necessary to exercise either the power of exhortation (Wrage, 2007) or barter (Kolm, 2008), policemen lacking public support double down on their exercise of physical coercion, according to Muir (1977). Observational studies suggest that officers reporting antagonistic relationships with the public tend to use more physical coercion (Terrill et al., 2003). Research on the "demeanor hypothesis" tends to support this interpretation. The exercise of police coercion—whether measured as arrest, the use of force, or threat—is most likely when citizens are disrespectful toward the police (Alpert, Dunham, & MacDonald, 2004; Black, 1971; Engel, Sobol, & Worden, 2000). In sum, the police are more likely to endorse coercion when they perceive hostility, disrespect, and challenge to their authority.

## Current Study

Qualitative policing research has consistently suggested that the police culture is substantially influenced by officers' perceptions of public sentiment. Yet, a relatively small body of quantitative research has evaluated this relationship. The current study examines whether officers' perceptions of public antipathy predicts several dimensions of the traditional police culture. We use four regression models to answer the following research question: Do officers' perceptions of public antipathy influence aspects of police culture, including (1) social isolation, (2) police solidarity, (3) cynicism toward the public, and (4) coercive attitudes? A fifth model combines these outcomes into a global measure of "traditional police culture" in order to permit broader generalizations. Based on the literature reviewed above, we derive five testable hypotheses:

**Hypothesis 1:** Officers perceiving greater public antipathy will demonstrate higher levels of isolation from the public.

**Hypothesis 2:** Officers perceiving greater public antipathy will express higher levels of police solidarity.

**Hypothesis 3:** Officers perceiving greater public antipathy will demonstrate more cynicism toward the public.

**Hypothesis 4:** Officers perceiving greater public antipathy will have more physically coercive attitudes.

**Hypothesis 5:** Officers perceiving greater public antipathy will be more likely to endorse the traditional police culture.

Addressing these questions will provide insights into the consequences of perceived public antipathy for police officer culture. In the following section, we describe the data and methods used to answer our research questions.

## Method

### Sample

The present study consists of survey results from 12,376 sworn law enforcement officers in 98 agencies participating in the National Police Research Platform between August 2013 and January 2014 (Rosenbaum et al., 2016). The Platform data utilizes a stratified sampling procedure consisting of a sampling of law enforcement agencies, followed by a sample of the subpopulation of officers within those agencies. First, a sample of police departments and sheriff's offices across the United States with between 100 and 3000 sworn personnel was drawn from the 2007 Law Enforcement Management and Administrative Statistics (LEMAS) database.<sup>1</sup> Approximately 80% of all sampled agencies were municipal police departments, and 20% were sheriff's offices,

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<sup>1</sup> LEMAS includes the population of local US law enforcement agencies over 100 sworn employees, hence delineating the lower bound for sampling. This also ensured a sufficiently large sample of officers were available to participate in the survey.



comparable to the composition of local law enforcement agencies in the U.S. Within each agency, the universe of officers was emailed with a survey invitation which was delivered through each agency's chief executive officer (Chief, Sheriff, etc.) and was drafted with the assistance of Platform researchers.

Web-based surveys were delivered via Qualtrics to the population of officers in 98 agencies, with a mean sworn officer response rate of 37.1% across agencies, a relatively high figure for online surveys of police officers (Nix, Pickett, Baek, & Alpert, 2017). Participation was encouraged by weekly follow-up emails to the agency head indicating then-current response rates and encouraging follow-up with members via memorandum or email highlighting the importance of the research, the anonymity of the survey data, and their contribution to the field (Rosenbaum et al., 2011).

Listwise deletion of cases missing information resulted in final sample sizes ranging from 9725 to 9995 in our regression models. The loss of cases was principally attributable to nonresponse to items regarding age, tenure, and race, and officers expressed concern that their survey responses may be identifiable and that their feedback could be used against them, despite assurances to the contrary (Rosenbaum et al., 2011).<sup>2</sup>

Overall, the data are well-suited for addressing questions regarding officer cultural orientations and the correlates of these orientations. A sizable number of officers were surveyed, and they were drawn from numerous agencies across the United States, avoiding regional peculiarities and other sampling biases common to smaller samples. Further, these recent data reflect the contemporary composition of the law enforcement profession, which is presumed to be culturally distinct from the past, given the increased representation of female and minority officers (Paoline, 2003). Overall, the National Police Research Platform appears to be the largest law enforcement survey to date explicitly addressing police occupational norms.

<sup>2</sup> Even nonresponse, then, suggests cultural themes of cynicism, isolation, and solidarity, justifying missing data analysis. Nonresponse rates were compared to organizational variables (such as agency size, organizational structure, and city characteristics) as well as overall agency demographics (including gender, race, and military history) in order to evaluate possible nonresponse bias. Missing data were uncorrelated with agency characteristics, and discrepancies between survey demographics and overall agency demographics were rather small, with supervisors and white officers slightly overrepresented (Rosenbaum et al., 2011). It stands to reason that officers choosing not to respond to specific demographic questions out of fear of retaliation or harassment are likely to be those who most embrace the traditional police culture, characterized by cynicism, distrust, and insularity. Given that age, race, and years of experience were the most commonly missing variables, we examined how nonresponse to these items correlated with our outcome measures (isolation, solidarity, cynicism, coercion, and TPC) and key explanatory variable (perceptions of public antipathy). Few of these relationships were statistically significant and none were substantive. Officers who chose not to respond to the age question were slightly more likely to report social isolation ( $r=0.02$ ,  $p<0.01$ ). Officers who chose not to disclose their race were more likely to report perceptions of public antipathy ( $r=0.04$ ,  $p<0.001$ ) and social isolation ( $r=0.02$ ,  $p<.01$ ). Officers with missing or invalid data for years of experience also reported higher perceptions of public antipathy ( $r=0.02$ ,  $p<.05$ ) and social isolation ( $r=0.02$ ,  $p<.05$ ). No other relationships attained statistical significance, and none exceed ( $r=.04$ ). This analysis (not shown) is available upon request. The pattern of nonresponse would downwardly bias our regression coefficients, underestimating the strength of the proposed relationships and reducing the likelihood of committing a type I error.



## Measures

**Dependent Variables** The Platform survey instrument captures several cultural dimensions prominent in the police literature: social isolation, solidarity, cynicism toward the public, and physically coercive attitudes. Mean scales were computed to improve comparability between models, since the number of indicators (and, hence, summative scales) differed for each dependent variable.

**Social Isolation** Consistent with suggestions that police officers conceal their employment from, and tend not to socialize with, non-officers (e.g., Swanton, 1981; Skolnick, 2011; Clark, 1965), respondents were asked how strongly they agreed with the statement “I don’t really talk about my job with people who are not police officers.” Responses were captured using a 4-point Likert scale, with responses ranging from 1 (Strongly disagree) to 4 (Strongly agree). Higher scores on this measure indicate greater social isolation.

**Solidarity** Fraternal loyalty to other officers above all others is a defining characteristic of the traditional police culture (Brown, 1981; Skolnick, 2011; Van Maanen, 1973a, b; Westley, 1970). Two items were used to measure the degree to which officers endorse police solidarity. Respondents were asked the extent they agreed to the following statements: “Officers need to stick together because we can’t count on anyone to protect us if we get into trouble” and “Loyalty to other officers in the department should be one of the highest priorities.” These items were each measured using 4-point Likert scales and were averaged into a composite scale (Spearman-Brown coefficient = 0.55,  $\alpha = 0.54$ ,  $r = 0.38$ ),<sup>3</sup> with higher scores indicating greater solidarity.

**Cynicism toward the Public** Three questions were used to assess officers’ cynicism toward the public, similar to items used in recent multi-site police surveys and the Project on Policing Neighborhoods (e.g., Paoline & Terrill, 2014; Paoline, 2004). Respondents were asked the extent they agreed to the following statements: (1) “Officers have reason to be distrustful of most citizens;” (2) “The public doesn’t understand what it means to be an officer;” and (3) “In general, the media treat the police unfairly.” Responses to each item ranged from 1 (Strongly disagree) to 4 (Strongly agree). Responses were averaged, with higher scores indicating greater cynicism toward the public (Spearman-Brown coefficient = 0.52,  $\alpha = 0.54$ ).

**Coercion** According to the traditional police culture and its emphasis on physical coercion, many officers feel that “a good police officer takes charge of encounters with citizens” (Paoline & Terrill, 2014, p. 116). Aggressive orientations or

<sup>3</sup> Given considerable debate about the most appropriate measure for inter-item correlation (Elsinga, Te Grotenhuis, & Pelzer, 2013), several are reported here for the reader’s consideration. Several of our measures demonstrate modest reliability coefficients. This is, in part, attributable to the small number of items used in each scale. Furthermore, a limited number of response categories (here, a 4-point Likert item) has been associated with lower internal consistency in multi-item scales (Preston & Colman, 2000). We address concerns about the reliability of outcome measures through the use of an omnibus measure of traditional police culture, described later.

attitudes were captured using three items assessing how eagerly officers embraced the use of physical coercion in their duties. A 4-point Likert scale was used to capture officers' degree of agreement with the following statements: "If officers don't show that they are physically tough, they will be seen as weak"; "It is more useful for an officer to be aggressive than to be courteous"; and "Some people can only be brought to reason the hard, physical way" (Spearman-Brown coefficient = 0.58,  $\alpha = 0.63$ ).

**Traditional Police Culture** There are empirical and theoretical reasons to suspect that police occupational culture is not a multi-dimensional phenomenon composed of isolation, solidarity, cynicism, and coercion. Rather, the traditional police culture may be a unidimensional construct characterized by the conceptual overlap of these features. We have noted, for instance, that reliability coefficients for our two- to three-item cultural variables are modest at best. Furthermore, some researchers have argued for the construction of a "traditional police culture" scale that combines various inter-related components of police norms and attitudes (Silver et al., 2017). In light of these arguments, as well as the low internal consistency of our small scales, we constructed a unidimensional scale of "traditional police culture" (TPC) that combines our measures of isolation, solidarity, cynicism, and coercion. The 9-item TPC scale combines these subscales, providing an omnibus measure of traditional police culture that is empirically reliable and internally consistent (Spearman-Brown coefficient = 0.67,  $\alpha = 0.75$ ). A unidimensional construct of police culture allows us to explore how the perceived quality of the police-public relationship is associated with officers' general endorsement of the traditional police culture.

Results utilizing a unidimensional indicator of police culture should be interpreted with caution. Some police researchers have suggested distinctions between constructs such as isolation, solidarity, cynicism, and coercive attitudes, as indicated in our preceding review (e.g., Skolnick, 2011; Paoline & Terrill, 2014). Further, the concept of a 'monolithic' police culture has been criticized as overly reductive (Paoline, 2003). We do not attempt to resolve the conflict between the multi-dimensionality of police culture depicted in the theoretical literature and the unidimensionality suggested by the reliability coefficients, and instead present outcomes consistent with both. In short, we use the same items in an omnibus measure of traditional police culture that demonstrates good reliability, but we report the smaller subscales nonetheless, based on theoretical representations of police culture.

**Independent Variables** Prior research on police culture suggests that officers' perceptions of public support influence the policeman's working personality. Research also suggests, however, that the structural characteristics of the job (e.g., shift work), demographic characteristics, and organizational roles are also relevant considerations. We incorporate measures of these characteristics as independent variables in our analyses.

**Perceptions of Public Antipathy** We have variously used the terms public antipathy, public hostility, and low public support to describe resentment from the public that

some officers perceive. To evaluate perceptions of public antipathy toward police, officers were asked to what extent they agreed with the statements “Most people respect the police” and “The relationship between police and the people of this city is very good”, items consistent with recent surveys of officer perceptions of the police-public relationship (e.g., Morin et al., 2017; Fontaine et al., 2017). Responses were reverse-coded using a 4-point Likert-type scale, where higher scores indicate greater levels of perceived public antipathy, and averaged into a composite scale (Spearman Brown = 0.65,  $r = .486$ ,  $\alpha = 0.65$ ).<sup>4</sup>

**Shift Work** Some scholars have argued that members of law enforcement become more socially isolated from non-law enforcement because they often work unconventional schedules (e.g., Swanton, 1981; Banton, 1964). Furthermore, the type and volume of police work varies substantially with the hour of day (Cohn, 1996), and it stands to reason that work-related strains that vary by shift may also contribute to variation in cultural adaptations. Officers were asked about their “normal work shift.” Officers indicating that they “mostly work days” were coded as 0, while officers indicating that they “mostly worked afternoons/evenings,” “mostly worked nights,” or “mostly rotat-ed shifts” were coded as 1 to indicate shift work.

**Work Role** Given that patrol officers may differ substantially from supervisors and specialists (Reuss-Ianni, 1983), we account for two measures of officer work role. First, we use a dichotomous variable to distinguish between supervisors (coded as 1) from non-supervisors (coded as 0). We also distinguish patrol officers (coded as 1) from those working in special assignments such as traffic, investigations, narcotics, gangs, or various other specialties (all coded as 0).

**Demographic Characteristics** We include controls for gender (dichotomous, male = 1), race (dichotomous, white = 1, non-white = 0), military experience (dichotomous, yes = 1), tenure at current agency (continuous, in years) and highest education received (an ordinal variable where 1 = high school degree, 2 = some college, 3 = A.A. or equivalent, 4 = B.A. or equivalent, 5 = some graduate courses, and 6 = a graduate or professional degree).

## Analytic Strategy

To assess the influence of perceived public antipathy on dimensions of police culture, our analysis proceeds in two stages. First, we describe summary and bivariate statistics for key dependent and independent variables. Second, we use ordinary least squares regression in five separate models to test hypotheses regarding the influence of after

<sup>4</sup> Although it might appear that the perceptions of public antipathy scale has overlap with the dimension of cynicism toward the public, confirmatory factor analysis shows that these dimensions are indeed distinct. For the two-factor solution,  $\chi^2(4) = 227.78$ , RMSEA = 0.070 with an upper bound of 0.078, CFI = 0.972, TLI = 0.931, and SRMR = 0.026 which is within the range of acceptable fit (Hu & Bentler, 1999) and fits better than a one-factor solution (where  $\chi^2(4) = 734.68$ , RMSEA = 0.113, CFI = 0.910, TLI = 0.820, and SRMR = 0.049). Based on the results of the two-factor solution, we can conclude that perceptions of public antipathy and cynicism toward the public are empirically distinct.

**Table 1** Summary statistics of study variables

Variable	N	Mean	Min-Max	S.D.
Isolation	11,563	2.69	1–4	0.74
Solidarity	11,394	2.70	1–4	0.65
Cynicism	11,443	2.84	1–4	0.53
Coercion	11,396	2.49	1–4	0.60
Perceived public antipathy	11,494	2.45	1–4	0.64
Shift work	11,196	0.43	0–1	–
Military	11,275	0.28	0–1	–
Male	11,034	0.86	0–1	–
White	10,821	0.79	0–1	–
Experience	10,517	15.47	0–53	8.44
Education	11,157	3.45	1–6	1.38
Age	10,619	42.40	18–79	8.66
Supervisor	11,341	0.35	0–1	–
Patrol	11,211	0.41	0–1	–

controlling for other relevant characteristics of the officers and their jobs.<sup>5</sup> All analyses were conducted using STATA 15 (StataCorp., College Station, TX).

## Results

### Summary Statistics and Bivariate Correlations

Table 1 contains summary statistics for all study variables. It is worth noting that officers do not appear to be especially isolated, loyal, cynical, or coercive: the average response on each of these dimensions were near the middle of the 4-point scale. Of these, more than half of all officers agreed or strongly agreed that they don't speak about their jobs with civilians, demonstrate solidarity with other officers, and were cynical toward the public. On the other hand, slightly fewer than half agreed or strongly agreed with statements regarding physical coercion or public antipathy. Nearly half of

<sup>5</sup> We also examined several alternative modeling strategies (not shown). Given that the dependent variables are ordinal rather than interval, ordered logistic regression was analyzed, but the dependent variables violated assumptions of parallelism, complicating interpretation (O'Connell, 2006); nonetheless, the findings did not substantively differ from the OLS models presented here. Given that officers are clustered within agencies and violate the assumption of independence of observations, we also analyzed various hierarchical linear models, which examined both random intercepts and random coefficients, where appropriate (Luke, 2004). ICC's were low (1–4%) and our parameter estimates and *p*-values were quite similar to the more parsimonious and interpretable models presented here. Finally, we also calculated standard errors for OLS models using the *cluster* option in STATA, which relaxes the assumption of independence (StataCorp, 2007). The small changes to the calculated standard errors had no effect on inferences of statistical significance. Our evaluation of alternative models suggests that, especially given our large sample size, our linear models are extremely robust to small deviations from OLS assumptions. Our chosen models also permit the calculation and meaningful interpretation of standardized beta coefficients, in order to evaluate the relative influence of our predictors on cultural outcomes.

all officers (43%) worked a rotating, evening, or night shift, and over a quarter (28%) had military experience. The vast majority of officers were white (79%) and male (86%). The average officer had just over 15 years of experience and was over 42 years of age. The average educational level, at 3.45, corresponds with a level of education between an Associate's degree and a Bachelor's degree. Just over a third (35%) of respondents held supervisory positions, and 41% worked in patrol operations.

Bivariate correlations are shown in Table 2. The correlations demonstrate positive, statistically significant relationships ( $p < .001$ ) between perceptions of public antipathy and four elements of the traditional police culture: social isolation ( $r = .14$ ), solidarity ( $r = .20$ ), cynicism ( $r = .43$ ) and coercion ( $r = .24$ ). The composite measure of traditional police culture is also significantly and positively correlated with perceptions of public antipathy ( $r = .38$ ). These correlations provide preliminary evidence supporting the linkages between perceived public antipathy and belief in the traditional police culture.<sup>6</sup>

### Regression Analyses

Table 3 presents the results of five OLS regression models designed to examine the effects of perceptions of public antipathy on various indicators of police culture, including social isolation (Model 1), police solidarity (Model 2), cynicism toward the public (Model 3), and coercion (Model 4). Model 5 combines these indicators of police culture into a comprehensive Traditional Police Culture (TPC) scale, and examines the effect, if any, of perceptions of public antipathy on TPC. We address each of these models in turn.

Model 1 predicts social isolation. We find that officers who perceive greater antipathy from the public also report greater social isolation ( $b = .173$ ,  $p < .001$ , S.E. = .013), supporting Hypothesis 1. Officers who perceive little public support are significantly less likely to talk about their jobs with others who are not also police. Despite its emphasis in the literature, officers working unconventional schedules (shift work) are not significantly more isolated.

In Model 2, which predicts police solidarity, the regression results demonstrate that officers express significantly more loyalty to other officers when they perceive public hostility ( $b = .177$ ,  $p < .001$ , S.E. = .011). We therefore find support for Hypothesis 2, confirming the predictions of ethnographers who argue that police solidarity may be a mutual defense reaction to public hostility.

<sup>6</sup> Table 2 also indicates potentially problematic collinearity between respondent age and experience ( $r = .77$ ) (see Licht, 1995). Given this high correlation, additional model diagnostics—variance inflation factors (VIFs) and condition indices—were also examined. VIFs did not exceed a value of 3, below the problematic threshold of 5 (Rogerson, 2001), but condition indices were at 31 with the inclusion of both the age and experience variables in the models, slightly exceeding the problematic threshold of 30 (see Belsley, Kuh, & Welsch, 1980). These additional diagnostics indicate that collinearity could bias regression estimates. To determine whether this was the case, alternative regression models, which excluded either age or experience, the highly correlated variables, were examined. Results from these models are substantively similar to those reported here. That is, officer perceptions of public antipathy are consistently and significantly, positively associated with each outcome of interest. In these alternative models, condition indices all fell below 30, and VIFs fell below 2. Given the concordance across these different models, we present the full models (e.g., those containing both age and experience) in the current text.

**Table 2** Bivariate correlations between study variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Isolation														
2 Solidarity	0.13*													
3 Cynicism	0.22*	0.38*												
4 Coercion	0.18*	0.45*	0.48*											
5 TPC	0.40*	0.71*	0.79*	0.83*										
6 Perceived public antipathy	0.14*	0.20*	0.43*	0.24*	0.38*									
7 Shift Work	0.00	0.16*	0.14*	0.14*	0.17*	0.12*								
8 Military	0.03	0.03*	-0.01	0.01	0.01	-0.01	0.02							
9 Male	-0.01	0.10*	0.01	0.09*	0.07*	-0.09*	0.08*	0.15*						
10 White	0.01	0.01	0.03	0.06*	0.04*	-0.03	-0.01	-0.05*	0.08*					
11 Experience	0.02	-0.17*	-0.16*	-0.18*	-0.20*	-0.10*	-0.32*	-0.02	0.02	0.01				
12 Education	-0.03*	-0.09*	-0.05*	-0.05*	-0.08*	-0.04*	-0.05*	-0.10*	-0.10*	0.02	0.01			
13 Age	-0.02	-0.16*	-0.20*	-0.19*	-0.23*	-0.12*	-0.30*	0.09*	0.04*	-0.03	0.77*	0.00		
14 Supervisor	0.01	-0.19*	-0.14*	-0.16*	-0.19*	-0.15*	-0.07*	-0.01	0.05*	0.02	0.39*	0.16*	0.30*	
15 Patrol	-0.02	0.15*	0.12*	0.11*	0.14*	0.05*	0.40*	0.03	0.06*	0.03	-0.25*	-0.02	-0.22*	-0.04*

\*p < .001

**Table 3** OLS regressions predicting belief in dimensions of traditional police culture

	Model 1: Isolation		Model 2: Solidarity		Model 3: Cynicism		Model 4: Coercion		Model 5: TPC						
	b	S.E.	Beta	b	S.E.	Beta	b	S.E.	Beta	b	S.E.	Beta			
Intercept	2.466	.065		2.284	.057		2.228	.043		2.084	.051		2.222	.037	
Perceived Public Antipathy	.173*	.013	.151	.177*	.011	.174	.336*	.008	.410	.212*	.010	.229	.242*	.007	.355
Shift Work	-.018	.017	-.012	.077*	.014	.059	.029	.011	.027	.054*	.013	.045	.043*	.009	.049
Military	.067*	.017	.041	.023	.014	.015	-.005	.011	-.004	.000	.013	.000	.010	.009	.010
Male	-.009	.021	-.004	.197*	.018	.106	.065*	.014	.043	.173*	.016	.102	.123*	.011	.099
White	.026	.019	.014	.017	.016	.011	.037	.012	.028	.087*	.015	.059	.047*	.010	.043
Experience	.007*	.001	.079	-.003	.001	-.039	.002	.001	.024	-.002	.001	-.027	.000	.001	-.003
Education	-.015	.005	-.028	-.017*	.005	-.037	-.003	.003	-.008	-.006	.004	-.014	-.008	.003	-.026
Age	-.007*	.001	-.079	-.002	.001	-.035	-.008*	.001	-.129	-.006*	.001	-.094	-.006*	.001	-.122
Supervisor	.038	.017	.024	-.185*	.014	-.136	-.053*	.011	-.048	-.116*	.013	-.093	-.091*	.009	-.100
Patrol	-.030	.017	-.020	.121*	.014	.091	.070*	.011	.066	.047*	.013	.039	.061*	.009	.069
N		9995			9859			9945			9896			9725	
R <sup>2</sup>		.028			.113			.219			.120			.215	
F		25.61*			125.37*			259.35*			125.73*			241.02*	

\*p < .001



In Model 3, we find that officers are significantly more cynical about the public when they report greater public antipathy ( $b = .336, p < .001, S.E. = .008$ ), lending support to Hypothesis 3. Officers who perceive little public support are substantially more likely to distrust citizens.

The results from Model 4 indicate support for Hypothesis 4. Officers are significantly more likely to endorse the general use of physical coercion when they perceive public antipathy ( $b = .212, p < .001, S.E. = .010$ ).

Model 5 predicts “traditional police culture,” the omnibus indicator of the police culture that is comprised of isolation, solidarity, cynicism, and coercion. Again, we find evidence that perceptions of public antipathy are significant and substantial predictors of the traditional police culture ( $b = .242, p < .001, S.E. = .007$ ).

We may also make comparisons across models. In four of the five models, older officers and supervisors appear significantly less likely to ascribe to characteristics of the traditional police culture, and so too do officers assigned to assignments other than patrol—results consistent with prior studies finding that culture tends to differ substantially by rank and assignment (Silver et al., 2017; Reuss-Ianni, 1983). While being male was significant in four of the five models, race was significant in just two and demonstrated rather small effects; these observations are perhaps unsurprising given inconsistent results reported on such demographic characteristics on police norms elsewhere (Silver et al., 2017; Paoline, Myers, & Worden, 2000). Put simply, in addition to the influence of public antipathy, we find that white, male, line-level patrol officers are the most likely to identify with values expressed in the traditional police culture, although these effects were not always statistically significant.

In all five models, officers’ perceptions of public antipathy have a direct, positive association with aspects of police culture. Public antipathy is the only variable to attain statistical significance in every model ( $p < .001$ ). Standardized beta coefficients, which allow us to compare the relative magnitude of effect, reveal that it is the single strongest predictor of social isolation ( $B = .151$ ), police solidarity ( $B = .174$ ), cynicism toward the public ( $B = .410$ ), coercive attitudes ( $B = .229$ ), and our global measure of traditional police culture ( $B = .355$ ), far outperforming personal and work role characteristics. In sum, all of our models indicate that perceptions of public antipathy toward police shape police cultural orientations. We discuss these findings in the following section.

## Discussion

In the wake of the events of Ferguson, law enforcement has faced increased scrutiny and criticism from both policymakers and the public (MacDonald, 2015; President’s Task Force on twenty-first Century Policing, 2015). Prominent members of the law enforcement community have made claims that this scrutiny and criticism influences officer attitudes and behaviors (Byers, 2014; Lichtblau, 2016). These suggestions were consistent with ethnographic accounts of police culture from the 1960s and 1970s. These ethnographies suggested that when officers feel as though they are the subject of hostility or criticism by the public (Whitaker, 1964; Crank, 2014), they may respond by retreating into a fraternal solidarity (Skolnick, 2011), cynically distrusting the public (Niederhoffer, 1967), and embracing the use of physical force (Westley, 1970). In this way, the suggestion has been that police culture is borne, at least in part, out of officer

perceptions of public antipathy toward law enforcement. Using a sample of 12,376 sworn law enforcement officers in 98 agencies, the current study used a series of OLS regressions to quantitatively evaluate the linkages between perceived public antipathy and these aspects of police culture.

Officers perceiving hostile public attitudes were significantly and substantially more likely to report (1) greater social isolation from the public, (2) greater police solidarity, (3) increased cynicism toward the public, and (4) more physically coercive attitudes. Elements of the traditional police culture appear to be a function of officers' sense of animosity from the public. Officers who perceive hostility from the public withdraw from the public into fraternal solidarity. Furthermore, these officers become much more distrustful of the public, and are more likely to justify the use of coercive tactics in the course of police work. The results lend support to qualitative research from the 1960's and 1970's which suggests that police cultural norms are a function of transactional relationships with the public.

The linkages between officer perceptions of public antipathy and their behavior warrants further examination. Research suggests that the traditional police culture may contribute to undesirable practices including corruption (Skolnick, 2002), hostility toward the public (Regoli, Crank, & Rivera, 1990), and the escalation of force (Terrill et al., 2003). Skolnick (2002) noted that a culture of police solidarity increases corruption and misconduct because it promotes loyalty to the working group over the law, and also due to its effectiveness in impeding investigations of wrongdoing (Kutnjak Ivković & Shelley, 2008). Cynical officers also report poorer work relations, more hostile police-citizen encounters, and more frequent arrests than their less cynical counterparts (Regoli et al., 1990). Officers who subscribe to a police culture which includes distrust toward citizens demonstrate significantly more use of coercive force in observational studies (Terrill et al., 2003). This evidence suggests the norms characterizing traditional police culture may produce tangible threats to democratic policing. Our results indicate these forms of problematic policing are not only a result of personal or organizational characteristics, but may derive from perceived tensions between officers and the public.

Given these potential consequences, police organizations must find ways to mitigate or minimize perceptions of public hostility among officers. We propose two potential solutions to address these perceptions. First, practices of organizational justice by police leadership may be useful for helping street-level officers deal with public criticism (Nix & Wolfe, 2016). When police leadership treat officers with respect, fairness, kindness, and consideration, officers may be significantly less likely to respond to public hostility with mutual derision and disaffection (Wolfe & Nix, 2016). Organizational justice also contributes to procedural justice and officer commitment to policing reform (Rosenbaum & McCarty, 2017). More broadly, this evidence supports arguments that both organizational and procedural justice are essential to overcoming modern-day challenges to policing, including public protest, criticism, and distrust (President's Task Force on twenty-first Century Policing, 2015).

Second, if cultural adaptations are due to officers' mistaken assumptions of public hostility toward police, it may be possible to correct these assumptions. Officer perceptions of public antipathy may not accurately reflect public attitudes toward the police; for instance, officers' perceptions of public antipathy may have been largely driven by "hostile media effects" and dominant news narratives post-Ferguson,

independent of actual citizen attitudes (Nix & Pickett, 2017). There does indeed appear to be a discrepancy between actual public support and officers' perceptions of public support: 76% of Americans express "a great deal" of respect for the police (McCarthy, 2016), but only 58.2% of officers believe the public respects the police (Cordner, 2017). Nonetheless, this study reveals that the officers who do not share this sentiment are the most likely to subscribe to the traditional police culture, with its attendant consequences. It stands to reason that correcting these officers' misperceptions of public attitudes (perhaps during regular in-service training) might reduce adherence to the traditional police culture. Correcting simple misunderstandings of experienced police officers has been a cornerstone of law enforcement training on mental health (Compton et al., 2014), sexual assault (Lonsway, Welch, & Fitzgerald, 2001), and domestic violence (Friday, Lord, Exum, & Hartman, 2006). As with these topics, officers may only need reminding that their perceived stigma is unwarranted. Simply making officers aware of their high levels of public support may mitigate against problematic and reactionary cultural adaptations.

Of course, the current study is not without limitations. First, the psychometric properties of many of our theoretical constructs are not as robust as would be desired. This issue of psychometric soundness is not uncommon in secondary data analysis, and policing research is no exception to this issue (e.g., Shjarback & White, 2016). Refining these measures should be a priority of future research. Second, there is emerging evidence that characteristics of workgroups and organizations influence police culture beyond the occupational strains common to all officers (Ingram et al., 2013; Ingram et al., *in press*). This consideration extends to important public events, such as police shootings or public protests. It is unclear whether officers' perceptions of public antipathy are differentially influenced by local versus national events.<sup>7</sup> Continuing to explore these local, organizational, and workgroup influences on police culture is necessary and worthwhile. Finally, the cross-sectional design of this study limits causal inference. While police ethnographies have suggested that officers' perceptions of public attitudes influence their cultural adaptations, the reverse is also plausible. As a lens through which they construe meaning, the traditional police culture may taint officer interpretations of citizen attitudes and behaviors. Given the dialogic and reciprocal nature of police-community relationships, non-recursive models are implied. Analysis of future waves of the National Police Research Platform would be better able to disentangle these processes. These limitations notwithstanding, our study is among the few to quantitatively demonstrate that officers' perceptions of police-public conflict influence police cultural norms.

In the end, this study presents compelling evidence that officers' sense of hostility from the public significantly influences police culture. Officers' approach to public service is significantly influenced by their perceptions of public sentiment, underscoring claims made by police ethnographers (e.g., Skolnick, 2011), law enforcement leaders (e.g., Byers, 2014), and editorialists (e.g., MacDonald, 2015). Tension between officers and their communities is not merely incidental to police work; rather, the degree of such tension predicts cultural adaptations that may further damage police-

<sup>7</sup> There is evidence for both: Baltimore police officers began de-policing in the wake of protests in Ferguson, but withdrew even further following local protests stemming from the death of Freddie Gray (Morgan & Pally, 2016).

public relationships. These theoretical arguments are echoed in the popular wisdom of the “Ferguson Effect,” which suggests that criticism of the police has a tangible influence on police culture and practice. Police officers are not immune to public antagonism, and they appear to respond with a degree of reciprocity. While much research has examined how public perceptions of the police influence citizen attitudes and behaviors, we hope that criminologists will continue exploring the other half of this exchange, as well.

**Acknowledgments** The authors would like to send sincere thanks to those who provided invaluable feedback to improve this manuscript: Dr. George Burruss, Dr. Lorie Fridell, Dr. Justin Nix, and the anonymous reviewers. The data used in this study were retrieved from the Inter-University Consortium for Political and Social Research. Data were collected for The National Police Research Platform, Phase 2 (ICPSR 36497).

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