Management-level Officers' Experiences with the Ferguson Effect*

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Abstract

Purpose: The purpose of this paper was to examine the factors associated with management-level officers' sensitivity to various manifestations of the "Ferguson Effect."

Design/methodology/approach: A survey was administered to police officers attending an advanced training institute in the southeastern United States in the fall of 2015. Specifically, a series of items first inquired about negative attitudes attributable to deadly force incidents throughout the country, followed by items tapping into theoretically relevant concepts including self-legitimacy, audience legitimacy, and peer attachment.

Findings: Findings suggest that like line-level officers, police managers may also harbor various attitudes attributable to a Ferguson Effect – including less willingness to be proactive, reduced motivation, less job enjoyment, and a belief that crime will ultimately rise as officers "de-police." However, officers who believe their communities afford legitimacy to the police were less likely to report these sentiments. Study limitations and avenues for future research are also discussed.

Originality/value: This is the first study to consider how police managers have been impacted by highly publicized deadly force incidents in recent years. It underscores the importance of maintaining legitimacy in the public eye, particularly in the post-Ferguson era of American policing.

Keywords: policing, Ferguson Effect, organizational justice, police management, self-legitimacy, audience legitimacy

Paper type: Research paper

Management-level Officers' Experiences with the Ferguson Effect

Over the last two years there has been heated debate about the existence of a "Ferguson Effect" on U.S. policing. Proponents of the argument suggest that in the wake of several high-profile deadly force incidents involving unarmed black citizens (most notably, Michael Brown in Ferguson, Missouri in August 2014), the police have become less willing to be proactive on the job for fear of being featured in the next viral video – and as a result, crime is on the rise (Mac Donald 2015, 2016). Researchers have since analyzed official data and casted doubt on whether crime is actually on the rise nationally post-Ferguson (Pyrooz *et al.* 2016; Rosenfeld 2016), but there is growing evidence that policing has in fact been impacted by Ferguson and related high-profile deadly force incidents. Recent studies have considered whether de-policing occurred in Baltimore following the deaths of Michael Brown and Freddie Gray (Morgan and Pally 2015), whether police officers feel less motivated or think that policing has gotten more dangerous in the wake of Ferguson (Nix and Wolfe 2016), whether citizens are less likely to view police use of force as justified post-Ferguson (Culhane *et al.* 2016), and even whether violence directed toward the police has increased in the months following Ferguson (Maguire *et al.* 2016). A recent survey of nearly 8,000 police officers across the United States by the Pew Research Center found that many officers are more concerned about their safety, more reluctant to use force when it would be appropriate, and less willing to stop and question suspicious persons (Morin *et al.* 2017). Thus, a growing body of evidence suggests that regardless of whether crime has meaningfully increased post-Ferguson, officers have indeed been psychologically affected by public scrutiny in the wake of the incident (and related incidents over the past two years).

We still do not know much about what factors are associated with officers' sensitivity to the Ferguson Effect. To date, only one study has posed such a research question (Nix and Wolfe

2016), and the results suggested that organizational justice was significantly correlated with less sensitivity to the Ferguson Effect. Importantly, however, the sample was restricted to a single sheriff's department and analyses focused primarily on line-level employees. Missing from the analyses was an examination of the extent to which police *supervisors* felt impacted by Ferguson. This is an important question worthy of empirical consideration, because it is likely that supervisors' attitudes and beliefs trickle down to their subordinates. In the words of Tyler (2011, p. 261), "the organizational culture of police departments is shaped by the values articulated by their leaders." If so, it is important to consider what factors are associated with management-level officers' experience with the Ferguson Effect. Three potential factors include officers' perceptions of the community, themselves, and their colleagues (Bottoms and Tankebe 2012; Johnathan-Zamir and Harpaz 2014; Nix 2015a, 2015b; Tankebe 2014). For example, officers who do not believe the community views the police as legitimate (i.e., audience legitimacy), do not have much confidence in their own legitimacy (i.e., self-legitimacy), or do not feel a sense of attachment to their peers may find themselves more negatively impacted by high-profile deadly force incidents such as Ferguson.

Accordingly, the present study adds to our limited knowledge on this topic by analyzing a survey of police officers holding various supervisory positions in agencies across the United States. Multivariate regression equations were estimated to determine the extent to which three theoretically important concepts – audience legitimacy, self-legitimacy, and peer attachment – were associated with sensitivity to the Ferguson Effect after ruling out the possible confounding influence of other individual characteristics. Our findings suggest that like line-level cops, those officers who hold supervisory positions have also been impacted by Ferguson. We discuss the implications of our research below after first reviewing the relevant literature.

The Ferguson Effect

American policing is in the midst of a legitimacy crisis as public protest, continuous media attention, and political debates center on police use of force and minority-community relations (Weitzer 2015; Wolfe *et al.* 2016a). A string of high-profile police killings of citizens began catching the public's attention around the summer of 2014. Eric Garner was killed by police officers in New York City and, shortly after, Michael Brown was fatally shot by an officer in Ferguson, MO. In both cases, the officer(s) was white and the citizen was black and unarmed. A number of similar incidents have since occurred in various cities throughout the United States such as Baltimore, North Charleston, Cleveland, and Baton Rouge. Each of the killings has garnered widespread social and conventional media attention, led to protests (and in several cases violent riots), resulted in the firing of officers and command staff, and, overall, threatened public trust in the police. Although allegations of excessive police force against unarmed individuals is nothing new in the United States (e.g., the fatal shooting of Amadou Diallo occurred in 1999), Brown's death in Ferguson was unprecedented in that news of the event spread so rapidly via conventional and social media. Since Ferguson, police use of force has become more visible than ever due to technological advances making it easier for bystanders to record police-citizen interactions and upload the footage to the Internet (Brown 2016; Miller 2016). Indeed, scholars have since referred to Ferguson as an "exogenous shock" (Pyrooz *et al.* 2016) or "environmental jolt" to law enforcement (Campbell *et al.* 2017).

The rationale behind the Ferguson Effect is that in response to increased scrutiny of law enforcement (due in large part to the "viral video" phenomenon), officers have become less willing to be proactive for fear of the backlash that could ensue should they be captured on video. Ultimately, according to proponents of the Ferguson Effect, this process could reverse the

downward crime trend the United States has experienced over the last 25 years. A recent study by Pyrooz *et al.* (2016), however, indicates that in 81 of the largest U.S. cities, there were no significant changes in overall, violent, or property crime trends in the year following Brown's death in Ferguson. Importantly, their analyses revealed that a handful of cities *did* experience increases in violent crime starting around the time of Ferguson, but the magnitude of those changes was very small.[1] Thus, there is no reason just yet to "sound alarm bells" over the Ferguson Effect on crime (Nix and Wolfe 2016, p. 13). However, other studies provide evidence that Ferguson has impacted policing in other ways. Morgan and Pally (2016) examined trends in crime and arrest data in Baltimore from 2010 to 2015 and found that shootings, homicides, robberies, carjackings, and car thefts all increased in the three months following Freddie Gray's death. And despite these crime increases, arrests during the same period declined by 30% - which certainly suggests de-policing may have been occurring.[2]

Other studies have considered the psychological impact of Ferguson – both among citizens and the police. With respect to citizens, an experiment by Culhane *et al.* (2016) demonstrated that citizens were less likely to view police shootings as justified post-Ferguson. A separate study by Kochel (2015) showed that Brown's death in Ferguson had a detrimental impact on St. Louis residents' perceptions of police legitimacy, procedural justice, effectiveness, and police misconduct. This effect was even more pronounced among African-American residents (see also Kochel 2017). With respect to the police, Wolfe and Nix (2016) found that deputies in an agency hundreds of miles away from Ferguson expressed less willingness to

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[1] In a separate analysis, Rosenfeld (2016) concluded that the 2015 homicide rise (up 11.8 percent from 2014) was largely attributable to homicide increases in a handful of cities.

[2] Of course, arrests may have declined for other reasons, including a decline in crime reporting by citizens. Desmond, Papachristos, and Kirk (2016), for example, recently demonstrated that residents of black neighborhoods in Milwaukee were less likely to report crimes to the police for over a year following the controversial and highly publicized police beating of Frank Jude, an unarmed black man.

engage in community partnerships as a result of negative publicity surrounding law enforcement in the six months after the death of Brown (though importantly, this effect was confounded by perceived organizational justice). Similarly, Nix and Wolfe (2016) provided evidence that Ferguson has made some police officers (a) feel less motivated, (b) think policing has gotten more dangerous, (c) think their colleagues have been adversely impacted, and (d) believe citizens' attitudes toward police have deteriorated. If the police are less willing to do their jobs or have otherwise been negatively affected because of Ferguson or related deadly force incidents, it could ultimately lead to more dangerous communities, as advocates of the Ferguson Effect have warned.

The research literature has advanced our understanding of the Ferguson Effect in multiple ways. The problem, however, is that we still do not know how recent high-profile deadly force incidents throughout the United States have impacted police *supervisors*. This is an important question because front-line and mid-level police managers are instrumental in setting the tone for street-level cops. Managers who may be less motivated on the job, less willing to be proactive and work with the community, or cynical about public antagonism because of questionable use-of-force incidents are not in a great position to lead patrol officers in a direction that effectively combats crime and encourages trust from the public. Accordingly, exploring the factors that account for police supervisors' sensitivity to the Ferguson Effect is important on both theoretical and practical grounds. Below we discuss some of the factors that may partially explain police supervisors' experience with the Ferguson Effect.

Audience Legitimacy

Bottoms and Tankebe's (2012) dialogic model of legitimacy focuses on the ongoing dialogue between power holders and their audiences in shaping authority figure legitimacy. As

power holders, the police make a claim to legitimacy and, as the audience, citizens respond to this claim. If the police make a claim to legitimacy that is incongruent with the public's expectations or desires, they risk losing legitimacy in the eyes of the public. For example, research clearly shows that procedural justice is the key antecedent to legitimacy evaluations among citizens (Jackson *et al.* 2012; Wolfe *et al.* 2016b). Recent work by Nix (2015b), however, showed that police officers believed that performance-based evaluations were more likely than procedural justice to result in public cooperation (see also, Jonathan-Zamir and Harpaz 2014; Nix 2015a). The gap between what citizens expect (i.e., procedural fairness) and what the police feel is key (i.e., performance) is important because such inaccuracies may cause the police to favor aggressive, order-maintenance crime control strategies over process-based strategies as a method for establishing community trust. This misguided claim to legitimacy may ultimately hinder community evaluations of police legitimacy in the long run.

This is relevant to the current discussion of the Ferguson Effect because strained police-community relations may be an indication that the public is rejecting police legitimacy claims in some jurisdictions. Public protest is one example of such a legitimacy claim rejection. An important component of the dialogic model is police officers' perceptions of audience legitimacy—the extent to which the police believe the public views them as a legitimate authority figure. Evidence suggests that when officers feel that citizens believe the police are legitimate, there are a number of beneficial outcomes. Tankebe (2014), for example, showed that officers who believe the public viewed them as legitimate had higher levels of self-legitimacy—confidence in their own authority. The legitimacy dialogue in this situation flowed as follows: the police claimed legitimacy, the public responded (real or perceived) with accepting that legitimacy, the police perceived the public as affording them legitimacy, and, finally, the police

felt more confident about their authority. In this way, perceived audience legitimacy should help protect officers from being negatively impacted by the Ferguson Effect. Police officers in such a situation may feel that public criticism surrounding law enforcement is not strong in their own community but, rather, the public views them as legitimate. Believing the public accepts the police claim to legitimacy likely sends the message to officers that the community trusts them, is willing to comply with them, and is not "out to get them." If so, we would expect such officers to be less impacted by the Ferguson Effect—their motivation should be affected less and they should be less likely to engage in de-policing activities.

Self-legitimacy

As mentioned earlier, officer self-legitimacy is an important component of Bottoms and Tankebe's (2012) dialogic model. Prior to making a legitimacy claim, the police must convince themselves that they hold legitimate power. This self-legitimacy refers to "power-holders' recognition of, or confidence in, their own individual entitlement to power" (Tankebe 2014, p. 3). The literature on officer self-legitimacy has grown tremendously in the past few years. In terms of its sources, the concentric model suggests that officers derive their self-legitimacy from at least three: their superiors, their colleagues, and the audience to their power (Barker, 2001; Tankebe 2014; Tankebe and Meško 2015). Recent studies have also demonstrated that media coverage of police can also affect officers' self-legitimacy (Farmer and Sun 2016; Nix and Wolfe 2017).

The benefits of greater self-legitimacy appear to be bountiful. Research has shown that officers with higher levels of self-legitimacy are more likely to support the use of procedural fairness (Bradford and Quinton 2014), less likely to use force to gain subject compliance (in hypothetical scenarios; Tankebe and Meško 2015), and are more committed to their organization

(Tankebe 2010). Nix and Wolfe (2016) recently published an analysis of sheriff's deputies' sensitivity to the Ferguson Effect. Their findings demonstrated that self-legitimacy was unrelated to several manifestations of the Ferguson Effect after accounting for perceptions of organizational justice (see also, Wolfe and Nix 2016). This is interesting because we would expect officers with greater confidence in their own authority to be less likely to engage in de-policing or experience reduced motivation as a result of negative publicity surrounding their profession. Self-legitimacy should help shield officers from such negative effects because, despite some public criticism, they have confidence in their role in society and believe they are capable of accomplishing their job. While important, we should not rely solely on Nix and Wolfe (2016) when drawing conclusions about the connection between self-legitimacy and sensitivity to the Ferguson Effect. That study focused on deputies from one agency and the sample was comprised mostly of patrol officers. Accordingly, we aim to build on that research by examining the possible link between self-legitimacy and the experience of the Ferguson Effect among management-level officers from various police agencies.

Peer Attachment

Another factor that may play a role in the degree to which police officers have been impacted by the Ferguson Effect is the quality of relationships they have with their colleagues. Most research to date has examined the role of peer attachment on police self-legitimacy—officers who have better quality relationships with their colleagues tend to be more confident in their authority (Nix and Wolfe 2017; Tankebe 2014; Tankebe and Meško 2015). Officers' bonds to their peers may also play a role in whether they have been negatively impacted by the Ferguson Effect. The police subculture literature reveals that officers often develop an "us versus them" mentality when it comes to their orientation toward the public (Chan 1996; Waddington

1999). Officers who enjoy working with their colleagues, trust them, feel supported by them, and are loyal to them are likely in a situation where they can be protected from relentless public criticism of the police. Regardless of how much the public seems to be unsupportive of the police, officers with strong bonds to their colleagues still have their support on the street. Strong peer attachment may create a situation where officers do not want to let their colleagues down by shirking their own responsibilities or being less motivated to do their job well. In this way, manifestations of the Ferguson Effect may be less likely among officers with a high quality peer network.

The Current Study

The present study explored whether perceived audience legitimacy, self-legitimacy, and/or peer attachment were associated with management-level officers' sensitivity to the Ferguson Effect. We examined this question with a survey of police officers that was conducted a little over a year after the death of Michael Brown in Ferguson, MO. This was a time when debate surrounding the existence of a Ferguson Effect was getting a lot of attention in the media. Indeed, shortly before the administration of the survey, FBI Director James Comey commented that he believed the Ferguson Effect had caused crime to go up in some cities throughout the US as police became more hesitant to do their jobs (Comey 2015). We used several survey questions to tap into various sentiments that could be attributable to Ferguson and other similar high-profile deadly force incidents, such as the deaths of Eric Garner in New York and Walter Scott in South Carolina. The purpose of the present study was to provide a theoretically-informed understanding of the factors that are associated with greater sensitivity to the Ferguson Effect, in order to allow for more informed policy discussions. Nix and Wolfe (2016) provided a good starting point, but importantly, that study was carried out in a single agency and was restricted

primarily to line-level officers. Here, our focus is on supervisors at various levels throughout numerous police departments. These are the individuals who oversee the officers working patrol, and it is possible that their concerns might trickle down to their subordinates. We tested three hypotheses:

1. Respondents who perceive greater audience legitimacy will be less sensitive to the Ferguson Effect.

2. Respondents who possess greater self-legitimacy will be less sensitive to the Ferguson Effect.

3. Respondents who have greater attachment to their peers will be less sensitive to the Ferguson Effect.

Methods

Data

In October 2015, we surveyed alumni of an advanced police education and training institute in the southeastern United States. The institute is geared toward mid-level police managers. The survey was administered online at a password-protected website, and to encourage participation we emailed police officers who were listed on the institute's alumni listserv ($N = 509$) using a modified Dillman method. Specifically, the initial email explained the purpose of the study and the importance of participation, and reminder emails were sent two and four weeks later to encourage those who had not responded to do so (Dillman 2000). A total of 114 police officers returned completed surveys, representing a 22.4% response rate.[3] As is common with survey

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[3] The officers were employed by approximately 75 different agencies from across the United States (the exact number is unknown as six respondents declined to provide this information). It is unknown how well our sample represented the population from which it was drawn due to the fact that we only had access to an email listserv – and we have no way of knowing the demographic information of officers who elected not to complete the survey.

research, a few respondents did not answer every question on the survey, which resulted in a small amount of missing data. We used hotdeck imputation to handle missing data (available in Stata 14; Andridge and Little 2010; Fuller and Kim 2005).

Dependent Variable

We measured sensitivity to the Ferguson Effect using five questions. Respondents were asked to indicate their level of agreement (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) that deadly force incidents such as those in Ferguson, Staten Island, and North Charleston "have caused you to be less proactive on the job than you were in the past," "have made it more difficult to be motivated at work," "have negatively impacted the way you do your job," "Have made it less enjoyable to have a career in law enforcement," and "will ultimately result in higher crime rates due to de-policing" (Nix and Wolfe 2016; Wolfe and Nix 2016).

We consider responses to each of these questions as possible manifestations of the Ferguson Effect. Thirty-nine participants reported (i.e., responded "agree" or "strongly agree") that the Ferguson-related controversy had negatively impacted the way they do their job, 35 indicated that it is now more difficult to be motivated at work, and 68 believed policing has become less enjoyable. A total of 34 officers reported being less proactive on the job than they were in the past, which is a clear sign that a non-trivial portion of the sample has engaged in de-policing. Moreover, 53 supervisory-level officers believed that crime rates will increase as a result of de-policing. This is alarming because it suggests that many police managers in the sample believed their subordinate line-level officers will engage in de-policing.

Principal components analysis (PCA) suggested that the five items loaded onto a single component (λ = 3.40, loadings > 0.76) with strong internal consistency (α = 0.88). For the

multivariate models presented below, we combined the items into a single additive scale with higher scores indicating that the respondent felt negatively impacted by Ferguson and related high-profile deadly force incidents. Descriptive statistics for all variables used in the analysis are presented in Table 1.

[Table 1 about here]

Independent Variables

Audience Legitimacy

The first independent variable was *audience legitimacy*, which we measured using five statements with Likert-type response categories. Specifically, respondents were asked to report the extent to which they agreed or disagreed (1 = strongly disagree to 5 = strongly agree) that citizens in their community "view the police as a legitimate authority," "trust the police," "are willing to obey the police," "believe the police are effective," and "share the same values as the police" (Bottoms and Tankebe 2012; Jonathan-Zamir and Harpaz 2014; Nix 2015a). The items demonstrated strong internal consistency ($\alpha = 0.91$) and PCA indicated that the items loaded onto a single component ($\lambda = 3.78$, loadings > 0.79). Accordingly, the items were summed to create a scale whereby higher scores reflect a stronger belief on the part of the respondent that his/her community views the police as legitimate.

Self-legitimacy

The second independent variable was *self-legitimacy.* We asked respondents to report the extent to which they agreed or disagreed (1 = strongly disagree to 5 = strongly agree) with three statements: "I believe I occupy a special position in society," "I have confidence in the authority vested in me as a law enforcement officer," and "I believe people should always do what I tell

them as long as my orders are lawful" (Nix and Wolfe 2017; Tankebe 2014). PCA revealed that the three items loaded onto a single component (λ = 1.51, loadings > 0.65). The items demonstrated moderate internal consistency (α = .51), but it is important to note that these items were extracted from prior research pertaining to the construct. As such, we summed the items to create a scale with higher scores reflecting greater self-legitimacy.

Peer Attachment

The third independent variable was *peer attachment*, which was measured via four items. Respondents were asked to indicate their level of agreement (1 = strongly disagree to 5 = strongly agree) with the following statements: "I enjoy working with my colleagues in my agency," "I feel supported by my colleagues in my agency," "I feel a sense of loyalty to my colleagues in my agency," and "I trust my colleagues in my agency" (Nix and Wolfe 2017). PCA demonstrated that the items loaded onto a single component (λ = 3.13, loadings > 0.82), and Cronbach's alpha revealed strong internal consistency (α = 0.90). We therefore used the items to create a summated scale with higher scores reflecting greater peer attachment.

Controls

In an effort to generate unbiased estimates of the effects of the key independent variables on sensitivity to the Ferguson Effect, we controlled for several officer characteristics. In terms of agency type, we used a dummy variable to account for whether the respondent was employed by a local/municipal, sheriff's, or state law enforcement agency (1 = Local/municipal, 0 = state or sheriff's agency).[4] *Rank* was measured via four ordinal categories (1 = line-level supervisors, 2 =

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[4] Only nine respondents indicated that they were employed by a state law enforcement agency. Findings were substantively unchanged when these respondents were removed from the analysis.

lieutenants, 3 = captains, and 4 = command staff).[5] *Years of experience* was measured

continuously, while age was measured with a dummy variable indicating whether the respondent

was over 50 (1 = yes).[6] Respondents' highest level of *education* was measured categorically (1 =

some college, 2 = associate's degree, 3 = bachelor's degree, 4 = Master's degree or higher).[7]

Finally, we controlled for whether or not the respondent had a *military* background (1 = yes).

Analytic Strategy

To examine whether perceived audience legitimacy, self-legitimacy, and peer attachment were

associated with sensitivity to the Ferguson Effect, we estimated a series of multivariate equations

using ordinary least squares regression (OLS). OLS was used because our dependent variable

approximated normality (skewness = -0.02, kurtosis = 2.27). First, we estimated the effect of

perceived audience legitimacy on sensitivity to the Ferguson Effect, net of statistical controls.

Likewise, in two subsequent regression models we estimated the effect of self-legitimacy and

peer attachment on sensitivity to the Ferguson Effect, respectively, holding all controls constant.

Finally, we incorporated all three independent variables into a single regression model. This

allowed us to provide a robust assessment of the degree to which audience legitimacy, self-

legitimacy and peer attachment were associated with sensitivity to the Ferguson Effect.

Several diagnostic tests provided evidence that collinearity was not a concern in our

multivariate models. All bivariate correlations between the independent and control variables fell

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[5] Due to the small number of chiefs (n = 5) and deputy chiefs (n = 6), we combined them with majors to form a single "command staff" category. Line-level supervisors include corporals and sergeants; command staff includes majors, assistant/deputy chiefs/sheriffs, and chiefs/sheriffs.

[6] This variable was originally measured using four categories but due to the small number of respondents in the 21-30 and 31-40 groups, we had to collapse the variable into over or under 50.

[7] Not surprisingly given our sample, none of the respondents indicated that their highest level of education was a high school diploma or GED.

below |.47|. Moreover, all variance inflation factors fell below 1.33 and all condition indices fell below 30 – well within acceptable ranges (Tabachnick and Fidell 2013).

Results

Model 1 in Table 2 presents the results of an OLS model that regressed *sensitivity to the Ferguson Effect* onto perceived audience legitimacy and six control variables. Roughly 13% of the variance in sensitivity to the Ferguson Effect was accounted for by the model. Most importantly, respondents who felt that their community perceives the police as legitimate were significantly less likely to have been adversely impacted by Ferguson-related incidents ($b = -0.54$, $p < .01$). In other words, respondents who felt that their community trusts them, is willing to obey them, and shares the same values as them were less likely to report de-policing behaviors, being less motivated, or thinking their job has been negatively impacted by Ferguson and similar incidents (Hypothesis #1 supported).

[Table 2 about here]

Model 2 presents the results of an OLS model that regressed our dependent variable onto *self-legitimacy* and each of the controls. This model was not statistically significant, meaning that it did not provide better prediction of the outcome than would be expected by a constant-only model (Hypothesis #2 not supported). Much of the research exploring the correlates of self-legitimacy has been conducted with line-level officers, so perhaps the construct carries a different meaning among officers of higher rank.

In Model 3, *sensitivity to the Ferguson Effect* was regressed onto our peer attachment scale along with each of the aforementioned control variables. This model accounted for a modest amount of variation in the outcome ($R^2 = 0.07$). Peer attachment ($b = -0.49$, $p < .01$) was

significantly and negatively associated with the dependent variable (Hypothesis #3 supported). That is, respondents who trust their colleagues, feel supported by them, and feel loyal to them were less likely to report being negatively affected by Ferguson-related controversies.

Finally, Model 4 presents the results of a fully-saturated model that includes all three independent variables and each of our controls. This model explained about 13% of the variance in the outcome measure. Audience legitimacy ($b = -0.41$, $p < .01$) remained significantly and negatively associated with sensitivity to the Ferguson Effect (Hypothesis #1 supported). Note that the peer attachment coefficient was reduced to non-significance upon accounting for perceived audience legitimacy. With these findings in hand, we now turn to a discussion of the implications surrounding the results.

Discussion

Policing has been negatively impacted by the controversies surrounding Ferguson and other fatal encounters between police and minority citizens. As such, it is necessary to consider what factors are associated with greater sensitivity to the so-called Ferguson Effect. While Nix and Wolfe (2016) provided a starting point, additional research is needed before firm conclusions can be drawn. Given their main finding – that organizational justice was the key to protecting line-level officers from being negatively impacted by Ferguson-related negative publicity – we considered the factors that may be associated with sensitivity to the Ferguson Effect among officers in supervisory positions. These are the very officers who are in a position to *use* organizational justice to the benefit of their subordinate officers. Supervisors who have been negatively affected by Ferguson and similar controversies may be at a disadvantaged spot to ensure effective managerial strategies like employing organizational justice. The present study attempted to shed some light on this matter. We found evidence of a Ferguson Effect in our sample of officers from

many different agencies holding a variety of managerial positions. But importantly, those officers who felt that their communities perceive the police as more legitimate were less sensitive to the ill effects of recent high-profile police shootings. With this in mind, several issues warrant more discussion.

Bottoms and Tankebe (2012) suggest that police legitimacy represents an ongoing dialogue between the police and the communities they serve. As such, it is not only important to consider what makes the public view the police as legitimate, but also *how the police believe the public views them*. This has ramifications for their own self-legitimacy, and ultimately, the way that police go about doing their jobs (i.e., the claims to legitimacy they make). In this case, managerial police officers who believed their community trusts the police, shares similar values with the police, and feels obligated to obey the police were significantly less likely to indicate having been negatively impacted by Ferguson and similar controversial deadly force incidents. This suggests that in those communities where the police do not feel that citizens view them with legitimacy, officers may feel less motivated or believe the job has become more dangerous. Indeed, this could perhaps explain the de-policing that went on in Baltimore following Gray's death (Morgan and Pally 2015), or the crime increases observed in select cities following Brown's death in Ferguson (Rosenfeld 2016).

On the other hand, self-legitimacy and peer attachment were not significantly associated with sensitivity to the Ferguson Effect among officers in this sample. This is consistent with the findings of Nix and Wolfe (2016). Because self-legitimacy is still an emerging concept that has received relatively little empirical attention in police research, it will be important for researchers to consider what self-legitimacy might mean for officers at various levels of the police organization, and perhaps more importantly, how best to measure the concept on a survey. Peer

attachment, on the other hand, appeared significant at first but was actually confounded by perceived audience legitimacy. This can perhaps be attributed to the fact that management-level cops are not on the street as much as patrol officers. So, we would expect peer attachment to be more meaningful among line-level officers because they may believe that, although the public does not support them, their colleagues do. Police supervisors still work along colleagues but their bond may be less meaningful when it comes to overcoming public criticism that is more commonly experienced on the street.

A rapidly growing body of research suggests that good things happen when line-level police officers believe their supervisors exhibit organizational fairness. For example, officers are *less* likely to engage in misconduct (Wolfe and Piquero 2011), and *more* likely to: (a) comply with procedures and orders (Bradford *et al.* 2013), (b) be committed to agency goals (Bradford and Quinton 2014), (c) trust and feel obligated to obey supervisors (Trinkner *et al.* 2016), and (d) express support for using procedural fairness with citizens (Tankebe 2014). Studies have even shown that officers who perceive greater organizational justice from their supervisors and command staff are less sensitive to the Ferguson Effect (Nix and Wolfe 2016) and remain committed to engaging in community partnerships *despite* negative publicity surrounding the profession after Ferguson (Wolfe and Nix 2016). Thus, organizational justice appears capable of shielding line-level officers from the Ferguson Effect. But what if the very people who are in a position to use organizational fairness (i.e., supervisors at various levels throughout the agency) *also* feel adversely impacted by public criticism stemming from recent high-profile shootings of citizens? That is, what happens if supervisors feel less motivated, are less willing to be proactive, or think their job is less enjoyable post-Ferguson? This was precisely the case among many of the officers within our sample. Could these sentiments translate into less organizationally fair

treatment of subordinates? If so, this would be highly problematic given that organizational

justice is key to offsetting the Ferguson Effect on line-level officers – those officers who interact

with the public on a daily basis (Nix and Wolfe 2016).

These issues have practical importance for the police. It is important to note that our

findings suggest that the Ferguson Effect is real to many of the managerial officers in our

sample. At this point we must wait to determine how long the Ferguson Effect lasts. This is an

important question because a more prolonged effect could potentially have detrimental

ramifications for issues such as officer self-legitimacy and audience legitimacy. The longer

officers feel less motivated, less willing to work with the community, and the like, the more

likely it is that they may begin to question their own legitimacy. In turn, this may diminish

audience legitimacy and contribute further to strained police-community relations.

Accordingly, it is important for police managers to devise strategies to intervene in this

potential decay of community trust. Our findings suggest that it would be wise to focus attention

on building audience legitimacy. As discussed above, an internal mechanism that could help in

this process would be for police supervisors to ensure organizational justice when dealing with

subordinates. Line-level officers who are treated fairly by their superiors are more likely to treat

the public in the same manner (Tankebe 2014). Such treatment, over time through repeated

teachable moments, may help repair lost community trust. Police agencies must also work

directly with the community to improve trust and legitimacy. Community policing efforts must

strive to integrate community members into the police decision-making process, the police must

routinely engage the public by explaining to them why they make particular decisions, and

officers must seek avenues for rapport building (e.g., community meetings and joint events).

Accordingly, research examining the effects of these practices on cultivating and sustaining audience legitimacy will be necessary.

This study is, of course, not without limitations. First, our sample was fairly small and comprised mostly of white males in their 40's and 50's.[8] This was expected given the targeted sample—mid-level police managers. However, researchers should continue to explore the relationship between perceived audience legitimacy and work-related outcomes such as sensitivity to the Ferguson Effect using larger, more diverse samples. Note, however, that our sample was not restricted to officers from a single agency like most prior studies concerned with the issues examined here. Second, our response rate was low and we therefore cannot rule out the possibility of nonresponse bias skewing our results. Moreover, due to our small sample size, we may have lacked sufficient statistical power to detect significant effects, and low R-squared values suggest our models may have suffered from omitted variable bias. Finally, our study was cross-sectional which precluded our ability to determine whether respondents' attitudes had actually *changed* in the aftermath of Ferguson. Future research using longitudinal designs with larger samples would be a welcomed addition to the literature.

Despite these limitations, our study adds to a growing body of literature which suggests that police have felt the effect of the Ferguson controversy on their profession. Similar to line-level officers (Morin *et al.* 2017; Nix and Wolfe 2016), our findings revealed that management cops feel less motivated on the job, less willing to engage in proactive policing, and less satisfied with their careers in law enforcement. The microscope of scrutiny on the police appears to influence their attitudes and behaviors. Research of the sort we did here does not displace blame

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[8] Eighty-nine percent of the respondents were white and 91% were male.

for excessive use of force, unjustified shootings, poor training, or strained community relations that we have seen in various jurisdictions around the United States. Police reform is needed in many places and the law enforcement agencies must be responsible for leading this effort. At the same time, however, most departments are comprised of good cops who are performing a noble job. Our research suggests that public criticism that is lobbed at the police affects officers regardless of whether they work in a community that experienced a high-profile police shooting or not. In the end, this is important because the extent to which officers de-police or feel less motivated to do their job naturally impacts community safety. The good news is that if we can identify strategies for improving the legitimacy of the police in the eyes of the public, we will go a long way in preventing such negative effects on officers. The legitimacy crisis facing American policing should be the target of reform efforts. Reestablishing trust among the community could ultimately help avoid Ferguson-related effects on officers, reduce the number of officer-involved shootings, and reduce crime along the way.

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Table 1. Descriptive statistics ($N = 114$).

Variable	M	SD	Min	Max
Ferguson Effect	15.31	5.16	5	25
Audience legitimacy	19.52	3.33	9	25
Self-legitimacy	13.13	1.51	9	15
Peer attachment	16.79	2.59	8	20
Local/municipal	0.64	---	0	1
Rank	2.48	1.07	1	4
Years of experience	24.32	6.04	12	38
Age > 50	0.33	---	0	1
Education	3.03	1.04	1	4
Military	0.56	---	0	1

Table 2. OLS regression model predicting sensitivity to the Ferguson Effect.

Variable	Model 1 b (SE)	Model 1 β	Model 2 b (SE)	Model 2 β	Model 3 b (SE)	Model 3 β	Model 4 b (SE)	Model 4 β
Audience legitimacy	-0.54** (0.14)	-0.35	---	---	---	---	-0.47** (0.15)	-0.30
Self-legitimacy	---	---	-0.32 (0.34)	-0.09	---	---	0.04 (0.33)	0.01
Peer attachment	---	---	---	---	-0.49** (0.18)	-0.25	-0.27 (0.20)	-0.13
Local/municipal	1.70† (0.95)	0.16	1.66 (1.02)	0.15	1.62† (0.99)	0.15	1.65† (0.96)	0.15
Rank	-0.50 (0.45)	-0.10	-0.77† (0.47)	-0.16	-0.88† (0.45)	-0.18	-0.58 (0.45)	-0.12
Years of experience	0.01 (0.09)	0.01	-0.02 (0.09)	-0.02	0.01 (0.09)	0.01	0.02 (0.09)	0.02
Age	-0.74 (1.06)	-0.07	-0.67 (1.14)	-0.06	-0.46 (1.09)	-0.04	-0.67 (1.07)	-0.06
Education	-0.59 (0.45)	-0.12	-0.56 (0.49)	-0.11	-0.53 (0.46)	-0.11	-0.54 (0.46)	-0.11
Military	0.09 (0.93)	0.01	-0.16 (0.98)	-0.02	-0.13 (0.96)	-0.01	0.05 (0.93)	0.01
Intercept	27.84** (3.55)	---	22.78** (4.89)	---	26.28** (3.91)	---	30.06** (5.02)	---
F-test	3.44**		1.26		2.22*		2.88**	
Adjusted R^2	0.13		0.02		0.07		0.13	

Note: entries are unstandardized regression coefficients (b), standard errors (SE), and standardized regression coefficients (β).
** $p ≤ .01$, * $p ≤ .05$, † $p ≤ .10$