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BEYOND THE "FERGUSON EFFECT" ON CRIME:

EXAMINING ITS INFLUENCE ON LAW ENFORCEMENT PERSONNEL

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ABSTRACT:

The purpose of the current study is to examine the influence tensions over high-profile officer-involved shootings have had on Atlanta police officers' ability to do their jobs and whether these impacts vary by officer race. Data was collected between August and October of 2016. A total of 241 police officers across six zones completed the self-administered survey. Findings indicate that while white officers, on average, felt the impacts of recent tensions surrounding officer-involved shootings more strongly, non-white officers were more likely to say they would leave policing if offered a better paying job in another field. This study provides insight into racial differences in the impacts of recent tensions and protests over fatal officer-involved shootings.

INTRODUCTION

Over the past several years, multiple high-profile incidents of fatal officer-involved shootings have drawn national attention and caused law enforcement to come under increased public scrutiny. The deaths of Tamir Rice in Ohio, Eric Garner in New York, Freddie Gray in Maryland, Walter Scott in South Carolina, George Floyd in Minnesota, Alton Sterling in Louisiana, Atatiana Jefferson in Texas, and many others have reignited concerns about police race relations and excessive use of force. Indeed, the legitimacy of law enforcement is currently being challenged by calls from the public, political officials, social movement organizations (e.g., Black Lives Matter), and other notable public figures (e.g., professional athletes) to defund police departments. The most recent Gallup poll has further uncovered record low confidence in law enforcement. From 2019 to 2020, the American public's confidence in police decreased five points to 48 percent (Brenan, 2020). This is the first time in 27 years that this statistic fell below the majority and may be in response to the police-involved death of George Floyd in late May of this year (Brenan, 2020).

The deadly police shooting of Michael Brown in Ferguson, Missouri in 2014 has often been identified as the catalyst for what has been called the "Ferguson effect" (MacDonald, 2015). According to Wolfe and Nix (2016), the Ferguson effect "suggests that officers are conscious of the negative publicity surrounding their profession, understand that their actions could be recorded by the public at any given time, and become less willing to do their job as a way to avoid being accused of racial profiling or excessive force" (p. 1). While the Ferguson effect has typically been discussed in conjunction with whether or not violent crime rates are increasing (see Gross & Mann, 2017; MacDonald, 2015; Morgan & Pally, 2016; Pyrooz et al., 2016; Rosenfeld, 2015), the implications of the Ferguson effect may manifest itself in other

less observable ways such as a decreased willingness among police officers to engage in community partnerships (Wolfe & Nix, 2016), as well as decreased police morale and job satisfaction (Deuchar et al., 2019; Torres et al., 2018; Wolfe et al., 2018).

Since much of the negative media publicity surrounding the use of deadly force has focused on criticizing law enforcement, it is important to explore the impact the Ferguson effect has had on police officers' ability to do their job. Such an examination is necessary because the Ferguson effect may contribute to critical problems such as recruitment, hiring, and retention issues (Jones & Board, 2020; Morrow et al., 2019), causing departments to deplete already scarce monetary resources (Orrick, 2002).

LITERATURE REVIEW

The Ferguson Effect and its Impact on Police Officers

Ferguson effect research has mostly focused on the consequences of change in officer behavior and, specifically, if the spike in violent crime that occurred in 2015 was related to the death of Michael Brown and subsequent protests (Pyrooz et al., 2016; Rosenfeld, 2015; Rosenfeld & Wallman, 2015). However, the Ferguson effect can more generally refer to an officer's fear of becoming part of a "viral video," encompassing other high-profile officer-involved shootings or killings of unarmed Black individuals. A general framework has been developed for assessing the effect of Ferguson-like events: (1) increased negative public attitudes toward police subsequent to an unjustified incident of officer-involved brutality or killing of unarmed Black individuals, (2) police behavior change in response (de-policing), and (3) a coalescence of the first two components to precipitate rising crime rates (Capellan, 2020; Nix & Pickett, 2017; Turchan, 2020).

The focus of the current inquiry relates to negative attitude shifts among police officers, which falls under component two of the general framework. Indeed, evidence suggests criticism following high-profile incidents of police brutality negatively impacts police personnel. Morin and colleagues (2017) found that 86% of their nationally representative sample of police officers (N = 7,917) reported their job was more difficult as a result of the widespread media coverage of fatal encounters between black individuals and law enforcement, and three-quarters of the sample stated high-profile incidents worsened tensions between the police and black communities (Morin et al., 2017). In addition, police officers are less inclined to engage in stops, citations, and arrests, among other outcomes – providing support for the de-policing hypothesis (Deuchar et al., 2019; Jones & Board, 2020; Marier & Fridell, 2020; Morgan & Pally, 2016; Myers, 2018; Schjarback et al., 2017; Wolfe & Nix, 2016).

Although research supports the de-policing hypothesis, it appears that shifts in enforcement behavior are temporary (Capellan et al., 2020; Slocum et al., 2019), such that officers are "laying low" until tensions ease, not abandoning their duties altogether. This behavioral dynamic suggests other aspects of the job may be influencing how officers internalize negative publicity – or the degree to which they perceive it as hostile to policing generally (Nix & Pickett, 2017). However, limited research has focused on occupational factors that may insulate officers from public backlash, especially sources of job satisfaction that are known to influence officer attitudes and their commitment to the profession.

Job Satisfaction

The policing profession is inherently dangerous, and the militaristic organizational structure may propagate a seemingly apathetic and negative work environment – especially when under external scrutiny (Crank, 2014). Scholars have linked lower job satisfaction to higher

stress, which can lead to absenteeism, anger, or a higher propensity to engage in misconduct like the excessive use of force (Bishopp et al., 2018; Shane, 2020; Wolfe & Piquero, 2011). In general, police job satisfaction is derived from primary two sources: (1) work-related attitudes and (2) the work environment (Johnson, 2012; Paoline III & Gau, 2020).

Work-related attitudes thought to influence job satisfaction include autonomy, workload, and task variety (Johnson, 2012; Miller et al., 2009; Zhao et al., 1999). Specifically, officers who perceive they have more autonomy in the performance of their duties report higher levels of satisfaction, while task variety has received mixed support. Conversely, workload – especially with tasks an officer does not view as fulfilling the policing mission – can result in higher stress and lower satisfaction levels (Huey & Ricciardelli, 2015; Shane, 2020). Perhaps to a higher magnitude, organizational factors like peer cohesion (Carlan, 2007; Johnson, 2012), organizational fairness (Donner et al., 2015; Wolfe et al., 2018), and feedback from superiors (Johnson, 2012; Paoline III & Gau, 2020) also influence officer job satisfaction. That is, officers who receive more frequent feedback from superiors, who have a better working relationship with peers, and who believe the organization to be fair (e.g., in issuing reprimands, promotion equity) report higher levels of job satisfaction and may be more dedicated to organizational goals.

Findings from more general police job satisfaction research extend to the limited satisfaction research concerning the Ferguson effect (Nix & Wolfe, 2016; Wolfe et al., 2018). Specifically, officers who perceived that their organization and superiors treat them fairly reported less of an impact from negative outcomes (e.g., decreased motivation) related to the Ferguson effect. Yet still, less is known about other components that may be factored into an officer's job satisfaction calculus – like job autonomy or peer cohesion – and whether they reduce the negative effects of increased public scrutiny. Given the benefits of maintaining officer

satisfaction, this line of inquiry can have implications for police executives facing elevated levels of officer attrition (e.g., MacFarquhar, 2021; Mourtgos et al., 2021), and ensure officers remain dedicated to fostering relationships with the community and to achieving organizational goals.

Hiring and Attrition Post-Ferguson

In 2017, the Major Cities Chiefs Association noted that "[m]any major cities are experiencing difficulty finding enough qualified candidates to fill vacant positions" (p. 2). Morrow et al. (2019) empirically support that notion, finding that college students who perceived that the policing profession had been negatively impacted by public and media scrutiny (i.e., the Ferguson effect) cited such scrutiny as negatively affecting their trajectory to work in policing and making them more apprehensive about applying for police positions. Another study of 410 sworn law enforcement officers in North Carolina suggested that some officers believe that the events that transpired in Ferguson have hampered agency recruitment and retention efforts (Jones & Board, 2020). While Rhodes and Tyler (2019) asserted that the total number of applicants for the Dallas Police Department were not negatively impacted by the events in Ferguson, the results of their study cannot speak to the quality of the applicant pool.

A single study was identified that examined the relationship between the Ferguson effect and turnover intentions among police officers. Markopoulos (2017) found a weak correlation which indicated that participants (N = 1,445) did not intend to leave the policing profession as a result of the Ferguson effect; however, it should be noted that the sample consisted "primarily of tenured, senior officers" (p. 90). In other words, research has primarily consulted the perspectives of potential applicants and managerial personnel, neglecting the patrol officers who endure the bulk of public criticism. We aim to bridge that gap by examining whether aspects of

the job that produce satisfaction may insulate officers from the Ferguson effect, and which, if any, help prevent attrition.

Current Study

Beginning in 2015, *The Washington Post* began tracking every fatal shooting by an on-duty police officer in the United States. In 2016, a total of 961 individuals were shot and killed by law enforcement and approximately 25 percent of these incidents (N = 234) involved the death of a black individual (*The Washington Post*, 2020). We believe it is important to provide social context for our study setting – Atlanta, Georgia – to demonstrate the extent to which surveyed officers were experiencing public backlash related to nationwide incidents of officer-involved killings. The shooting deaths of Alton Sterling (Louisiana) and Philando Castile (Minnesota) in July of 2016 reignited protest efforts across the country (Lee et al., 2016) and sparked five consecutive days of protests within the city of Atlanta between July 8, 2016 and July 12, 2016 (Mariano, 2016). While Atlanta garnered national attention during this period, protests were occurring on a frequent basis throughout the summer of 2016. Protesters again took to the streets of Atlanta on September 23, 2016 in response to the officer-involved shooting deaths of Terrence Crutcher (Oklahoma) and Keith Lamont Scott (North Carolina) earlier that month (Haney, 2016).

In addition to protests against police brutality, there were two high-profile incidents of violent retaliation against police. On July 7, 2016, Dallas police officers were ambushed by snipers, leaving five police officers dead and seriously injuring nine others (Bruton et al., 2016). Yet again, on July 17, 2016, a gunman opened fire on police in Baton Rouge, Louisiana, killing three officers and wounding three others (Shapiro, 2016). Accordingly, we argue these violent acts against police, in conjunction with large-scale protests challenging the legitimacy of law

enforcement, have the potential to negatively impact officers' ability to do their jobs effectively, as well as their decisions to remain in policing.

The purpose of the current study is to examine the influence that high-profile officer-involved killings have had on Atlanta police officers. The current study contributes to the existing literature in three main ways. First, our study explores whether there are differences across race in the extent to which officers said negative publicity surrounding use of deadly force incidents had affected their job. Second, we investigate whether organizational-level job satisfaction measures and perceptions of community support are associated with recent tensions, and if these factors vary by race. Lastly, we examine whether these tensions are related to officers indicating they would immediately accept a higher paying job outside of policing if offered as a way to assess the potential for these events to impact officer attrition from policing.

METHODOLOGY

Data Collection and Sample

Prior to data collection, a letter of support was obtained from the Chief of the Atlanta Police Department. The researchers were able to secure this letter of support through an established collaborative agreement between the Department of [REMOVED FOR BLIND REVIEW] and the Atlanta Police Department. Data was collected between August and October of 2016. During that time, the research team visited all six zones within the jurisdiction of the Atlanta Police Department. The research team spent one day at each zone, attending all three roll calls (i.e., shifts) during that day. The research team introduced the purpose of the research, provided and explained the informed consent form, and distributed paper surveys to police officers that were present. Signed consent forms were collected from each participant. The research team collected and separated completed surveys from signed informed consent forms

and manually entered data into SPSS version 24.0 (IBM Corp, 2016). Of the 265 officers that

were present during roll calls, 241 officers completed the survey, for a total response rate of

90.9%. The sample was predominantly male (85%), with a mean age of 32 years old. The

majority of officers were non-White (70.9%). In terms of education, 68% of participants had a

college degree. The average years of experience for the sample was 4.7 years. According to a

2016 report from the U.S. Department of Labor, the Atlanta Police Department was 82% male

and 63% non-White in 2013 (Miller et al., 2016). While our sample is consistent with agency

data on the percentage of male versus female officers, our sample has significantly more non-

White officers than the population ($z = 3.40$; $p < 0.001$).

Table 1. *Summary Statistics*

Item	N	Percentage	Min.	Max.	Mean
Recent Tensions Scale	237		5.00	25.00	15.89
Age	223		21.00	54.00	31.87
Years of Experience	229		0.00	27.00	4.68
Sex	233				
Male	198	85.0%			
Female	35	15.0%			
Race	227				
White	66	29.1%			
Non-White	161	70.9%			
Education	228				
Less than Associate's	73	32.0%			
Associate's and Higher	155	68.0%			

Dependent Variables

Recent Tensions

Recent tensions, for the purposes of this study, acknowledges multiple congruent events

and factors as contributors to the general state of unrest between police officers and society.

Recent tensions were captured using five items assessing the extent to which recent tensions over officer-involved shootings nationwide have affected Atlanta police officers. Participants were asked the extent to which they agreed that "Recent tensions over officer-involved shootings nationwide have:" (1) "Made it more difficult to do my job effectively;" (2) "Made me feel less satisfied with my job;" (3) "Made me feel less safe while on duty;" (4) "Made me feel less safe while off duty;" and (5) "Made me consider finding a job in a different department." Response options ranged from strongly disagree (= 1) to strongly agree (= 5). Cronbach's alpha for the recent tensions scale was 0.829.

Job Offer Outside of Policing

Participants were asked to rate the extent to which they agreed with the following statement: "If I received an offer for a better paying job outside of policing I would immediately accept it." Response options ranged from strongly disagree (= 1) to strongly agree (= 5). The original Likert-type item was then dichotomized on the mean and was operationalized as follows: 0 = less likely to accept a job outside of policing; 1 = more likely to accept a job outside of policing.

Independent Variables

Job Satisfaction

Job satisfaction was adapted from the organizational-level variables outlined in Johnson (2012). All job satisfaction measures were Likert-scale items asking participants the extent to which they agreed with a given statement. Response options ranged from strongly disagree (= 1) to strongly agree (= 5). Variables were created using these items as follows. *Job autonomy* (α = 0.868) was measured using two items: (1) "My job gives me considerable opportunity for independence and freedom in how I do my work"; and (2) "I feel I have enough authority in my

job." *Peer cohesion* (α = 0.814) was assessed using three items: (1) "I like the employees I work with a great deal"; (2) "The example my fellow employees set encourages me to work hard"; and (3) "I feel like I can depend on my fellow employees". *Supervisor feedback* (α = .914) comprised of four items: (1) "My supervisors let me know how well I am doing on the job"; (2) "My supervisors often let me know how well I am performing"; (3) "I always know what my immediate supervisor expects of me in terms of my performance"; and (4) "My supervisor is fair." *Internal affairs fairness* was assessed with a single item: "The internal affairs investigation process is fair." Similarly, *workload* was measured with a single item: "I am dissatisfied with the amount of work I am expected to do." Lastly, *job variety* was captured by a single item: "My job assignment required me to use a number of complex and high-level skills."

Community Outlook

Community outlook functioned to assess how an officer views their community, and the degree to which they believe the community should be involved in police matters. The community outlook index (α = .760) included five questions: (1) How satisfied are you with Atlanta Police Department's relationship with the community?; (2) How high of a priority for the department to improve police-community relations?; (3) How important for the department to accomplish increasing community partnerships?; (4) How important for the department to accomplish solicitation of community input on police operations?; and (5) How supportive are Atlanta's residents of the police department?

Compensation Satisfaction

Participants were asked to rate their satisfaction with (1) the current retirement system; (2) the current base pay and salary increases; and (3) compensation received for overtime, court

time, etc. Response options ranges from extremely dissatisfied (= 1) to extremely satisfied (= 5), with higher scores indicating greater satisfaction.

Current Appeals Process

The current appeals process was assessed with a single-item, Likert-type measure in which officers were asked to indicate their level of satisfaction with the current appeals/grievance process, with 1 = extremely dissatisfied and 5 = extremely satisfied.

Increase Department Diversity

Participants were asked whether they believed it was important for the department to increase officer diversity. Response options for this single-item, Likert-scale variable ranged from not important (= 1) to extremely important (= 5).

Demographic Variables

Participants were asked to provide information on their age, sex (0 = male; 1 = female), race (0 = non-White; 1 = White), education (0 = less than associate's degree; 1 = associate's degree or above), and years of experience on the force.

RESULTS

We begin our analyses of the impact of tensions over officer-involved shootings by examining whether there are differences across race in how officers said such incidents and their aftermath had impacted their job. The mean recent tensions score for White officers ($\bar{X} = 17.68$) was 2.42 higher than that for non-White officers ($\bar{X} = 15.26$) and a t-test shows that the difference was statistically significant ($t = -3.32$; $p \leq 0.001$). Considering the five items in the scale, this means White officers on average felt less safe on and off duty, felt it was more difficult to do their jobs effectively, were less satisfied with their jobs due to tensions of over officer-involved shootings, and were more likely to consider switching departments as a result.

It is important, however, to assess additional factors as this difference could also be explained by other demographic characteristics and/or pre-existing differences across race in various measures related to job satisfaction. To begin examining this possibility, we first estimated an OLS regression model predicting the recent tensions variable by race, sex, age, level of education, and years of experience as an officer. The results of our model predicting the recent tensions scale by officer characteristics (Table 2) indicates that race remains a significant predictor after adding in other demographic controls, further demonstrating that the negative impacts were more strongly felt by White officers. None of the other controls reached statistical significance, and the low adjusted R-Square (0.027) shows that little of the variation in the recent tensions scale is explained by demographic factors alone. As noted above, it is likely that the impact of tensions around officer-involved shootings is influenced by pre-existing attitudes and feelings officers have about their careers. Our next set of models explores this possibility by adding in a set of variables drawn from the police job satisfaction and related literature. We begin by presenting an overall model (shown in Table 3) and then present models with the sample split by race to examine any differences in predictors, given the significant mean difference in the recent tensions scale across race.

Table 2. *Regression Results for Officer Characteristics*

Measure	B	SE	β	p-value
Age	-.057	.067	-.081	.392
Years of Experience	.081	.100	.077	.418
Sex	-.041	1.019	-.003	.968
Race	2.139**	.792	.192	.007
Education	.618	.735	.058	.401
F-Test	2.676			
R^2	.027[a]			

p < .05*
p < .01**
[a] Mean Adjusted R^2

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First, the results presented in Table 3[1]show that even after controlling for variables related to job satisfaction and community support, White officers were still found to believe their jobs had gotten harder due to recent tensions over officer-involved shootings. Perhaps surprisingly, only three of the satisfaction variables reached significance. Officers who reported higher levels of job autonomy ($B = -0.386$; $p < 0.05$) and more peer cohesion ($B = -0.332$; $p < 0.05$) felt less impacted by recent tensions. Conversely, officers who were more dissatisfied with their workload ($B = 1.038$; $p < 0.01$) felt more impacted by recent tensions. Despite the other measures not reaching significance, these findings support the notion that officers who are more satisfied with their work may be more resilient during challenging times for police officers.

Table 3. *Regression Results for Job Satisfaction Measures*

Measure	B	SE	β	p-value
Age	-.042	.070	-.057	.554
Years of Experience	-.085	.112	-.080	.446
Sex	.055	1.085	.004	.960
Race	2.366**	.895	.204	.009
Education	-.275	.779	-.025	.724
Community Outlook	-.175	.129	-.133	.177
Supervisor Feedback	.113	.109	.092	.299
Peer Cohesion	-.332*	.162	-.164	.042
Job Autonomy	-.386*	.151	-.211	.012
Internal Affairs Fairness	.085	.411	.018	.837
Workload	1.038**	.333	.234	.002
Work Variety	.285	.352	.060	.419
Compensation Satisfaction	-.229	.176	-.101	.195
Current Appeals Process	-.434	.457	-.082	.345
Increase Dept. Diversity	.338	.357	.089	.345
F-Test	3.534**			
R[2]	.180[a]			

$p < .05$*
$p < .01$**
[a] Mean Adjusted R^2

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[1] Collinearity diagnostics were examined to ensure no multicollinearity was present between tenure and age, of which both the tolerance and VIF values were within normal range. Inclusion of both in this and subsequent models is in line with prior research (see e.g., Nix & Wolfe, 2016; Wolfe et al., 2018).

Next, given the significant difference across race found earlier, we estimated separate models for White and non-White officers to examine whether predictors of officers' feelings about the impacts of tensions over officer-involved shootings also vary (see Table 4).[2] Comparing the two models highlights some important differences in job characteristics that may contribute to how White and non-White officers feel the impacts of tensions over officer-involved shootings. First, the findings suggest that the potential insulating effect of officers feeling they have job autonomy and cohesion with their peers found above may only be the case for non-White officers. Among non-White officers, there may be some resiliency to the negative impacts of officer-involved shootings if they feel they have both autonomy on the job ($B = -0.429$; $p < 0.05$) and a supportive network of officers in their agency ($B = -0.476$; $p < 0.05$); however, the model suggests there are no such insulating effects for White officers. Conversely, workload has the opposite effect for non-White officers, suggesting that negative impacts are felt more strongly among minority officers who feel the amount of work with which they were tasked was unfair ($B = 0.912$; $p < 0.05$). For White officers, the only significant predictor was feeling that the internal affairs process in the department was fair ($B = -1.695$; $p < 0.05$). White officers who believed the process was fair appear to be less strongly impacted by recent tensions.

Table 4. *Regression Results for Job Satisfaction Measures by Officer Race*

Measure	Non-White			White		
	B	SE	β	*B*	SE	β
Age	-.049	.076	-.069	.097	.184	.142
Years of Experience	-.121	.127	-.107	-.370	.303	-.411
Education	-.937	.911	-.088	2.080	1.508	.184
Community Outlook	-.186	.162	-.141	-.130	.199	-.105
Supervisor Feedback	.131	.142	.109	-.091	.188	-.074
Peer Cohesion	-.476*	.208	-.240	-.519	.296	-.267
Job Autonomy	-.429*	.178	-.241	-.359	.295	-.197

[2] For the models in Tables 4 and 5, we had to exclude sex as a predictor as the very small number of white, female officers was influencing model stability. While this is unfortunate, and should be explored in future research, any bias in the current models is likely to be low given sex was not significant in the models above.

Table 4 Continued.

Internal Affairs Fairness	.942	.523	.202	-1.695*	.655	-.376
Workload	.912*	.388	.202	1.439	.709	.374
Work Variety	.171	.415	.036	.579	.709	.127
Compensation Satisfaction	-.358	.218	-.151	.082	.292	.044
Current Appeals Process	-1.013	.575	-.190	.266	.715	.058
Increase Dept. Diversity	.567	.436	.142	.243	.595	.066
F-Test	2.650**			2.425*		
R²	.140ª			.287ª		

$p < .05$*
$p < .01$**
[a] Mean Adjusted R^2

Finally, given the potential negative impacts of tensions over officer-involved shootings on attrition in police agencies, our final model (presented in Table 5) uses logistic regression to examine whether these tensions are related to officers indicating they would immediately accept a higher paying job outside of policing if offered. Given the consistent racial differences found in the prior models, we again estimated separate models for White and non-White officers. The results show that for both White ($B = -0.495$; $p < 0.05$) and non-White officers ($B = -0.390$; $p < 0.05$), being satisfied with compensation made them less likely to say they would leave policing if offered a higher paying job in another field. Thus, even in a time of tension over illegitimate police shootings, officers are less likely to leave law enforcement if they feel they are fairly compensated. While this is a commonsense finding, the only other significant predictor in either model is much more striking. For non-White officers, the results show that those who were more strongly impacted by recent tensions were more likely to say they would immediately accept a better paying job outside of policing ($B = 0.104$; $p < 0.05$). For White officers, this measure was not significant. This suggests that even though tensions may have made them more dissatisfied with their job as found above, White officers in this sample do not appear to be looking to leave policing as a result. However, for non-White officers, those who are more strongly affected by tensions over officer-involved shootings do appear to be more likely to consider a career change.

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Table 5. *Logistic Regression Results for Leaving Policing*

Measure	Non-White			White		
	B	SE	Exp(*B*)	*B*	SE	Exp(*B*)
Age	-.013	.042	.987	-.090	.143	.914
Years of Experience	.058	.068	1.060	.444	.263	1.559
Education	.501	.477	1.650	.108	1.108	1.114
Community Outlook	.022	.093	1.022	-.099	.154	.906
Supervisor Feedback	-.066	.075	.936	.005	.116	1.005
Peer Cohesion	-.152	.118	.859	.209	.212	1.233
Job Autonomy	-.085	.104	.919	-.338	.269	.713
Internal Affairs Fairness	.069	.283	1.072	.199	.514	1.220
Workload	-.216	.223	.806	-.325	.598	.722
Work Variety	.201	.221	1.222	-.407	.587	.665
Recent Tensions	.104*	.052	1.110	.023	.116	1.023
Compensation Satisfaction	-.390**	.129	.677	-.495*	.245	.610
Current Appeals Process	-.399	.321	.671	.157	.525	1.170
Increase Dept. Diversity	-.089	.243	.915	.800	.498	2.226
-2 Log Likelihood	27.186**			39.812**		
R^2	.281[a]			.333[a]		

$p < .05$*
$p < .01$**
[a] Cox & Snell R^2

DISCUSSION

Throughout the last decade, public outrage in response to shootings of unarmed black civilians has given rise to protests and movements such as Black Lives Matter, placing increased pressure on police departments around the United States. As would be expected, this climate has led to concerns about officer recruitment and attrition, particularly in big city agencies that already long faced challenges with officers leaving for higher paying jobs in the suburbs and smaller cities. For instance, the Atlanta Police Department has struggled to stay fully staffed and was more than 400 officers below their authorized force size of 2,046 by late 2020 (Haney, 2020). This has been a persistent issue that was exacerbated in 2020 when the Atlanta Police Department saw a wave of "blue flu" (i.e., officers calling in sick in protest), resignations, and retirements following the charging of two officers in the shooting death of Rayshard Brooks on June 12, 2020 (Hansen, 2020).

This example highlights the importance of examining whether recent tensions over police brutality has affected officers and police attrition. As reviewed earlier, much research on the "Ferguson effect" (MacDonald, 2015) has focused on crime rate fluctuations and/or potentially de-policing (Rosenfeld & Wallman, 2019). However, others have noted that tensions over police shootings of unarmed minorities may also decrease police morale and job satisfaction (Deuchar et al., 2019; Torres et al., 2018; Wolfe et al., 2018), key issues directly linked to officer attrition. The current study aimed to add to this area of inquiry by examining whether officers felt tensions over high-profile cases of police brutality had negatively affected their ability to do their jobs. More importantly, we assessed whether this varied by race, if measures related to police job satisfaction affected how strongly officers felt any negative impacts of tensions, and whether the tensions were making officers more likely to consider leaving policing for another career. The data used are well suited to addressing these issues as they were collected in the latter half of 2016, a year with multiple high-profile police shootings and nationwide protests – including in Atlanta – very similar to those that rocked the nation and world in 2020.

Our first focus was examining whether there were racial differences in officers believing that tensions over police brutality had made it more difficult for them to do their jobs. Our data showed that the impact of these tensions was significantly higher for White officers, and that relationship remained statistically significant after controlling for other demographic factors and a host of variables related to police job satisfaction. In some respects, this finding is not surprising as the Black Lives Matter movement and other protests primarily arose after high-profile shootings of unarmed Black men by White officers. As such, White officers in particular are likely to feel that these tensions make it more difficult, and/or less safe, for them to carry out their duties.

This does not mean, however, that non-White officers were unaffected by these tensions. Indeed, our later analyses showed that non-White officers who were negatively impacted by these tensions were more likely to indicate they would leave policing if offered a higher paying job in another field. Tensions did not have a statistically significant impact on White officers' responses to that question. Thus, while the impact of tensions was found to be stronger overall among White officers, our data suggest the potential for attrition is higher among non-White (primarily Black in our data) officers. A likely reason here is that tensions and related protest movements have centered on police killings of unarmed Black men. Attrition related to such incidents is salient given that research has discovered negative perceptions of police fairness function as a barrier to potential new recruits' desire to join policing (Vermeer et al., 2020), perhaps contributing to a cycle of staffing shortages. Emphasizing that police organizations should work to minimize attrition in general is further accentuated by the resource demand of hiring new officers, as well as the loss of experienced personnel that may present new officers with diversified perspectives on accomplishing the policing mission (Haarr, 2005; Lynch & Tuckey, 2008).

While only anecdotal at this point, comments from Black law enforcement officers help disentangle the struggle of balancing Black identity and allegiance to their organization. For example, Sheriff Hubert Peterkin of Hoke County, North Carolina (George Floyd's hometown) said, "I am a black man first, then law enforcement" (Korynta, 2020). In an episode of *The New York Times'* podcast "The Daily," Scott Watson, an officer from Flint, Michigan, shared similar sentiments. He noted, however, that these events had caused him to consider retiring, but he was also reluctant due to worries about "who replaces me?" and concerns over things never

improving if officers quit and are replaced by hires from outside the communities where these incidents keep occurring (Barbaro, 2020).

Research has also shown that Black officers view issues related to recent tensions very differently. For instance, one study found that while a majority of White and Hispanic officers rated police relationships with the Black community as excellent or good, only 32% of Black officers shared this view (Morin et al., 2017). The same study also found 72% of White or Hispanic officers felt fatal shootings of Black individuals were isolated incidents, while 57% of Black officers felt they were a sign of a broader problem. Black officers were also more than twice as likely to believe that widespread protests in response to fatal encounters with police have been motivated by a sincere desire to hold police officers accountable. Future surveys and qualitative studies should directly examine how Black officers cope with working in law enforcement during times of heightened public criticism and identify factors that impact decisions on whether or not to remain in the field. Such work is key to understanding the Ferguson effect's impact on recruitment and retention of minority officers.

In short, our findings suggest that both White and non-White officers feel tensions over police brutality have made their jobs more difficult, but they have experienced this differently. As such, care must be given to these differences when law enforcement agencies are designing efforts to prevent attrition of officers during this currently challenging climate. Our other set of models examined the impacts of various job satisfaction measures on the extent to which officers experienced recent tensions and also examined how those vary across officer race. Our findings here offer some preliminary insights for shaping retention efforts in the current climate.

First, for White officers, the only satisfaction variable that had a significant impact on thinking recent tensions had made their jobs more difficult was believing the internal affairs

process was fair. This suggests that, in many respects, the impacts of these tensions among White officers are centered on practical concerns about their careers, with some research finding reliance on managerial fairness heightens during periods of pervasive uncertainty (Wolfe et al., 2018). From a policy standpoint, it appears that one way to limit attrition among White officers during these ongoing tensions is for agencies to find a way to hold officers accountable for misconduct while also ensuring that officers see that the process for firing, disciplining, and criminally charging officers for abuses of power is transparent and fair. Officers who perceive their organization to be fair have higher levels of commitment to organizational goals (Donner et al., 2015) and increased self-legitimacy, or the notion of officers' having greater confidence in their ability to perform on the job (Nix & Wolfe, 2017), while Hilal and Litsey (2020) point out that poor managerial practices are cited as a motivation for resigning. That said, as evidenced by the aforementioned "blue flu" and wave of resignations and retirements in 2020 following the charging of officers in the killing of Rayshard Brooks, balancing police accountability with officer perceptions of fairness is a challenging task (Hansen, 2020).

Second, our findings suggest that, for non-White officers, the nature of their jobs and the workplace environment that can perhaps buffer or amplify the negative impacts of tensions over police brutality. Specifically, we found that the negative impacts of recent tensions were stronger among non-White officers who felt their workload was overly burdensome. This is perhaps not surprising as any negative effects are likely to be strongest among those already dissatisfied with aspects of their job, which is a sentiment that may intensify during times of staffing shortages that result in remaining officers taking on more work (Dahle & Archbold, 2015). Turning to potentially buffering effects, our results show that officers who reported higher levels of peer cohesion were significantly less affected by recent tensions. This finding suggests peer cohesion

may serve as a protective factor to external threats, adding to research that recognizes its positive influences on outcomes critical to retention like officer job satisfaction (Johnson, 2012) and increased self-legitimacy (Nix & Wolfe, 2016; 2017). Further, as nearly 71% of our sample was non-White, it may be that department diversity played a role as well. However, future research is needed in less diverse departments to see if this finding holds among non-white officers in different contexts.

Finally, our models found that officers reporting higher levels of job autonomy were less strongly impacted by recent tensions. A possible implication here is that non-White officers may feel their jobs are less impacted by tensions between their communities and their agency if they feel they have more autonomy in how they themselves police. For instance, the above noted sentiments of being a Black man first and law enforcement second may cause fewer moral dilemmas within a community- or problem-oriented policing framework where officers are given more discretion on the problems they focus on and how they address them. In our view, this is a promising avenue as research also finds that police strategies like community- or problem-oriented policing that increase officer autonomy are effective in improving police-community relationships and reducing crime and disorder, respectively (Gill et al., 2014; Hinkle et al., 2020).

Conclusion

Before concluding, we first must note some limitations of the current study. First, as with most studies, care is needed in generalizing the findings beyond the study site. Atlanta is unique as a majority black city and has a similarly diverse city police force (nearly 71% of those in our sample were non-white). It is unclear whether similar findings, especially about the potential buffering impacts of peer cohesion and job autonomy for minority officers, would be found in less diverse departments. Second, and related to the first limitation, we need research which

examines the Ferguson effect in contexts other than big city police agencies. While these contexts are central given many high-profile police shootings occur in large cities, it is important to understand how these events and the social reactions to them impact officers in mid-sized and smaller organizations that represent the majority of police agencies across the country. Third, because 2016 had an amalgam of events (e.g., the unarmed killing of minorities, nationwide protests, violent retaliation against police officers), it is difficult to parse out which events were impacting officers more or less than others. Future research may benefit from asking officers about specific events and how those events impact officers' ability to do their job. Finally, we centered our discussion above to issues of attrition during a trying time period for policing. However, understanding the impacts of the Ferguson effect on recruitment is also crucial during a time when many police agencies are staffed well below their authorized force size. Future research is needed to examine how recent events and tensions are impacting the decisions of recruits, and perhaps more importantly potential recruits, to pursue or not pursue a career in law enforcement.

In sum, the current study aimed to shed some light on the Ferguson effect by examining racial differences in the impacts of recent tensions and protests over police killings of unarmed Black men on a sample of officers from the Atlanta Police Department. Our data show that while White officers felt the impacts more strongly on average, non-White officers were more likely to say they would leave policing if offered a better paying job in another field. Our examination of measures from the police job satisfaction literature suggest that White officers' concerns are primarily over whether they would be treated fairly by internal affairs unit if an issue arose. While challenging, this highlights the need for departments to find fair, transparent and effective ways to hold officers accountable for misconduct while not causing officers doing good police

work to leave the force. For non-White officers, our findings suggest that agencies create ways to build cohesion among officers, providing them with autonomy in how they police and shifting to a workload that is viewed as fair may be beneficial to preventing attrition and building and maintaining a more diverse force.

Future research is needed to examine the Ferguson effect's impacts on recruitment and retention as the social and political climate around policing is unlikely to change in the near term. It is well known that policing is one of the most difficult occupations when it comes to retaining quality employees (Gachter et al., 2013), and widespread criticism and calls to defund police will likely negatively impact attrition and make difficult recruiting and retaining the type of diverse and educated officers needed to lead to true police reform.

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