

Racial Congruence in Police Use of Force and Arrest Encounters
Authors: Andrea M. Headley and James E. Wright II

Author Note: This paper will be presented at the NEA Annual Conference on January 5, 2020 in San Diego, CA

Abstract:

A significant amount of attention has been refocused on the relationship between officer use of force and communities of color due to the recent killings of unarmed Blacks across the United States. To understand the impact of race and police use of force more meticulously, this paper applies the theory of representative bureaucracy to investigate differences in the amount of force used by Black and White officers and test the link between passive (descriptive) and active (substantive) representation. Research on representative bureaucracy has examined the extent to which a civilian's race affects an officer's decisions, but few studies consider the level of force that officers use or whether an arrest is made. The salience of racial matches depends on contextual factors, such as the interaction between race and the presence of a weapon, that existing scholarship may not account for sufficiently. Using individual-level data to estimate this impact, we find that White officers are more likely to use severe force on Black (as opposed to White) civilians and that both Black and White officers are more likely to use severe force and make an arrest with weapon presence. Yet, when Black civilians have a weapon, Black (as compared to White) officers are more likely to use severe force, but less likely to make an arrest. This study suggests that biases among both Black and White officers may exist.

Recent high-profile police killings of unarmed African American men in the United States have garnered national attention. These incidents raise questions about the role of race in police officers' decisions to use force. According to Edwards, Lee, and Esposito (2019), police kill Black men at a higher risk, with about a 1 in 1,000 chance over their life span. Further, the Bureau of Justice Statistics (2019) reports that Black individuals comprised approximately 25% of arrest-related deaths in 2015—even though African Americans constitute under 13% of the population. This problem is long-standing. Police brutality against African Americans has been a recurring issue since it surfaced during the U.S. Civil Rights Movement in the 1940s. Scholars, conclude that police brutality against people of color is one of the most significant unfulfilled goals of the Civil Rights Movement (e.g., see Siff 2016).

One policy advocated to reduce adverse policing outcomes against people of color is to hire more officers of color. Requests for increased diversity and representation in policing rely on the belief that hiring officers of color will result in less violent police-civilian encounters and greater police legitimacy. This belief is not without critique. Others have argued that the inclusion of officers of color on the police force has not resulted in substantive differences for communities of color (Smith and Holmes 2014) and, on some occasions, has resulted in harsher treatment (McElvain and Kposowa 2008; Wilkins and Williams 2008). Nevertheless, the lack of representation in police departments is a persistent and ongoing problem (see, e.g., Ashkenas and Park 2015). Thus, hiring officers of color is still widely advanced as a policy solution for police departments (U.S. Department of Justice 2016), which serves as the basis for this analysis.

In order to understand the nuances that impact officers' street-level decisions, we estimate the impact of racial congruence and risk on (a) the levels of force that officers use and (b) subsequent arrest outcomes. Our study offers three additions to the literature. First, we assess

interactions between racial congruence and risk, using an indicator that measures the presence of a weapon. Policing studies in public administration and management have tended to focus exclusively on race without accounting for important contextual interactions (see, e.g., Hong 2016, 2017a; Linos 2018; Riccucci, Van Ryzin, and Lavena 2014; Riccucci, Van Ryzin and Jackson 2018; Wilkins and Williams 2008; 2009). In this analysis, we are also able to control for important contextual and encounter-related variables, such as: weather, type of encounter, and whether the civilian was under the influence or was mentally unstable.

Moreover, we distinguish between two related outcomes: the level of force an officer used and if the use of force incident resulted in an arrest. This is important for two primary reasons. First, existing research focuses primarily on police killings and the use of lethal force rather than looking at all levels of use of force more broadly (see, e.g., Jennings and Rubado 2017; Menifield, Shin, and Strother 2018; Nicholson-Crotty, Nicholson-Crotty and Fernandez 2017). Lethal force is rare, and officers engage in other types of force more frequently, thus, examining the variety of force types that officers engage in is necessary. Assessing the level of force helps us to understand when officers choose to use more severe force as compared to lower levels of force, rather than just looking at instances when force occurred. Second, in use of force encounters, a civilian arrest, or other results, may occur in use of force encounters. However, arrests do not occur in all use of force incidents. Thus, we seek to identify if the same factors that correspond with officers' use of force behaviors are indicative of their arrest behaviors.

We also focus our analysis at the micro-level by examining individual incidents of police-civilian encounters. Most representative bureaucracy literature focuses at the organizational- or aggregate-level, which has generally been associated with improved performance and outcomes (Keiser, Wilkins, Meier and Holland 2002; Hong 2016). However,

comparatively fewer studies examine the effects of individual-level demographic or identity matching between bureaucrats and civilians, and these studies provide mixed support (Guul 2018; Wright 2019).

This article uses 2016-2019 data from the New Orleans Police Department to test the relationship of racial congruence and risk on use of force and arrest outcomes. We present the results using a stepwise linear probability model with individual-, encounter-, and situational-level controls as well as year-fixed effects. In our study, we find that racial congruence (not accounting for racial type) does not correlate with levels of force or arrests. There is a much lower probability of an arrest when officers interact with civilians of the same race who possess a weapon compared to when officers interact with a civilian of a different race who has a weapon.

When parsing out congruence by race, we find that White officers are more likely to use severe force on Black civilians in comparison to White civilians. We also note a lack of statistical significance when comparing Black officer and Black civilian use of force interactions with White officer and Black civilian interactions. Further, we find that in situations where the civilian has a weapon, Black officers are more likely to use severe levels of force on Black civilians as compared to White officers interacting with Black civilians. Regarding arrest outcomes, we see that when the civilian has a weapon, Black officers interacting with Black civilians are less likely to make an arrest as compared to when White officers interact with Black civilians. Thus, the risk posed to an officer based on the presence of a weapon changes the relevance of racial congruence for officer behaviors.

The results of our analysis suggest that representation alone does not explain all officers' behaviors. Moreover, the relevance of representative bureaucracy is conditional on the behavioral outcome analyzed and situational contingencies. Our results demonstrate that White

officers are guilty of bias (when comparing White to Black civilian interaction); however, Black officers do not significantly differ from White officers in their use of force or arrest behaviors when interacting with Black civilians either. In regard to this latter point, the lack of significance may indicate department-wide biases against Black civilians regardless of officer race.

Therefore, more representation does not necessarily equate to less bias. There is value in training both White and Black officers to understand, acknowledge, and correct potential biased decision-making and behavioral patterns, particularly as it pertains to identifying a threat to safety.

Police as Street-Level Bureaucrats

Street-level workers are front-line public servants “operat[ing] at the boundary between citizens and the state, and they profoundly shape the definitions of both through the actions they take and the norms they invoke” (Maynard-Moody and Musheno 2000, p. 332). These workers hold significant amounts of discretion to implement laws and rules, which impact the quality of service delivery. They must consider multiple factors when exercising this discretion, including legal constraints, organizational rules, informal organizational culture, and their own norms and beliefs (Scott 1997).

Discretion is necessary for street-level workers to uniquely respond to diverse circumstances and cases. Accordingly, “we must examine data at the individual level” to investigate street-level bureaucracy and explain policy implementation (Keiser 2010, p. 249). Focusing at the micro-level within an organization allows for an evaluation and isolation of the determinants of bureaucratic discretion and decision-making while holding constant organizational culture, rules, and constraints. Research suggests that attributes and characteristics of both the service recipient (i.e., the civilian) as well as the service provider (i.e., the street-level bureaucrat) impact decision outcomes at the street-level (Scott 1997). Even so, one of the most

important characteristics of street-level interactions is the worker's assessment of the civilian, particularly as it pertains to their attributes, character, identity, and/or deservingness (Schneider and Ingram 2005; Maynard-Moody and Musheno 2003).

In the United States, police officers are street-level workers who make contact with approximately 53.5 million civilians in any given year (Davis, Whyde, and Langton 2018). Of this number, almost one million Americans experience the threat or actual use of force whereas over two million people experience an arrest or police search. When officers use force, it is likely that a subsequent arrest occurs. However, there is still large discretionary leeway when deciding to make an arrest. For instance, our data here shows that approximately 20% of cases that involved police use of force did not lead to subsequent arrests in New Orleans. The question then arises as to what prompts officers to use lower or higher levels of force and/or make an arrest? How are the factors that impact decision-making regarding these two outcomes similar and/or different?

Policing scholars have long examined the decision-making process and practices of officers (see e.g., Goldstein 1960). They acknowledged the multitude of factors that contribute to officers' decisions on the streets, including extralegal ones. Extralegal factors refer to social, psychological, and economic factors that may influence discretion, such as: civilian demographics (race, ethnicity, gender, age), demeanor, prior contact with the police, and so forth (National Research Council 2004). At the individual level, few variables consistently and significantly relate to officer decisions, these include civilians who have low socioeconomic status, who are under the influence of drugs or alcohol (Terrill and Mastrofski 2002), and officer education (Rydberg and Terrill 2010). Other correlates, such as race, gender, age, or experience, have exhibited much less evidentiary consistency in explaining officer use of force and arrests.

Some scholars found that officers arrest people of color at higher rates (Smith and Visher 1981) and use greater levels of force against them (Goff, Lloyd, Geller, Raphael, and Glaser 2016). Scholars also have noted that the race of the officer (Donohue and Levitt 2001) and civilian (Smith, Visher, and Davidson 1984) both matter for arrest decisions. Alternatively, other scholarship has suggested that a civilian's race is not a significant correlate of an officer's arrest decisions (Smith, Visher, and Davidson 1984), officers may be less inclined to use deadly force on people of color (James, James and Vila 2016), and an officer's race does not explain use of force decisions (Brandl and Strohline 2013). Despite these mixed findings, two recent meta-analyses, Kochel, Wilson and Mastrofski (2011) and Bolger (2015), found that *civilian race* was a statistically significant correlate of officer arrest and use of force decisions, respectively. Overall, scholars have more conclusively agreed that the relevance of these demographics or individual-level characteristics depend highly on the presence or absence of other encounter-specific nuances and contingencies (Bolger 2015).

Encounter-specific variables capture the situational nuances that may cue officers to make certain decisions, particularly as it pertains to public and officer safety. Current literature suggests that some of the strongest predictors of officer decisions include ongoing criminal activity (Paoline and Terrill 2007), presence of a weapon (Johnson 2011), civilian demeanor (Worden and Pollitz 1984), and offense seriousness (Bolger 2015). These situational variables are most consistently and strongly related to officer decision-making, which is in alignment with notions of street-level bureaucracy and the need for discretion. However, the question remains: how does racial congruence interact with the situational contexts to impact officers' levels of force used and subsequent arrest decisions? Using the theory of street-level bureaucracy to guide our analysis, we now focus on the theoretical foundation of representative bureaucracy.

Representative Bureaucracy and Risk

Individuals are boundedly rational—they make decisions with imperfect or incomplete information and they have limited ability to process this information (Simon 1955, 1990a). Thus, they employ informational shortcuts (Conlisk 1996; Simon 1947, 1990b). In the context of police-civilian interactions, two informational shortcuts may exist: racial representation and safety.

At its core, representative bureaucracy purports that demographic and social identities matter for bureaucrat decision-making, service delivery outcomes, and public perceptions. These identities include race and ethnicity (Wilkins and Williams 2008), gender (Meier and Nicholson-Crotty 2006), veteran status (Gade and Wilkins 2012), and others. Representative bureaucracy argues that identities matter for a variety of reasons. First, racial congruence may indicate shared experiences, attitudes, beliefs, or values between the bureaucrat and civilian (Bradbury and Kellough 2008). This shared identity may impact bureaucrat behavior by reducing the potential for discriminatory or biased behavior on behalf of the bureaucrat (i.e., active representation). Empirical studies found that bureaucrats of color use their discretion to implement policies and practices that reduce disparate treatment for people of color (see Capers 2017; Eterno, Barrow and Silverman 2017; Grissom, Nicholson-Crotty, and Nicholson-Crotty 2009; Lim 2006; Nicholson-Crotty, Grissom, and Nicholson-Crotty 2011).

Scholars have often conducted studies linking passive and active representation at the aggregate-level and mainly explored in the context of education. At the individual-level, we know that Black teachers are more likely to have positive assessments of and behavior toward Black students (Nicholson-Crotty et al. 2016); direct racial and ethnic representation positively impacts parental outcomes (Vinopal 2017); and gender-matching between job seekers and job

counselors positively impacts subsequent educational enrollment (Guul 2018). We add to this body of literature by examining the context of policing and looking at more fine-grained data on the level of force police use and their decision to make an arrest.

On the other hand, symbolic representation may be at play. Shared identity may directly impact the civilian by increasing his or her willingness to follow instructions, cooperate, or coproduce (Ricucci and Van Ryzin 2017). Research on the effects of symbolic representation have all concluded that representation positively impacts individuals' perceptions and/or evaluations of services and encounters irrespective of bureaucrat behavior changing (i.e., without active representation) (Gade and Wilkins 2013; Ricucci, Van Ryzin, and Lavena 2014; Ricucci, Van Ryzin, and Jackson 2018; and Theobald and Haider-Markel 2009).

Unlike other contexts that have been explored which assess positive outcomes resulting from representative bureaucracy, police encounters often includes negative contacts between police and civilians. Thus, in policing, the result of an outcome where there is a shared identity may be *less negative* compared to incidents without shared identity. For instance, scholars have found correlations with racial representation and decreased crime (Hong 2016), decreased ticketing of Black civilians (Gilliard-Matthews, Kowalski, and Lundman 2008), reduced civilian complaints (Hong 2017a), and improved civilian perceptions (Ricucci, Van Ryzin, and Jackson 2018). Yet, other research has identified potential detrimental impacts of racial representation in police departments on the public, such as, increased racial profiling and police-involved homicides (see Nicholson-Crotty, Nicholson-Crotty, and Fernandez 2017; Wilkins and Williams' 2008, 2009).

An important distinction exists between levels of force and arrest decisions, as it relates to active and symbolic representation. In the context of police use of force, officers interacting

with civilians of the same race may interpret the same resident behavior, mannerisms, and communication differently because of a shared understanding based on their lived experiences (i.e., the officer behaves differently). At the same time, civilians may be more likely to respect officers who share their racial background and be less likely to act aggressively toward officers (i.e., the civilian behaves differently), which would directly impact officers' behavioral response in return. Thus, in the case herein, to test the theoretical components of representative bureaucracy, we hypothesize:

***Hypothesis 1a:** In encounters where there is racial congruence, officers will use lower levels of force.*

We also acknowledge that organizational socialization may affect policing. Research has documented that the culture of policing can overpower individual identity affiliations, making officers identify less with their racial or ethnic background and more with their occupational identity (Rowe 2012). Prior studies show that organization socialization is prominent in policing, with all officers showcasing discriminatory behavior (Wilkins and Williams 2008), whereas more recent research finds that the impacts of socialization is not as pronounced, and that representation still matters (Hong 2017b). Research has suggested that implicit biases exist toward Black civilians, where they are seen as more criminal and more aggressive (Eberhardt, Goff, Purdie and Davies 2004). Thus, we would expect to see:

***Hypothesis 1b:** If organizational socialization influences police officers, then regardless of racial congruence, Black civilians will have higher levels of force used against them as compared to their White counterparts.*

Alternatively, officer decisions to make an arrest are less discretionary than to use force due to the legalities surrounding arrests. Police officers are legally able to make an arrest when

there is probable cause, which requires that the facts or evidence of the case would lead a person to believe someone has committed a crime beyond that of a reasonable suspicion. When an officer takes an individual into custody, he or she must advise the person of his or her Miranda Rights: to remain silent and to have an attorney. According to the official New Orleans Police Department policy, arrest decisions should not be made as a result of civilian demographics, such as race, gender, religion, and so forth (New Orleans Police 2016). However, the use of force policy includes no explicit mention of *not* using civilian demographics as a decision-making cue. Thus, we hypothesize following:

***Hypothesis 2a:** Racial congruence will not impact officer decisions to make an arrest due to the presence of explicit legal and policy guidance on arrest decision making.*

Force behaviors may entail a nuanced and reciprocal exchange between police and civilians, where either active or symbolic representation may occur in any given circumstance. However, arrest behaviors are primarily about officer decisions, as it aligns with legal specifications and departmental policy. Thus, if racial representation is salient for arrest behaviors, we conclude:

***Hypothesis 2b:** In encounters where racial congruence is significant for arrests, then it is a result of officer decisions to actively represent his or her racial group.*

As discussed, research has shown that encounter-related factors pertaining to the nuances of the situation are the strongest determinants of officer decision-making. In theory, officers should respond to the facts of a case that warrant the use of force or an arrest; officers should *not* make decisions based on identity factors (e.g., race, gender, age and so forth). Thus, we control for situational contingencies that we hypothesize to impact officer decisions. However, police officers continuously weigh the prevalence and severity of potential threats and rely on situational factors to cue them about safety. Often, police training prioritizes officer safety and

imminent threat above all else, focusing on demographic characteristics. We assess the impact of *risk*, as an informational shortcut, on officer decisions to use escalated levels of force and make arrests (Klinger 1997; Meyer and Carroll 2011). Having a weapon would make officer concerns about safety clearer and following this belief, we hypothesize:

***Hypothesis 3:** In encounters where public or officer safety are at risk (due to weapon possession), racial congruence will not explain the (3a) severity of force or (3b) likelihood of arrest because of the saliency of safety.*

Data Setting and Source

New Orleans, one of the largest cities in the South, is a landmark site for racial integration, having an extensive history of activism and protest pertaining to civil rights that dates to the 1950s and 1960s (Rogers 1993). The New Orleans Police Department (NOPD) also has a deep history with police-civilian conflict, including violent assaults against law enforcement, brutality against civilians, and police corruption, dating back to the 1980s if not before (see “Timeline: NOPD’s Long History,” 2010). In 2011, the U.S. Department of Justice (DOJ) found that the NOPD engaged in a pattern of unconstitutional practices, civil rights violations, and misconduct. Specifically, the DOJ identified violations of law, pertaining to excessive use of force; unconstitutional stops, searches, and arrests; and biased and discriminatory policing regarding race, ethnicity, gender, sexual orientation, and English proficiency (U.S. Department of Justice 2011). As a result of these findings, the NOPD instated a Consent Decree in 2012 to positively reform the police department (“NOPD Consent Decree,” para. 3).

This analysis uses incident-level use of force and arrest data from the NOPD from January 2016 to the end of June 2019, forming a three-and-a-half-year cross-sectional dataset.

January 2016 represents the earliest time frame that the city of New Orleans made the data publicly available. The dataset contains detailed demographic information about the officer, the civilian, and the circumstances of the encounter. Officer characteristics include the officer's race, gender, age, and two outcome measures (i.e. the level of force used by the officer and if the officer made an arrest). Civilian characteristics include the civilian's race, age, gender, and whether the civilian was under the influence or if the civilian was mentally unstable. Finally, we include variables about the circumstances of the encounter that may pose risks to officer or public safety, including weather and if the civilian carried a weapon. We also control for the type of incident that occurred (i.e., service type).

This dataset includes in-depth demographic measures as well as detailed descriptive information on the force encounter. While other cities, such as Austin or New York, have arrest and use of force data, they do not provide as much detail related to the civilian or officer profile (e.g. the civilian carried a weapon, the civilian's mental state, or the officers race). Not having details about a force encounter may incur inaccurate conclusions about what factors led to heightened levels of use of force and if the civilian gets arrested or not.

Key Variables

Our first dependent variable is the *level of force* used during the incident. The original variable took on four characteristicsⁱ, as defined by the NOPD Operations Manual. We are interested in exploring how an officer escalates from a lower level to a higher level of force, thus we collapse the variable to take on two levels. The first level of force (i.e., low force) includes both soft and hard hand, which includes the display (but makes no use) of a weapon, physical take-down tactics, and strikes. Further, the second level of force (i.e., high force) includes blunt impact weapons or lethal force, such as: baton strikes, canine bites, CEW/taser deployment,

firearm discharge, and others. Essentially, the low level of force indicates when an officer used his or her hands during an encounter and the high level of force occurs when an officer used a weapon of any sort (see Table 1 for descriptive statistics).

[Table 1 Here]

The second dependent variable is whether the officer *arrested* the civilian. This variable takes on a 0 if the officer did not make an arrest and a 1 if the officer arrested the civilian. In Table 2 below, we show the distribution of the arrest variable.

[Table 2 Here]

Our key independent variables for hypothesis testing include two different *racial congruence* variables, allowing us to test the theory of representative bureaucracy, as well as a *risk* indicator. The first main independent variable, *racial match*, is a dichotomous variable that indicates if the civilian and the officer were of the same race or of a different race during the encounter (see Table 3). In the data, the racial categories of Black and White constitute over 97% of the officers. Thus, our second key independent variable, *racial combination*, takes on four categories: 1) White officers and Black civilians, 2) White officers and White civilian, 3) Black officers and White civilians, and 4) Black officers and Black civilians (see Table 4). We measure *risk* as a dummy indicator if the civilian possessed a weapon during the encounter.

[Table 3 Here]

[Table 4 Here]

Control Variables

We include several control variables that we group into three broad categories. The first category captures the situational circumstances of the encounter like *weather*, which is a dichotomous variable that assesses clear or unclear conditions, and whether the service type was

a 911 *call for service*. Additionally, the second category is related specifically to civilian demographics and state, including *age*, *gender*, if he or she was *under the influence* (alcohol or drugs), and if he or she was deemed *mentally unstable*. We also control for officer characteristics, such as: the *officer's age* as a proxy for officer years of service and the *officer's gender*. See Table 5 below for a summary of descriptive statistics on key variables of interest.

[Table 5 Here]

Model Estimation

In our current study, we analyze the effect of racial matches between officers and civilians on officers' level of force (Y_1) and arrests (Y_2). We employ a linear probability model (LPM) that takes the form of the model belowⁱⁱ.

$$Y_{oce} = race_o + race_c + \delta_1\{race_o \neq race_c\} \times \lambda W + X_{oc} + Z_{oc} + S_e + \varphi_t + \varepsilon_{oce}$$

Y is the severity of force used (low or high) by an officer towards a civilian during a police encounter or if the officer made an arrest or not. $Race$ is a set of mutually exclusive race indicators for the officer and for a civilian. δ_1 is an indicator function that denotes whether the officer and the civilian are of the same race or of different races during the course of an encounter, interacted with our W , which is a binary measure for whether the civilian had a weapon during the encounter. X is a vector of time-varying factors that include the officer's age, the civilian's age, if the civilian was under the influence, and if the civilian was deemed mentally unstable. Z denotes the gender of both the officer and the civilian. S is a control for the situational circumstances of the encounter, indicating the weather conditions during the situation and the service type, while φ is a yearly fixed effect and ε is an idiosyncratic error term.

In our regression estimate, we clustered our standard errors at the incident-level because our errors are independent across clusters (each incident is independent), but are correlated

within clusters (each officer within the same incident is not independent). By clustering our standard errors, it allows us to more accurately relax some of the assumptions related to our error terms being independent.

Analyses

We ran a series of linear probability models with marginal effects to better understand the relationship that exists among officer and civilian race, risk, and other situational characteristics, on (a) officer use of low or high force and (b) officer arrests. In Table 6, Models 1 through 3, we looked at whether the officer and civilian were of the same race or different race, regardless of the specific racial category. We observed the bivariate relationship between civilians and officers of the same race compared to racial mismatches in Model 1. For Model 2, we looked at the same relationship between civilians and officers of the same race compared to racial mismatches and included our full set of control variables. Finally, we included the full set of controls and interacted our racial match variable with the risk indicator of whether the civilian had a weapon in Model 3.

Likewise, we ran the same models and analyses for the arrest outcome, with the addition of one extra control variable to account for the level of force used (see Table 7, Models 1 through 3). Including this variable into the arrest model was imperative since the arrest outcome is a secondary outcome of the use of force encounter.

Next, building on our original race match variable, we broke down the racial matches into smaller subgroups to compare Black and White officers and civilians and how it influenced use of force in Table 8. In the first model displayed in this table, Model 1, we utilized White officers and Black civilians as a base group to see how White officers and White civilians, Black officers and White civilians, and Black officers and Black civilians have either higher or lower levels of

use of force. In Model 2, we then added in our full set of controls. Finally, we added an interaction term between the racial combinations and risk in Model 3. Again, we ran the same models and analyses for the arrest outcome, with the addition of one extra control variable to account for the level of force used (see Table 9, Models 1 through 3).

Findings

Racial Congruence and Risk

Through the course of our analysis, Table 6 indicated that our same race dummy had no statistical significance, as it relates to officers' level of force. Moreover, this null finding remained consistent across all three models. Thus, these results suggest that racial congruence is not an important correlate of severity of force.

(Insert Table 6 about here)

Similar to our findings in Table 6 regarding officers' level of force, our same race dummy revealed no statistically significant results when looking at the arrest outcome in Table 7, Models 2 and 3. However, in Table 6 Model 2 and in Table 7 Model 3 indicated that the presence of a weapon was correlated with a higher likelihood of an officer using more severe force and making an arrest. Further, when looking at interaction term in Table 7 Model 3, we found that when the civilian has a weapon, and, the officer and the civilian are of the same race, the officer is less likely to make an arrest, compared to when the civilian has a weapon and the officer and civilian are not of the same race.

(Insert Table 7 about here)

Racial Combinations and Risk

We broke down race by Black and White civilians and officers to further tease out different racial matches on levels of force. When running a bivariate analysis between officer

race and civilian race, we saw that Black officers are more likely to use a higher level of force on White civilians compared to White officers and Black civilians. However, the covariate loses its significance when we add in our full set of controls. With our control variables included, White officers are less likely to use a higher level of force on White civilians compared to when they interact with Black civilians, as indicated in Model 2 and Model 3 (see Table 8). This finding persists even after including an interaction term between racial congruence and weapon presence. In Table 9, Model 3 shows that when a Black officer interacts with a Black civilian who has a weapon, they are more likely to use a higher level of force compared to a White officer interacting with a Black civilian with a weapon.ⁱⁱⁱ

(Insert Table 8 about here)

Next in Table 9, we broke down the racial combinations of Black and White civilians and officers to assess the disaggregated impact of racial congruence on arrests. When we ran a simple bivariate analysis, we found that Black officers are less likely to arrest a White civilian compared to a White officer with a Black civilian. However, the variable loses its significance when we add in our full set of controls. In Table 9, Models 2 and 3, none of the racial combinations are significant on their own. In Model 3, we observed that the presence of a weapon is correlated with a greater likelihood of arrest regardless of race; however, Black officers (compared to White officers) are less likely to arrest a Black civilian with a weapon.

(Insert Table 9 about here)

Conclusion

Curbing police use of force is an issue traced back to the Civil Rights that we, as a society, have yet to resolve. In August 1963, Reverend Dr. Martin Luther King Jr. stated in his *I Have a Dream* speech that “we can never be satisfied as long as the Negro is the victim of the

unspeakable horrors of police brutality.” We were interested in exploring how racial representation coupled with the notion of risk impacted the severity of police use of force and subsequent arrests. Research has provided mixed evidence on the impact of racial congruence on police decision-making, particularly as it relates to situational and contextual contingencies. Using insights from the theories of street-level bureaucracy and representative bureaucracy we empirically investigated officer behaviors.

The findings of this study indicate that police decisions and behaviors regarding race and risk are not straight forward. A few trends regarding the salience of race and risk in officer force and arrest outcomes are apparent. First, we see that only looking at if the officer and civilian shared the same race (regardless of which race) did not explain the severity of force or the likelihood of arrest, indicating that racial congruence broadly speaking is not a significant predictor of levels of force or arrest. Yet, looking at race disaggregated demonstrated that White officers are more likely to use lower levels of force on White civilians as compared to Black Civilians, indicating that racial congruence is salient for White officers only (or alternatively, racial bias is prominent for White officers). Moreover, the coefficient for Black officers interacting with Black civilians was not statistically significant, indicating no significant difference when compared to White officers interacting with Black civilians and their force behaviors. The lack of statistically significant difference may indicate that Black officers are not acting any different than their White counterparts when interacting with Black civilians, thus organizational socialization could be influencing officers to act in similar ways towards Black civilians.

Next, in comparing the racial combination variables across the force and arrest models, we saw that once we added in controls to our arrest models none of the racial combinations were

statistically significant (unlike that of the force model). This suggests that officers are not relying on racial cues the same way when making arrest decisions as compared to force decisions, which may be because of the explicit policy guidance around the use of race as a decision factor and legalities about probable cause.

Further, we saw that the presence of a weapon is correlated with greater likelihood of severe force and arrests when holding officer and civilian race constant. However, the addition of this risk indicator did not entirely wash out the salience of race in our models. Rather, we saw that the interactions between race and weapon presence displayed that Black officers were more attuned to Black civilians with a weapon than White officer. Specifically, we saw that Black civilians with weapons experienced higher levels of force, but lower likelihood of arrest when they interacted with Black officers as compared to White officers.

Most notably, these findings suggest that decision-making cues pertaining to public and officer risk and safety do not entirely diminish the relevance of race. Racial congruence (or the lack thereof) matters in nuanced and complex ways, not always in complete alignment with the theory of representative bureaucracy. Thus, the theory of representative bureaucracy needs to account for the organizational context and situational contingencies that may alter the impact of racial congruence on outcomes. As Watkins-Hayes (2011) noted, “the processes of racial representation are structured by both organizational conditions and intragroup politics in ways that encourage us to be mindful of, and attentive to, the complexities of diversity” (p. 249). They suggest that:

“although racially representative bureaucracy theory provides us with useful tools to examine racial diversity within institutions, street-level bureaucracy theory, with its

emphasis on organizational context, ultimately offers the best explanatory power to adequately capture caseworker-client relations among intraracial minorities” (p. 235).

Other studies argue that disproportionate and inequitable policing outcomes result from policy decisions, institutional norms, and organizational factors (Epp, Maynard-Moody, and Haider-Markel 2017; Guul, Villadsen and Wulff 2019; Menifield, Shin, and Strother 2018). Our study confirms that racial trends do exist within organizations. Officers “describe their decisions as normative, an exercise in moral reasoning rather than rule following or even rule breaking. They first make moral judgments about the relative worthiness of the citizen client, and then they use rules, laws, and procedures to help those they consider worthy and punish those they deem unworthy” (Maynard-Moody and Musheno 2000, p. 351). Thus, demographic characteristics, such as race, may be attached to notions of relative worthiness. These notions of worth can become embedded within the organizational culture and become reproduced in street-level bureaucrat discretionary decisions and behaviors.

Overall, this article presents a comprehensive analysis of police levels of force and subsequent arrest in New Orleans from 2016 to 2019, with implications for policy and practice. If police departments want to reduce inequities, focusing solely on increasing diversity in the workforce is not an effective solution. As of 2016, Black officers comprised over 50% of the New Orleans police force. Thus, the findings indicate that despite having a large amount of demographic representation from officers of color, adverse outcomes for people of color persist. These findings suggests that policy makers and decision makers need to couple alternative solutions with diversity hiring and recruitment plans. For instance, more comprehensive training for all officers (Black and White alike), explicit policy language for the use of force (akin to that of arrests) regarding race as decision cues, changing police culture, and implementing civilian

oversight boards with broad scopes of authority and discretion (Ali and Pirog 2019) may reduce inequities that present themselves in police officer actions.

This article still warrants several limitations. First, we rely on data from one police department. While this data is comprehensive and detailed, New Orleans has a unique historical context, which may not generalize to all police departments across the United States. However, New Orleans is not unusual to other urban cities that have high poverty rates, crime rates, and population of color – specifically those cities that have also had to undergo Department of Justice investigations and consent decrees regarding racialized interactions. In official government reporting, the NOPD is compared to other cities across the United States including Washington, D.C., Indianapolis, IN, Chicago, IL. and Austin, TX when displaying their performance data and police-civilian interaction (New Orleans Office of the Independent Monitor 2018).

Further, and probably most important, this is one of the few analyses (in the literature thus far) that has enough Black officer interactions to be able to truly test the impacts of racial representation. Other studies have suggested the need for more representation and “critical mass” in police departments (e.g., Nicholson-Crotty, Nicholson-Crotty and Fernandez 2017). However, this study’s sample includes almost 50% of Black officer interactions. Thus, we are able to test what other scholars have said is needed to truly understand the implications of representation. We find that biases are still present regardless of the amount of Black officer interactions that are present. These findings provide opportunity for future research to extend this analysis beyond the NOPD and can be particularly applicable to other police departments that are undergoing efforts to increase representation.

The second limitation is that this data includes only incidents where use of force occurred and does not include incidents where officers decided not to use force. Without the data on all incidents that lead to force, we can only make conclusions about the level or severity of force and not the presence or absence of force. Moreover, administrative data in policing is reported by the officer after an incident has occurred, which inherently opens the door to self-reporting biases. However, in the practitioner community, this is the official and formal way to document use of force incidents and all police departments across the United States use officer reporting, thus NOPD is not unique in this aspect. Still, future research should consider alternative ways to capture and verify this self-reported data including, but not limited to, experimental research, civilian surveys and interviews, or systematic observations. Given the normative decision cues associated with officers' levels of force, identifying at what point officers assign notions of deservedness can be transformational.

In addition to addressing the limitations, future research can also proceed by moving beyond identifying disparities in policing outcomes to designing and testing interventions (e.g., behavioral nudges or policy solutions) to reduce inequitable disparities. Empirically investigating the organizational context and culture to assess its impacts on street-level bureaucrats will allow for an understanding of how the use of nudging and choice architecture can be applied to improve bureaucrat behavior (Battaglio, Belardinelli, Bellé, and Cantarelli 2019). However, we must also know more about when, how, and why stereotypes are activated and applied across racial groups and contexts in order to come up with effective solutions (Harrits 2019). Public service agencies can no longer blindly implement organizational changes or accountability mechanisms without thorough assessment of effectiveness (Headley and Wright 2019). Even with room for future research, the findings of this research may prompt United States police

departments to make more informed decisions in regard to policies and interventions concerning police officer decision-making around race and risk.

Table 1: Officer Force Breakdown

| Force Level | Total Sample Freq. (Percent) | Force Model Freq. (Percent) |
|------------------------------|---------------------------------|--------------------------------|
| Low: Soft or Hard Hands | 4,182 (93.81%) | 2,783 (94.12%) |
| High: Blunt Impact or Lethal | 276 (6.19%) | 174 (5.88%) |
| Total | 4,458 (100%) | 2,957 (100%) |

Table 2: Arrest Breakdown

| Civilian Arrested | Total Sample Freq. (Percent) | Arrest Model Freq. (Percent) |
|-------------------|------------------------------|------------------------------|
| No | 904 (20.28%) | 460 (15.56%) |
| Yes | 3,554 (79.72%) | 2,497 (84.44%) |
| Total | 4,458 (100%) | 2,957 (100%) |

Table 3: Same Race Breakdown for Officer and Civilian Race

| Racial Makeup | Total Sample Freq. (Percent) | Force & Arrest Models Freq. (Percent) |
|----------------|---------------------------------|--|
| Different Race | 2,449 (54.93%) | 1,784 (54.56%) |
| Same Race | 2,009 (45.07%) | 1,486 (45.44%) |
| Total | 4,458 (100%) | 3,270 (100%) |

Table 4: Racial Combinations for Officer and Civilian

| Racial Combinations | Total Sample Freq. (Percent) | Force & Arrest Models Freq. (Percent) |
|----------------------------------|---------------------------------|--|
| White Officer and Black Civilian | 1,836 (45.57%) | 1,346 (45.52%) |
| White Officer and White Civilian | 335 (8.31%) | 240 (8.12%) |
| Black Officer and White Civilian | 189 (4.69%) | 127 (4.29%) |
| Black Officer and Black Civilian | 1,669 (41.42%) | 1,244 (42.07%) |
| Total | 4,029 (100%) | 2,957 (100%) |

Table 5: Key Characteristics

| Key Characteristics | Percent or Mean |
|------------------------------------|-----------------|
| <u>Officer Characteristics</u> | |
| Race | |
| White | 50.04% |
| Black | 42.40% |
| Hispanic | 5.25% |
| Asian/Pacific Islander | 2.31% |
| Gender | |
| Male | 90.40% |
| Female | 9.60% |
| Age | 36.42 years |
| Years of Service | 9.49 years |
| <u>Civilian Characteristics</u> | |
| Age | 29.04 years |
| Gender | |
| Male | 85.24% |
| Female | 14.76% |
| Alcohol or Drug Influence | 15.79% |
| Mentally Unstable | 13.44% |
| <u>Situational Characteristics</u> | |
| Weapon Present | 4.18% |
| Clear Weather | 94.57% |
| Unclear Weather | 5.43% |
| Service Type | |
| Yes, Call for Service | 35.90% |
| Not Call for Service | 64.10% |

Table 6 – Level of Force Same Race Dummy

| VARIABLES | Marginal Effects for Force | | |
|--------------------|----------------------------|------------------|-----------------|
| | (1) | (2) | (3) |
| Same Race | -0.00 (0.01) | -0.01 (0.01) | -0.01 (0.01) |
| Male Officer | | -0.01 (0.02) | -0.01 (0.02) |
| Male Civilian | | 0.01 (0.01) | 0.01 (0.01) |
| Weapon Presence | | 0.09 (0.04)** | 0.06 (0.05) |
| Same Race x Weapon | | | 0.08 (0.08) |
| Observations | 4,458 | 3,270 | 3,270 |
| YEAR FE | YES | YES | YES |
| INTERACTIONS | NO | NO | YES |
| CONTROLS | NO | YES | YES |
| Number of Clusters | 1,695 | 1,193 | 1,193 |
| R- Squared | 0.01 | 0.03 | 0.03 |

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 7 – Arrest DV Same Race Dummy

| VARIABLES | Marginal Effects for Arrest | | |
|--------------------|-----------------------------|-----------------|-------------------|
| | (1) | (2) | (3) |
| Same Race | 0.01 (0.02) | 0.01 (0.02) | 0.02 (0.02) |
| Male Officer | | -0.02 (0.03) | -0.02 (0.03) |
| Male Civilian | | 0.05 (0.03) | 0.05 (0.03) |
| Weapon Presence | | 0.05 (0.07) | 0.14 (0.05)*** |
| Same Race x Weapon | | | -0.20 (0.11)* |
| Observations | 4,458 | 3,270 | 3,270 |
| YEAR FE | YES | YES | YES |
| INTERACTIONS | NO | NO | YES |
| CONTROLS | NO | YES | YES |
| Number of Clusters | 1,695 | 1,193 | 1,193 |
| R- Squared | 0.02 | 0.12 | 0.12 |

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 8 – Level of Force Racial Breakdown

| VARIABLES | Marginal Effects for Force | | |
|---|----------------------------|------------------|------------------|
| | (1) | (2) | (3) |
| <u>Officer and Civilian Race</u> | | | |
| White- Black (reference) | | | |
| White - White | 0.02 (0.02) | -0.03 (0.02)* | -0.03 (0.02)* |
| Black - White | 0.05 (0.03)* | 0.03 (0.03) | 0.02 (0.03) |
| Black - Black | -0.00 (0.01) | 0.01 (0.01) | -0.01 (0.01) |
| Male Officer | | -0.01 (0.02) | -0.01 (0.02) |
| Male Civilian | | 0.01 (0.01) | 0.01 (0.01) |
| Weapon Presence | | 0.08 (0.04)* | 0.00 (0.03) |
| White Officer-Black Civilian x Yes Weapon (reference) | | | |
| White Officer-White Civilian x Weapon | | | 0.03 (0.09) |
| Black Officer-White Civilian x Weapon | | | 0.19 (0.27) |
| Black Officer-Black Civilian x Weapon | | | 0.16 (0.07)** |
| Observations | 4,029 | 2,957 | 2,957 |
| YEAR FE | YES | YES | YES |
| INTERACTIONS | NO | NO | NO |
| CONTROLS | NO | YES | YES |
| Number of Clusters | 1,578 | 1,114 | 1,114 |
| R- Squared | 0.01 | 0.03 | 0.04 |

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 9 – Arrest DV Racial Breakdown

| VARIABLES | Marginal Effects for Arrest | | |
|---|-----------------------------|-----------------|-------------------|
| | (1) | (2) | (3) |
| <u>Officer and Civilian Race</u> | | | |
| White- Black (reference) | | | |
| White - White | -0.06 (0.05) | -0.03 (0.04) | -0.01 (0.04) |
| Black - White | -0.12 (0.05)** | -0.07 (0.06) | -0.07 (0.06) |
| Black - Black | 0.01 (0.02) | 0.01 (0.02) | 0.02 (0.02) |
| Male Officer | | -0.03 (0.03) | -0.03 (0.03) |
| Male Subject | | 0.05 (0.03) | 0.04 (0.03) |
| Weapon Presence | | 0.07 (0.08) | 0.19 (0.04)*** |
| White Officer-Black Civilian x Yes Weapon (reference) | | | |
| White Officer-White Civilian x Weapon | | | -0.37 (0.28) |
| Black Officer-White Civilian x Weapon | | | -0.09 (0.22) |
| Black Officer-Black Civilian x Weapon | | | -0.22 (0.13)* |
| Observations | 4,029 | 2,957 | 2,957 |
| YEAR FE | YES | YES | YES |
| INTERACTIONS | NO | NO | YES |
| CONTROLS | NO | YES | YES |
| Number of Clusters | 1,578 | 1,114 | 1,114 |
| R- Squared | 0.03 | 0.13 | 0.13 |

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

References

- “NOPD Consent Decree.” N. D. *New Orleans*. <https://www.nola.gov/nopd/nopd-consent-decree/>
- “Timeline: NOPD's Long History of Scandal.” 2010. *PBS Newshour*, August 25, 2010. <https://www.pbs.org/wgbh/pages/frontline/law-disorder/etc/cron.html>
- Ali, Mir Usman and Maureen Pirog. 2019. “Social Accountability and Institutional Change: The Case of Citizen Oversight of Police.” *Public Administration Review*, 79 (3): 411-426.
- Ashkenas, Jeremy, and Haeyoun Park. 2015. “The Race Gap in America’s Police Departments.” *The New York Times*. April 8, 2015. https://www.nytimes.com/interactive/2014/09/03/us/the-race-gap-in-americas-police-departments.html?_r=0
- Battaglio Jr, R. Paul, Paolo Belardinelli, Nicola Bellé, and Paola Cantarelli. 2019. “Behavioral public administration ad fontes: A synthesis of research on bounded rationality, cognitive biases, and nudging in public organizations.” *Public Administration Review* 79 (3): 304-320.
- Bolger, P. Colin. 2015. “Just Following Orders: A Meta-Analysis of The Correlates of American Police Officer Use of Force Decisions.” *American Journal of Criminal Justice* 40 (3): 466-492.
- Bradbury, Mark D., and J. Edward Kellough. 2007. “Representative bureaucracy: Exploring the potential for active representation in local government.” *Journal of Public Administration Research and Theory* 18 (4): 697-714.
- Brandl, Steven G., and Meghan S. Stroshine. 2013. “The Role of Officer Attributes, Job Characteristics, and Arrest Activity in Explaining Police Use of Force.” *Criminal Justice Policy Review* 24 (5): 551-572.
- Capers, K. Juree. 2018. “The effect of the external environment on bureaucratic representation: Assessing the passive to active representation link.” *The American Review of Public Administration* 48 (4): 301-317.
- Conlisk, John. 1996. “Why Bounded Rationality?” *Journal of Economic Literature* 34 (2): 669-700.
- Davis, Elizabeth, Anthony Whyde, and Lynn Langton. 2018. “Contacts Between Police and the Public, 2015.” *Bureau of Justice Statistics*. US Department of Justice.
- Donohue III, John J., and Steven D. Levitt. 2001. “The Impact of Race on Policing and Arrests.” *The Journal of Law and Economics* 44 (2): 367-394.
- Eberhardt, Jennifer L. Phillip Atiba Goff, Valerie J. Purdie, and Paul G. Davies. 2004. “Seeing Black: Race, Crime, and Visual Processing,” *Journal of Personality and Social Psychology* 87 (6): 876-893.
- Edwards, Frank, Hedwig Lee, and Michael Esposito. 2019. “Risk of being killed by police use of force in the United States by age, race–ethnicity, and sex.” *Proceedings of the National Academy of Sciences* 116, no. 34: 16793-16798.
- Epp, Charles R., Steven Maynard-Moody, and Donald Haider-Markel. 2017. “Beyond Profiling: The Institutional Sources of Racial Disparities in Policing.” *Public Administration Review* 77 (2): 168-178.

- Eterno, John A., Barrow, Christine S., and Silverman, Eli B. 2017. Forcible stops: Police and citizens speak out. *Public Administration Review*, 77(2), 181-192.
- Gade, Daniel M., and Vicky M. Wilkins. 2012. "Where did you serve? Veteran identity, representative bureaucracy, and vocational rehabilitation." *Journal of Public Administration Research and Theory* 23 (2): 267-288.
- Gilliard-Matthews, Stacia, Brian R. Kowalski, and Richard J. Lundman. 2008. "Officer race and citizen-reported traffic ticket decisions by police in 1999 and 2002." *Police Quarterly* 11 (2): 202-219.
- Goff, Philip Atiba, Tracey Lloyd, Amanda Geller, Steven Raphael, and Jack Glaser. 2016. "The Science of Justice: Race, Arrests, and Police Use of Force." *Center for Policing Equity*.
- Goldstein, Joseph. 1960. "Police Discretion Not to Invoke the Criminal Process; Low-Visibility Decisions in The Administration of Justice." *Yale Law Journal* 69: 543-594.
- Grissom, Jason A., Jill Nicholson-Crotty, and Sean Nicholson-Crotty. 2009. "Race, region, and representative bureaucracy." *Public Administration Review* 69 (5): 911-919.
- Guul, Thorbjørn Sejr, Anders R. Villadsen, and Jesper N. Wulff. 2019. "Does Good Performance Reduce Bad Behavior? Antecedents of Ethnic Employment Discrimination in Public Organizations." *Public Administration Review* 79 (5): 666-674.
- Guul, Thorbjørn Sejr. 2018. "The Individual-Level Effect of Gender Matching in Representative Bureaucracy." *Public Administration Review* 78 (3): 398-408.
- Harrits, Gitte Sommer. 2019. "Stereotypes in Context: How and When Do Street-Level Bureaucrats Use Class Stereotypes?" *Public Administration Review* 79 (1): 93-103.
- Headley, Andrea M., and James E. Wright. 2019. "National Police Reform Commissions: Evidence-Based Practices or Unfulfilled Promises?" *The Review of Black Political Economy*: 0034644619873074.
- Hong, Sounman. 2017b. "Black in blue: Racial profiling and representative bureaucracy in policing revisited." *Journal of Public Administration Research and Theory* 27, no. 4 (2017): 547-561.
- Hong, Sounman. 2016. "Representative Bureaucracy, Organizational Integrity, and Citizen Coproduction: Does and Increase in Police Ethnic Representativeness Reduce Crime?" *Journal of Policy Analysis and Management* 35 (1): 11-33.
- Hong, Sounman. 2017a. "Does Increasing Ethnic Representativeness Reduce Police Misconduct? Evidence from Police Reform in England and Wales." *Public Administration Review* 77 (2): 195-205.
- James, Lois, Stephen M. James, and Bryan J. Vila. 2016. "The Reverse Racism Effect: Are Cops More Hesitant to Shoot Black Than White Suspects?" *Criminology & Public Policy* 15 (2): 457-479.
- Jennings, Jay T. and Meghan E. Rubado. 2017. "Preventing the Use of Deadly Force: The Relationship Between Police Agency Policies and Rates of Officer-Involved Gun Deaths." *Public Administration Review* 77 (2): 217-226.
- Johnson, Richard. 2011. "Suspect Mental Disorder and Police Use of Force." *Criminal Justice & Behavior* 38: 127-145.
- Keiser, Lael R. 2010. "Understanding Street-Level Bureaucrats' Decision Making: Determining Eligibility in the Social Security Disability Program." *Public Administration Review*, 70 (2): 247-257.

- Keiser, Lael R., Vicky M. Wilkins, Kenneth J. Meier, and Catherine Holland. 2002. "Lipstick and Logarithms: Gender, Institutional Context, and Representative Bureaucracy." *American Political Science Review* 96 (3):553–564.
- Klinger, David A. 1997. "Negotiating order in patrol work: An ecological theory of police response to deviance." *Criminology* 35 (2): 277-306.
- Kochel, Tammy R., David B. Wilson, and Stephen D. Mastrofski. 2011. "Effect of Suspect Race on Officers' Arrest Decisions." *Criminology* 49 (2): 473-512.
- Lim, Hong Hai. 2006. Representative bureaucracy: Rethinking substantive effects. *Public Administration Review* 66:193–204.
- Linos, Elizabeth. 2018. "More Than Public Service: A Field Experiment on Job Advertisements and Diversity in The Police." *Journal of Public Administration Research and Theory* 28 (1): 67-85.
- Maynard-Moody, Steven, and Michael Musheno. 2000. "State Agent or Citizen Agent: Two Narratives of Discretion." *Journal of Public Administration Research and Theory* 10 (2): 329-358.
- Maynard-Moody, Steven, and Michael Musheno. 2003. *Cops, Teachers, Counselors: Stories from the Front Lines of Public Service*. Ann Arbor: University of Michigan Press.
- McElvain, James P., and Augustine J. Kposowa. 2008. "Police Officer Characteristics and the Likelihood of Using Deadly Force." *Criminal Justice and Behavior* 35 (4): 505-521.
- Meier, Kenneth J., and Jill Nicholson-Crotty. 2006. "Gender, Representative Bureaucracy, and Law Enforcement: The Case of Sexual Assault." *Public Administration Review* 66 (6): 850-861.
- Menifield, Charles E., Geiguen Shin, and Logan Strother. 2019. "Do White Law Enforcement Officers Target Minority Suspects?" *Public Administration Review*, 79 (1): 56-68.
- Meyer, Shannon, and Randall H. Carroll. 2011. "When Officers Die: Understanding Deadly Domestic Violence Calls for Service." *Police Chief* 78 (5): 24-27.
- National Research Council. 2004. *Fairness and Effectiveness in Policing: The Evidence*. Washington, DC: The National Academies Press.
- New Orleans Office of the Independent Police Monitor. 2018. 2018 Annual Report, Numbers at a Glance. Retrieved from <https://annual-report-2018.nolaipm.gov>
- New Orleans Police. 2016. New Orleans Police Department Operations Manual. Chapter 1.9. Arrests. Retrieved 9/5/19 from <https://www.nola.gov/getattachment/NOPD/NOPD-Consent-Decree/Chapter-1-9-Arrests.pdf/>
- Nicholson-Crotty, Jill, Jason A. Grissom, and Sean Nicholson-Crotty. 2011. "Bureaucratic representation, distributional equity, and democratic values in the administration of public programs." *Journal of Politics* 73: 582–96.
- Nicholson-Crotty, Sean, Jason A. Grissom, Jill Nicholson-Crotty, and Christopher Redding. 2016. "Disentangling the causal mechanisms of representative bureaucracy: Evidence from assignment of students to gifted programs." *Journal of Public Administration Research and Theory* 26 (4): 745-757.
- Nicholson-Crotty, Sean, Jill Nicholson-Crotty, and Sergio Fernandez. 2017. "Will More Black Cops Matter? Officer Race and Police-Involved Homicides of Black Citizens." *Public Administration Review*, 77 (2): 206-216.
- Paoline, Eugene, and William Terrill. 2007. "Police Education, Experience, and The Use of Force." *Criminal Justice & Behavior* 34 (2): 179–196.

- Riccucci, Norma M., and Gregg G. Van Ryzin. 2017. "Representative bureaucracy: A lever to enhance social equity, coproduction, and democracy." *Public Administration Review* 77 (1): 21-30.
- Riccucci, Norma M., Gregg Van Ryzin, and Cecilia F. Lavena. 2014. "Representative Bureaucracy in Policing: Does It Increase Perceived Legitimacy?" *Journal of Public Administration Research and Theory* 24: 537-551
- Riccucci, Norma M., Gregg Van Ryzin, and Karima Jackson. 2018. "Representative Bureaucracy, Race, and Policing: A Survey Experiment." *Journal of Public Administration Research and Theory* 28 (4): 1-13.
- Rogers, Kim L. 1993. *Righteous Lives: Narratives of The New Orleans Civil Rights Movement*. New York: NYU Press.
- Rowe, Mike. 2012. *Policing, race and racism*. New York: Routledge.
- Rydberg, Jason, and William Terrill. 2010. "The Effect of Higher Education on Police Behavior." *Police Quarterly* 13 (1): 92–120.
- Schneider, Anne L., and Helen M. Ingram, eds. 2005. *Deserving and Entitled: Social Constructions and Public Policy*. Albany: State University of New York Press.
- Schuck, Amie M., and Cara E. Rabe-Hemp. 2007. "Women Police: The Use of Force by and Against Female Officers." *Women & Criminal Justice* 16 (4): 91-117.
- Scott, Patrick G. 1997. "Assessing Determinants of Bureaucratic Discretion: An Experiment in Street-Level Decision Making." *Journal of Public Administration Research and Theory* 7 (1): 35-58.
- Siff, Sarah B. 2016. "Policing the Police: A Civil Rights Story." *Origins: Current Events in Historical Perspective* 9 (8): 1-2. <http://origins.osu.edu/article/policing-police-civil-rights-story>
- Simon, Herbert A. 1947. *Administrative Behavior*. New York: Free Press.
- Simon, Herbert A. 1955. "A Behavioral Model of Rational Choice." *The Quarterly Journal of Economics* 69 (1): 99-118.
- Simon, Herbert A. 1990a. "Bounded Rationality." In *Utility and Probability*, edited by John Eatwell, Murray Milgate, and Peter Newman, 15-18. London: Palgrave Macmillan.
- Simon, Herbert A. 1990b. "Invariants of Human Behavior." *Annual Review of Psychology* 41: 1-19.
- Smith, Brad W., and Malcolm D. Holmes. 2014. "Police Use of Excessive Force in Minority Communities: A Test of the Minority Threat, Place, and Community Accountability Hypotheses." *Social Problems* 61 (1): 83-104.
- Smith, Douglas A., and Christy A. Visher. 1981. "Street-Level Justice: Situational Determinants of Police Arrest Decisions." *Social Problems* 29 (2): 167-177.
- Smith, Douglas A., Christy A. Visher, and Laura A. Davidson. 1984. "Equity and Discretionary Justice: The Influence of Race on Police Arrest Decisions." *Journal of Criminal Law & Criminology* 75: 234-249.
- Terrill, William, and Stephen Mastrofski. 2002. "Situational and Officer-Based Determinants of Police Coercion." *Justice Quarterly* 19 (2): 215–249.
- Theobald, Nick A., and Haider-Markel, Donald P. (2009). Race, bureaucracy, and symbolic representation: Interactions between citizens and police. *Journal of Public Administration Research and Theory* 19:409–26.

- U.S. Department of Justice, Civil Rights Division. 2011. "Investigation of the New Orleans Police Department."
https://www.justice.gov/sites/default/files/crt/legacy/2011/03/17/nopd_report.pdf
- U.S. Department of Justice, Equal Employment Opportunity Commission. 2016. "Advancing Diversity in Law Enforcement." <https://www.eeoc.gov/eeoc/interagency/upload/police-diversity.pdf>
- Vinopal, Katie. 2017. "Understanding individual and organizational level representation: The case of parental involvement in schools." *Journal of Public Administration Research and Theory* 28 (1): 1-15.
- Watkins-Hayes, Celeste. 2011. "Race, Respect, and Red Tape: Inside the Black Box of Racially Representative Bureaucracies." *Journal of Public Administration Research and Theory* 21 (2): i233-i251
- Wilkins, Vicki M., and Brian N. Williams. 2008. "Black or Blue: Racial Profiling and Representative Bureaucracy." *Public Administration Review* 68 (4): 654-664.
- Wilkins, Vicki M., and Brian N. Williams. 2009. "Representing Blue: Representative Bureaucracy and Racial Profiling in The Latino Community." *Administration and Society* 40 (8): 775-798
- Worden, Robert E., and Alissa A. Pollitz. 1984. "Police Arrests in Domestic Disturbances: A Further Look." *Law & Society Review* 18: 105-120.
- Wright, James E. 2019. "Will They Even Hear Me? How Race Influences Citizen Complaint Outcomes." *Public Performance & Management Review*, 1-21.

Appendix

Table 1: Official New Orleans Use of Force Policy

| Force Type | Description | New Orleans Policy Statement | Frequency |
|------------|---|--|----------------|
| Level 1 | firearm (exhibited), rifle (pointed), shotgun (pointed), batons (non-strike), hands, takedown (no injury), CEW (exhibited), other | Uses of force include pointing a firearm at a person and hand control or escort techniques (e.g., elbow grip, wrist grip, or shoulder grip) applied as pressure point compliance techniques that are not reasonably expected to cause injury; takedowns that do not result in actual injury or complaint of injury; and use of an impact weapon for non-striking purposes (e.g., prying limbs, moving or controlling a person) that does not result in actual injury or complaint of injury. It does not include escorting, touching, or handcuffing a person with minimal or no resistance. | 3,180 (71.33%) |
| Level 2 | takedown (w/injury), handcuffing, force (escort tech), force (defense tech), CEWs (deployment) | These include use of a CEW (including where a CEW is fired at a person but misses); and force that causes or could reasonably be expected to cause an injury greater than transitory pain but does not rise to a Level 3 use of force. | 1,002 (22.47%) |
| Level 3 | batons (miss, strike), head strike, nontraditional impact weapon, canine (contact, no bite) | These include any strike to the head (except for a strike with an impact weapon); use of impact weapons when contact is made (except to the head), regardless of injury; or the destruction of an animal. | 201 (4.50%) |
| Level 4 | firearm (discharged), rifle (discharged), shotgun, canine (bite) | These include all ‘serious uses of force’ as listed below: (a) All uses of lethal force by an NOPD officer; (b) All critical firearm discharges by an NOPD officer; (c) All uses of force by an NOPD officer resulting in serious physical injury or requiring hospitalization; (d) All neck holds; (e) All uses of force by an NOPD officer resulting in a loss of consciousness; (f) All canine bites; (g) More than two applications of a CEW on an individual during a single interaction, regardless of the mode or duration of the application, and whether the applications are by the same or different officers, or CEW application for 15 seconds or longer, whether continuous or consecutive; | 75 (1.70%) |

-
- (h) Any strike, blow, kick, CEW application, or similar use of force against a handcuffed subject; and
 - (i) Any vehicle pursuit resulting in death, serious physical injury or injuries requiring hospitalization.
-

ⁱ See Table 1 in the Appendix for the original typology

ⁱⁱ Outside of running a linear probability model we ran a logit model which revealed similar results, thus we chose to present the more robust analysis with an easier interpretation.

ⁱⁱⁱ We plotted the predicted probabilities of each outcome as well as all the racial interactions and the presence of a weapon. However, we do not show those results because the confidence intervals were too large and overlapping on the corresponding probabilities to get an accurate estimate.