

BLACK TO BLUE AND WHITE TO FRIGHT: EXAMINING THE IMPORTANCE OF
MINORITY REPRESENTATION FOR RACIAL PROFILING IN POLICING

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ABSTRACT

**KEVIN ROACH: Black to Blue and White to Fright: Examining the Importance of
Minority Representation for Racial Profiling in Policing
(Under the direction of Frank Baumgartner.)**

What role does racial diversity in police agencies have on racially discriminatory practices? This paper will focus on the link between police agency demographics and racially discriminatory policing. I will argue that a more diverse police force can in fact make racial discrimination worse. Minority officers undergo organizational socialization, a process by which new members of an organization are taught the organization's values in place of their own. This process affects the link between demographic representation and policy outputs in policing, but this effect depends on the racial composition of the jurisdiction in question, with the effect being higher in cities with a low minority population. I will also consider the reaction of bureaucrats who belong to a racial majority to a diversifying workplace. Minority threat theory suggests that majority group members will react negatively to a growing minority population, increasing racial disparities. This relationship will be mediated by the racial composition of the jurisdiction as well, with the effect being more prominent in cities with a small minority population.

I test these arguments using a newly collected database of traffic stop outcomes, from which I create an index for racial discriminatory practices in a given police department. I find that the effect of increasing diversity in police forces interacts with the share of Black population in the city they serve. In line with my expectations, I find that in cities with a small Black population, increasing the diversity of the police force is associated with more racial disparities; in cities with a large minority population, new minority officers have no effect on racial disparities. I then discuss the implications of these findings and future avenues of research.

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INTRODUCTION

After the shooting of Michael Brown, the tenuous relationship between minority communities and the police was thrust back onto the national agenda. One of the many stories that came out of the unrest that followed talked about the peculiarities of the racial composition of the Ferguson Police Department: despite Ferguson being a primarily Black city, the police department was comprised of primarily White officers. Some wondered if a more demographically representative police force would have had the same racial problems. But Ferguson is not the only police force to have problematic race relations, nor is it the only police force to under-represent minorities in its community. What role does racial diversity in policing have in other cities with racially discriminatory practices? This paper will focus on the link between police agency demographics and racially discriminatory policing. I will argue that a more diverse police force can in fact make racial disparities worse in a police force.

Researchers have often focused on the connection between demographics and behavior in the bureaucracy. Previous research has examined the link between the demographics of governmental agencies and the outputs for minorities. Many authors have found that minority bureaucrats use their discretion in order to produce outputs in favor of fellow minority constituents (Selden 1997, Meier 1993, Thompson 1996, Keiser and Meier 2002, Meier and Cotty 2006). Work that is more recent has examined under which conditions a minority bureaucrat can influence bureaucratic outputs (Thompson 1976, Wilkins and Williams 2008).

While scholars have given this topic a great deal of attention, they have not focused as much on what mediates this relationship, specifically when would an increase in minority representation not lead to an increase in active representation? One potential mediating factor is organizational socialization, which changes an individual's behavior, diminishing the

effects of their demographic background on their decisions. Organizational socialization is the process by which recruits in an organization are inducted into the norms and culture of their new workplace, effectively wiping away their personal experience in favor of the organizationally encouraged qualities and worldviews. Scholarly work on the subject has suggested police is a bureaucracy with a high degree of organizational socialization, and therefore a larger share of minorities in the force should have no effect on racially discriminatory policing (Wilkins and Williams 2008). Scholars have also given little attention to the response of majority group members to a more diverse workplace. We know from minority threat theory that majority group members could react negatively to increasing diversity. I will examine both of these mediating factors as applied to police work.

I will argue that organizational socialization does affect the link between demographic representation and policy outputs in policing, but this effect depends on the racial composition of the jurisdiction in question. In cities with a small minority population, minority officers are inducted into a force with a predisposition towards racial discrimination, and will feel the need to overcompensate to prove their organizational commitment to a central tenet of their workplace; this will translate into an increase in racial discrimination with an increase in minority representation in the force. In high minority population cities, minority officers are inducted into a culture that is less prone to racial discrimination, and will therefore feel no need to overcompensate. This would mean that minority officers will act in the same manner as their majority colleagues, and minority representation will have no effect on racial discrimination by the police force.

I will also consider the reaction of bureaucrats who belong to a racial majority to a diversifying workplace, something minority representation scholars have given very little attention to. Minority threat theory suggests that majority group members will react negatively to a growing minority population, which means that majority group members in a more diverse police force will be more racially discriminatory. This relationship will be mediated by the racial composition of the jurisdiction. Police forces in cities with a large share of minority population may also be subject to a self-selection mechanism, whereby officers who are threatened by racial minorities do not choose to work in these cities. White

officers in cities with a large minority population will already be threatened by the city's population, and will feel no extra threat from a diversifying police force. Furthermore, even if they do feel more threatened, greater power minorities have in cities where they comprise a larger share of the population should neutralize the potential for increased discrimination coming from the officers.

I test these arguments using a newly collected database of traffic stop outcomes, from which I create an index for racial discriminatory practices in a given police department. While traffic stops do not cover all police-civilian contacts, they are an extremely routine encounter that represents the vast majority of police-civilian interactions. This research will also depart from the norm of investigating traffic stop rates, and investigate traffic stop search rates, solving some methodological problems associated with the former method. This methodology allows me to reliably measure racially discriminatory policies in the everyday functions of police forces. This dataset covers a broad variety of police agencies, allowing me to investigate variance in agency level characteristics, something many studies of minority representation which focus on individual agencies are unable to do. I find that the effect of increasing diversity in police forces interacts with the share of the population in the city they serve that is Black. In line with my expectations, I find that in cities with a small Black population, increasing the diversity of the police force is associated with more racial disparities; in cities with a large minority population, new minority officers have no effect on racial disparities. I then discuss the implications of these findings and future avenues of research.

Minority Representation

Existing Literature

The bureaucratic representation literature distinguishes between two types of representation: passive and active. Passive representation refers to having shared demographic characteristics, such as race or gender, between the bureaucrats and the clientele they serve (Mosher 1968). Early bureaucratic representation literature examined the demographic

similarity between governmental agencies and their clientele, generally focusing on how minorities were over or under represented in these institutions (Cayar and Siegelman 1980, Cornwell and Kellough 1994, Hall and Salsein 1975, Kellough and Elliot 1992). This early literature did not measure the policy outputs of these agencies, taking it for granted that more minority representation would lead to better policy outputs for minorities.

Later works directly examined active representation, when bureaucracies produces policy outputs that benefit those individuals that are passively represented (Meier 1993). The literature has defined two requirements for active representation: bureaucrats must have discretion so that they can actually alter policy outputs for those that they passively represent (Meier 1993) and the policy area must be salient for the minority group in question (Meier 1993, Selden 1997). The subject matter and organizations in question, racially discriminatory practices in policing (and more specifically during traffic stops), firmly meet both criteria. First, police officers are the quintessential street-level bureaucrats, meaning they are given wide discretion in how they do their jobs (Lipsky 1980). Officers decide whom to pull over, whom to search, and whom to give a warning instead of a ticket. There are many opportunities for minority officers to change the outcomes in favor of minority drivers; they could give them lighter outcomes or avoid searching them at higher rates than their White counterparts, or even avoid stopping them in the first place. Second, the importance of racial discrimination to the minority community is paramount. Scholars have documented how disparate policing influences minority opinions of the police (Cochran and Warren 2012, Weitzer and Tuch 2002), and recent social movement such as Black Lives Matter and the civil unrest in cities such as Ferguson and Baltimore show how important this issue is to minority group members.

The active representation literature has primarily focused on the representation along race and ethnic and gender identities, most works demonstrating that minority bureaucrats (either women or racial/ethnic minorities) produce better policy outputs for said minorities (Selden 1997, Meier 1993, Thompson 1996, Keiser and Meier 2002, Meier and Cotty 2006). These works generally argue that a sense of shared identity or a better understanding of minority needs leads minority bureaucrats to understand minority preferences better

than their White colleagues. These bureaucrats take this sensitivity towards minority preferences, in combination with their discretion in how they go about doing their job, and use it to actually produce policy outputs that meet these preferences (at least more so than their White colleagues). In the context of police officers, scholars have demonstrated that an increase in the number of female officers is connected to an increased focus on sexual assault an issue perceived as more salient for women, affirming the bureaucratic representation theory (Meier 2006). This literature would lead us to agree with the general notion that arose out of Ferguson: a more diverse police force would be associated with a decrease in racial disparities.

A New Perspective: Organization Socialization

However, it may not be as simple as the minority representation literature would suggest, the relationship between passive and active representation may not always work this way. In fact, there may be situations where minority bureaucrats produce negative outcomes for their minority clientele. Some scholars have begun to examine what mediates the relationship between passive and active representation, arguing that institutional characteristics can alter this link (Thompson 1976, Wilkins and Williams 2008). One characteristic of particular importance to policing is organizational socialization, the process by which new members of an organization are schooled into adopting the norms of that organization. The organizational theory literature argues that administrators are socialized into their organization's goals and norms, eliminating any personal effect their background may have on their decision-making (Downs 1967, Gawthorn 1969, Meine and Nigre 1976, Simon 1957, Thompson 1976). This process ensures that administrative decisions do not deviate from organizational goals. Organizational socialization does not only apply to administrators, however, it also affects regular employees. Employees are pressured to adopt the organizational worldview for personal or career reasons, casting aside their previous worldview in favor of the organization's in order to fit the mold and improve their chances at rising in the organization (Downs 1967, Romzek 1990, Simon 1957). In essence, organizational socialization eliminates any personal factors that would affect decision-making in an or-

ganization, wiping away the effects of things such as demographic characteristics. This would lead us to expect that in organizations with a high degree of organizational socialization passive representation would not lead to active representation.

Police certainly fit the organizational socialization pattern: they have a well-documented social cohesion (Hahn 1971, Wilkins and Williams 2008). The processes surrounding current forms of racial profiling have also been institutionalized to a surprisingly high degree (Tomaskovic-Devey and Warren 2009). Operation Pipeline, a federal program in the 1980's which helped transform traffic stop practices of the local law enforcement agencies, is credited as a major factor in the construction of current forms of racial profiling. This program helped local agencies to create drug courier profiles, which allowed them to determine who needed to be searched for drugs. These profiles were often times connected to race, either overtly or covertly (Tomaskovic-Devey and Warren 2009). Other research has also demonstrated how widespread these practices are in policing today: while agencies vary in how much they racially profile, the practice is present in almost all agencies (Baumgartner et al forthcoming, Price 2004). These practices are not ubiquitous, but we should expect police agencies to pressure new recruits into accepting some racial profiling practices, as the latter are an institutionalized part of modern policing.

When examining the link between organizational socialization and the practice of racial profiling in policing, there is one article of note that directly investigates this relationship - Wilkins and Williams (2008) piece *Black or Blue: Racial Profiling and Representative Bureaucracy*. Wilkins and Williams described some of the organizational socialization pressures that operate on officers, convincingly showing that officers do face a pressure to adhere to institutional goals and norms. They even documented the specific pressures on minority officers to conform: minority officer told them in interviews "Sometimes you have to do some degree of it [profiling] because that's one of the instincts that we have and that we pick up over the years if you stay in it [policing professions] long enough" and "It [profiling] is not only White officers. It's Black officers, too. I think we bought into the thought process of other people about our own people" (657). While these were only two of the responses in their interviews, it demonstrates how powerful organizational socialization is to minority

officers, and how practices of racial profiling are being reinforced. Wilkins and Williams argued that organizational socialization acts as a pressure to nullify the effect of minority officers on the policy output process, by removing the personal link minority bureaucrats have to minority groups and making minority officers act like existing members (Wilkins and Williams 2008). They also argued there may be a pressure on minority officers to over-commit to the agency's norms, meaning minority officers could actually make things worse for their Black clientele, though this is not the main argument of the paper. Furthermore, the authors found that an increase in minority bureaucrats was actually associated with an increase in racial bias, the opposite of the expectation from bureaucratic representation theory and their own expectation of no effect. This finding is extremely interesting, it suggests there could be negative consequences to minority representation that scholars have not fully considered.

But how does organizational socialization make minority officers act worse than their White counterparts? While this literature demonstrates that agency norms and goals are very important when considering how new officers will act, it has not considered how organizational socialization's effect may differ depending on the specific agency culture. The socialization's pressures of some agencies could push minority representatives towards negatively interacting with fellow minorities, as they are forced to prove their commitment to the cause to other organization members, above and beyond of what is expected from other officers. While Wilkins and Williams offer this over-commitment mechanism, they do not explain what may cause an officer to feel the need to over-commit to an agency's racial discrimination norms. This research will augment the organizational socialization literature by considering how the pressure to over-commit to an agency's culture may vary structurally. It will also seek to re-conceptualize organizational socialization as a set of pressures, which may be applied unequally to the members.

The Majority Reaction: Minority Threat Theory

The bureaucratic representation literature has also given very little attention to the majority's reactions to a more diverse workplace. Given minority bureaucrats are not a large

part of the bureaucracy, the majority of policy outputs are still determined by majority members. Therefore, the aggregate effect of increased minority representation may depend on the reactions of the vast majority of officers to having more minority colleagues. Minority Threat theory suggests that majority members feel threatened by minority group members, and use their disproportionately large share of power to repress the minority group when threatened (Blalock 1967). This literature generally measures minority threat as the share of the population, where a large minority population is more threatening than a smaller minority population. Multiple studies have demonstrated that a larger minority population leads to negative outcomes for minorities (Huff and Stahura 1980, King and Wheelock 2007, Chiricos et al 1997). This is the second possible explanation for Wilkins and Williams' interesting finding: racial disparities were worse in divisions with more minorities because the majority officers were acting with more bias in reaction to their diversifying workplace. This research will suggest that minority threat theory is a useful guide for examining how majority group members will react to a diversifying workplace, but will also examine how minority populations in the city surrounding the police force can remove this effect.

Integrating organizational pressures and majority reactions

In this section, I will present a theory of minority representation that incorporates organizational socialization pressures, as well as the reaction of the racial majority officers, for the case of police. While I expect minority officers to have a predisposition towards producing policy outputs in favor of minorities, the pressures they face to over-conform, as well as a negative reaction by their White colleagues will engender a negative effect, acting in the opposite direction to what traditional minority representation theory predicts. This effect will be dependent on the racial composition of the city the police operate within. As a result, in cities with a small minority population, increasing minority diversity in policing will result in overall racial disparities worsening. In cities with a large minority population increasing minority representation will result in no effect in racial disparity levels.

Mechanism 1: Organizational Socialization and the Pressure to Over-Commit

When considering the effects that training and organizational structure may have on the decision making of the employees, it is useful to have a basic understanding of police training in the United States. After all, in order for new recruits to be pressured into an organization's mindset, the organization needs to have the training procedures to accomplish this task, and methods of reinforcing this mindset once it has been taught. The Bureau of Justice Statistics conducts a survey of law enforcement training academies. This survey demonstrates that police training is generally taught by other police officers, and is extensive (Reaves 2016). Nearly three quarters of law enforcement academies required that their instructors have a minimum number of years in the force, averaging at about 4 years. The average academy's non-field training segment last for about 806 hours, or about 21 weeks. However, in the field training is the most likely culprit for inducing the organizational socialization effect. The report states directly that field training provides recruits with the opportunity to work with a field training officer in order to learn the practical aspects of law enforcement and community service, and to assimilate into the professional culture of a particular agency" (4). While only 37 percent of academies required a field training program, most hiring agencies conducted the field training themselves, so that about 95% of all police officers receive field training (this number varies slightly depending on the type of police agency), intended to assimilate them into the agencies' professional culture. This survey demonstrates that police officers go through an extensive level of training which is overseen by current police officers, either in the field or in the classroom. After training, officers are subject to a high level of inter-occupational solidarity and fraternity an resistance to change, further reinforcing the pressure for officers to commit to organizational norms (Dicker 1998, Hahn 1971, Williams and Wilkins 2008). That is why I argue, like the literature before me has, that police officers go through a powerful process of organizational socialization, as they are taught to police the way the current officers do and maintain that worldview. Furthermore, as the literature has suggested and Williams and Wilkins found in their interviews, racial profiling is an integral part of the policing culture that is impressed on new officers.

However, while there are certainly pressures on officers to adopt the police agency's norms and culture, there are reasons to think these pressures would not apply to all officers equally. Particularly, when considering attitudes towards racial profiling, is there a reason to think incoming minority officers may face different pressures than their White counterparts? I will argue that minority officers face an additional pressure: they need to overcome suspicions that they would treat minorities favorably. If it seems intuitive that minority bureaucrats will treat their minority clientele favorably and avoid racially profiling them, then we should expect that majority police officers find this intuitive as well, and would have an expectation that minority officers would not conform to agency norms. This expectation creates a barrier for minority officers, as they need to prove their loyalty to the agency's norms and culture, but are expected to be resistant to said norms and culture given their demographic characteristics. This gives minority officers an incentive to overcommit to racial profiling: in order to ward off perceptions that they will be lenient, they will give other officers no reason to question their loyalty to the force's norms. As a general rule, if that mechanism were at work, we would expect individuals in occupations with high degree of organizational socialization, who are perceived as unable to conform to organizational norms, to over-commit to those norms. In terms of racial profiling norms in policing specifically, in agencies with a strong racial profiling culture, we should see minority officers pressured to over-commit to racial profiling, making racial disparities worse as the force diversifies.

I argue that a culture of racial profiling can be approximated using the racial demographics of the city in which the police force operates. I begin by assuming that police agencies do not want to face public backlash against their policies, particularly as it regards racial discrimination. I then argue that large minority populations are more influential and can cause a larger backlash: if they are targeted too much, they can organize to change the way the police operate, or use their electoral power to pressure local leaders to do so on their behalf. Scholars have demonstrated that police agencies are cognizant of the political and social climate when determining how much to profile, they found political attention does affect the decision by police agencies to engage in racial profiling practices (Warren and

Tomaskovic-Devey 2009) Therefore, all else equal, larger minority population would mean higher probability and larger scale of a potential backlash. Ferguson is a prime example of a large minority population that mobilized in the face of perceived racial profiling, these demonstrations being detrimental to the standing of the Ferguson Police Department. Summing up, police agencies in areas with large minority population need to fear a backlash for using racial profiling to a larger extent, meaning, all else equal, they should rely on racial profiling less than agencies in areas with small minority population.

This argument should be observable in my test: cities with a larger minority population should, all else equal, be less likely to engage in racial profiling. If this is true, then the effect of adding minorities to a police force interacts with the share of the city population that is comprised of minorities. We should expect that adding minorities to police force in small minority cities will increase racial disparities, as these new minority officers need to overcommit to racial profiling to prove their commitment to an important agency norm and practice. Meanwhile, adding minorities to police forces in large minority cities will have no effect on racial disparities, as racial profiling is not an important tenet for the agency, and minority officers will not need to prove their loyalty. They will face socialization pressures to act like everyone else, just not as much as in agencies where racial profiling is used more.

In summary, organizational socialization is a process that takes recruits with a preference for certain methods of decision making and alters them so they fit the organization's methods of decision making. The training for police officers is extensive, and almost always includes field training with an existing officer, which is intended to socialize the recruit into the professional culture of the police agency. This demonstrates that police agencies do indeed have a large capacity for organizational socialization. We also have seen from interviews that racial profiling is a part of the police culture which recruits are pressured to adopt. However, socialization pressures are not equally applied to all recruits: those perceived to be less likely to adhere to the agency's norms would need to over-commit to them in order to prove their loyalty. In terms of racial profiling, minority officers will be perceived as being less likely to target minorities, and therefore need to target them more in order to prove their resolve. I have also argued that this effect depends on the value the agency

places on the use of racial profiling. If the agency values racial profiling, and engages in the practice to a large extent, they will expect their officers to adhere to this value more than agencies where racial profiling is not as central to policing practices. I then argued that the value an agency places on racial profiling can be approximated using the demographics of the city which the agency resides in. Agencies in cities with a large minority population need to fear a backlash for engaging in racial profiling, like the one observed in Ferguson. This culminates in an expectation of interaction: the effect of adding minorities to police agencies depends on the cities' demographics. In large minority population cities, adding minority officers will have no effect as organizational socialization wipes these officers of their demographic preferences. In small minority population cities, adding minority officers creates an increase in racial profiling, as minority officers double down on racial profiling practices to prove their commitment to an important practice in their agency that the coworkers perceive them as being less likely to follow.

Mechanism 2: Minority Threat and Majority Reaction

The theory presented so far only concerns the actions of new minority officers in a police force. However, according a survey conducted by the DOJ, LEMAS (Law Enforcement Management and Administrative Statistics), the average police department employs about 80% White officers. Thus far, I, and other minority representation scholars, have assumed that White officers (or more generally bureaucrats) do not act any differently when their agency becomes more diverse. If their decision-making were constant then any aggregate change in racial profiling indicators would be the result of the actions of the new minority officers. However, it is entirely possible that members of racial majorities would react to a diversifying agency, and the changes in racial profiling indicators could be a result of their reactions.

I argue, in line with minority threat theory, that majority officers will experience an increased perception of racial threat when minority representation increases. While minority threat theorists normally examine police officers as tools of minority repression when a city becomes threatened, the same processes should operate on police officers themselves. Mi-

minority representation in policing means more minority colleagues for White officers, and the same processes that make homeowners think crime is worse when their neighborhood diversifies, will operate at the workplace level (Chiricos et al 1997). Minority presence not only increases perceptions of negative stereotypes associated with minorities, it also makes majority members more punitive (King and Wheelock 2007). This means majority officers could have their negative perceptions of racial minorities highlighted, and have an increased probability of deciding to punish a representative of a racial minority. Given the vast discretion these officers have in who they select for investigation and when to punish, an increased perceived threat of racial minorities or punitive intent could very easily translate into negative consequences for minorities the officers interact with.

However, much like the organizational socialization effect earlier, there are reasons to think the effect minority threat has on racial profiling practices in policing may vary systematically with city demographics. First, the selection of officers who work in a given jurisdiction is not random: officers choose which departments they would like to work in. If an officer is a person who is particularly threatened by large minority populations, I expect them to choose to work in cities where they will not constantly be interacting with a large minority population. This assumes these individuals do not seek out a feeling of being threatened. This selection effect would produce agencies in small minority towns that are comprised of officers who are more threatened by minority populations, and agencies in large minority towns that are more resistant to minority threat effects. Second, I expect the same political/social power dynamic that was described earlier to be present. If large minority populations are more capable in detecting and punishing racial discrimination, then we could expect a political constraint on the decision making of majority group members. While majority officers may feel threatened because of a large minority population, they are not able to act on this perception of threat due to a fear of backlash. A third reason would be that majority officers working in large minority jurisdictions are already threatened by the large minority population they interact with on a day to day basis, and there simply is not as much room to go up in terms of perceived racial threat. All three effects have the same empirical signature: in cities with a small minority population, a diversifying police

force is met with increased perceptions of racial threat and worsening racial disparities. In cities with large minority populations, this effect is stymied, and increasing diversity comes with no change in majority officer behavior.

While both mechanisms predict the same aggregate effect, their particular empirical signatures would be slightly different. The organizational socialization effect would be produced by minority officers, while the majority reaction effect would be produced by majority officers. It is theoretically possible to separate these effects by measuring the differences in policy outputs by race of the officer. This would require micro level data, which records the outcome of each traffic stop by officer, and most importantly would need to contain information on the officer's race. Unfortunately, this is not possible with current data sources. This research will provide evidence of the described effects in the aggregate, which would be evidence for either or both mechanisms.

Hypotheses

The following are my formal hypotheses:

Hypothesis 1 All else equal, cities with larger minority populations will have lower racial disparities.

According to both mechanisms, we should observe a lower level of racial profiling in large minority population cities. The first mechanism specifies that large minority populations would have the political and social power to cause a backlash which would make police agencies think twice about going overboard. In the second part of my theory, I offered a selection mechanism and a political explanation for why cities with large minority populations would not experience a minority threat effect. Both mechanisms would require that these cities, all else equal, also rely on racial profiling less than cities without a large minority population.

Hypothesis 2 All else equal, as minority representation in the force increases, the level of racial disparities will increase.

Hypothesis 3 The effect of adding minority officers will approach 0 as the minority

population in the city increase.

The second and third hypotheses describe the interactive effect offered in both mechanisms presented in my theory. Both suggested that minority representation should lead to a negative effect - either through minority over-commitment or majority backlash. They also both gave a mechanism by which we should expect this to only be the case in cities with a small minority population, as with the minority population increased this effect would become stymied, until it dropped to a null effect.

Data and model

Dependent Variable

For the purposes of this study, I will focus on African Americans as the racial minority. In order to test the effect that minority representation will have on racial profiling practices I need to measure the level of racial profiling in a police agency. Like several works before me, I will investigate traffic stop encounters between the police and civilians. Traffic stop encounters may not be as newsworthy as police shootings, but they are the most common method of police civilian interaction (Eith and Durose 2008). For this reason, if we want to examine whether the police are racially profiling individuals, it is useful to examine traffic stops, as due to their routine nature they will be more representative of average police work. I will depart from the existing studies and not examine traffic stop rates, due to methodological concerns. While it is certainly substantively important to know if the police are stopping racial minorities more, examinations of traffic stop rates are plagued by the inability to know who the officer could have selected for a traffic stop (the initial pool the officer is choosing from). In order to know if officers are selecting minorities more for traffic stops we would need to know what is the pool of drivers who are on the road at the time of the stop and are breaking the law - a nearly impossible feat. Scholars normally get around this concern by estimating what the driving population looks like and assuming (with some survey evidence to support the claim) that drivers of different races break the law at about the same rate. While scholars have found interesting ways to attempt to circumvent

the limitations of examining traffic stop rates, I will focus on the outcomes of these traffic stops, namely the decision to search an individual. This is methodologically useful, as a person can only be searched if they have been stopped, which means I can know the full pool of drivers who could have been searched, and deduce whether minority drivers were selected for search more than White drivers. These searches are also substantively important: they are involved affairs that worsen the driver's perceptions of the officer's handling of the situation, and as scholars have argued, have other negative consequences not associated with just being stopped by the police (Lankton and Durose 2011, Either and Durose 2008, Epp et al. 2014).

I construct a search rate ratio to measure disparities in traffic stop search processes. Simply put, this is the search rate for Black drivers divided by the search rate for White drivers, where both rates are the number of searches divided by the number of stops for that racial group.

$$\text{Black Search Rate Ratio} = (\text{Black Searches/Black Stops}) / (\text{White Searches/White Stops})$$

This measure can be interpreted in the following manner: if the search rate ratio is above one, minorities are being searched at a higher rate than White drivers, if the search rate ratio is below one then minorities are searched at a lower rate than White drivers. The higher this measure goes, the more disparate minority searches rates becomes in reference to White search rates: a search rate ratio of two means Blacks are searched at twice the rate of White drivers, whereas a search rate ratio of three means Blacks are searched at three times the rate of White drivers. This measure is useful because it inherently compares minority drivers to their White counterparts, meaning I am directly measuring racial disparities in traffic stop search processes. The measure is also useful because it uses rates rather than frequencies: this avoids punishing agencies that have pulled over more minorities, as they will have more stops in which to conduct a search on. For this measure and all other variables in this data, race and ethnicity are measured in a mutually exclusive fashion. An individual is only considered White or Black if they are not ethnically Hispanic. An individual is coded as Hispanic if they are ethnically Hispanic, regardless of race.

This measure is constructed using a new traffic stops dataset created in collabora-

tion with Frank Baumgartner (UNC) and Leah Christiani (UNC). This dataset includes all known records of traffic stops in the United States from 2000 on, so long as they include the number of stops, the number of searches, for the agencies that are above a 10,000 stops per year threshold. It records the number of stops and searches for a given police agency in a given year, by driver's race. The number of stops per year threshold was imposed for data reliability - given this research uses stop rates, the 10,000 threshold makes sure the denominator in the rate is not so small that it is unreliable. This will bias my data towards large agencies, however other data availability restricts the data in this way anyway, and the implications of this bias will be discussed in the discussion section. This data includes reports published by police agencies (or other governmental bodies) which record yearly totals, as well as totals constructed from micro level (that is individual stop records) reports published in some states. This data includes sheriffs, local police departments, and state police. Table 1 reports descriptive statistics for the search rate ratio measure across our dataset (for those observations that are included in the final test), as well as the descriptive statistics for the other variables in the model. This shows that on average police agencies searches minority drivers nearly 3 times as much as White drivers; furthermore, only two agency years registered below one, meaning they searched Whites more than they searched Blacks.

Table 1: Descriptive Statistics

Variable	N	Mean	Std. Dev.	Min	Max
Black Search Rate Ratio	257	2.67	1.20	0.90	7.96
Share Black in City	254	0.16	0.13	0.01	0.54
Share Black on Force	268	0.08	0.08	0.00	0.34
Segregation Index	264	38.56	14.28	10.94	82.48
% Vote for Obama	265	61.24	12.21	33.19	84.34
100,000 Residents	254	1.83	4.22	0.07	28.24
Share in Poverty	254	0.13	0.07	0.03	0.33
Officer per 100,000 residents	254	205.53	138.04	104.07	1335.88
Share of CPO officers	264	0.13	0.18	0.00	0.81
Crime Rate	192	3497.46	1908.38	932.49	8491.05

Independent Variables

The main explanatory variables for this research will be the share of the city population and the police force that are Black. The demographics of the city are collected from the American Communities Survey, and are specific to the city in which the police agency operates. The average share of the Black population in the cities in this data is about 16%, but ranges from near 0, up to 54%, giving me very good variance in terms of city demographics. Police force demographics are collected using the Law Enforcement Management and Administrative Statistics (LEMAS) survey run by the Department of Justice. LEMAS surveys all police agencies with more than 100 sworn officers, and includes a nationally representative sample of smaller agencies, with a high response rate. This will unfortunately bias the availability of force demographics data towards large agencies, the implications of this will be also discussed in the discussion section. This research looks at four iterations of LEMAS: 2000, 2003, 2007, and 2013. Other iterations were not considered because they did not correspond to the time-frame the dependent variable was collected on. From these four iterations, a force profile was set up for each agency, which included its demographic profile for each iteration of the survey it was included in. It was apparent at this step that force demographics rarely change: police officers are not temporary workers, they remain in the profession for a long time. The average change from one iteration of LEMAS (an average of about 4 years) to another was about one Black officer, hardly enough to gather meaningful variance. For this reason, force demographics are treated as a unit constant, an average of their demographic for each LEMAS survey that contained information about the force. This is a potentially strong limitation: I do not have information about the changing demographics of all the forces in my dataset. Given the sporadic nature of LEMAS, and the relative stability of force demographics, this is a necessary limitation that is not imposing very much on the structure of the data. I will instead focus on differences in demographics between agencies.

Control variables

I will control for 6 different variables: segregation, ideology, city size, poverty, officer to citizen ratio, and crime rates. Geographic segregation may influence search-rate disparities. Scholars have suggested that police beats that are less diversified lead to more racial disparities in traffic stops (Roh and Robinson 2009). Therefore, police forces in highly segregated cities, which should consist of less diversified beats, may be more prone to racial profiling than those in more racially integrated areas. The expectation is that as segregation increases, the racial disparities in traffic stop search rates will increase as well. Racial segregation will be measured using the standard dissimilarity index, which measures what percentage of the population in a city would need to move in order to achieve even racial dispersion. Each city is assigned a 0-100 score, a value of 100 being maximum segregation while a value of 0 is maximum integration. I gathered this measure from Brown's American Communities project (Logan 2017).

Ideology is a useful control because it should measure political pressures on the police to refrain from racial profiling. According to a Pew survey, self-identified Democrats were less likely to say police officers were treating racial minorities fairly - 26% as compared to 78% for Republicans (Brown 2017). Given this, I expect that the local government and citizenry in more Democratic places will be less tolerant of racial profiling, so we should expect police agencies in these jurisdictions to engage in less racial profiling. Ideology will be measured as the percent vote share for Obama in 2008, a general measure used in the literature. This measure is unfortunately tied to the county instead of the city, because of data restrictions; implications for this will be discussed in the discussion section. It could be also argued that police agencies in large cities rely on racial profiling more than those in smaller cities. Cities are associated with anonymity: officers in large cities have less information to go on when interacting with civilians so they rely on racial cues more. There are also important cultural differences between urban and rural centers that should be controlled for. City size is measured as the number of citizens in 100,000s, collected from the American Communities Survey.

The literature has consistently identified poverty levels as an important factor when

looking at racial disparities in policing (Cox et al 2001; Fagan and Davies 2000; Smith and Petrocelli 2001). The general conception of this relationship is that police target individuals who are not capable of fighting back, the impoverished. This leads me to expect that as poverty rates increase, racial profiling will become more pronounced. I will control for poverty using the poverty statistics provided by the American Communities Survey (Census 2015).

It may also be important to measure the concept of over policing, measured as the number of officers per capita. Agencies with a high officer/citizen ratio may be more zealous in the attempt to control crime; this could lead them to engage in more racial profiling than agencies with a lower officer/citizen ratio. It could be counter argued that officers in agencies with a low officer/citizen ratio have higher demands placed on them, and need to rely on racial profiling to handle the increased workload. This control was constructed using officer totals from LEMAS and city size from the ACS. In the same lens, I will control for crime rates, which as scholars have suggested lead to racial disparities in policing (Fagan and Garth 2000). The logic here is that as crime rates increase, the police will react by increased racial profiling as a response. This is collected from the FBI's Uniform Crime Report (UCR), combining both violent and property crimes. This measure covers all crime collected by the UCR, including murder and non-negligent manslaughter, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. The crime rate measures how many of the specified crimes occur per 100,000 population.

Missing data

The original traffic stop outcomes dataset had 781 agency years, spanning from 2000 to 2016, and 208 different police agencies from 18 different states. The amount of coverage over time depended on the agency, some agencies only reported for one year, other reported over the whole period. Table 2 summarizes the loss of data. 214 observations were dropped due to not being included in any of the four LEMAS surveys examined. 222 observations were lost when including the ACS estimates for city demographics, as these estimates were

only available in a usable format ¹ from 2009 and on. Restricting the data to only local police departments constrained the data to include only 238 agency years from 64 agencies. Including the crime rates further restricted the time frame, to 2009 to 2014. This resulted in 50 observations lost, including losing 17 agencies (which had only reported these final years) for a final total of 182 agency years from 47 agencies.

Table 2: Missing Data

Restriction	Observations	Observations Lost
Starting	781	
LEMAS	567	214
ACS Estimates	345	222
Excluding non local PDs	238	107
Crime Rate	192	46

Model

Given the use of a pooled dataset, OLS regression would not be a reliable method of estimation. In particular, the presence of unit effects in the data could strongly bias my independent variables that do not vary over time. Given a major independent variable, force demographics, is held as a unit constant, this would bias a major theoretically important variable. Given this, I will use a pooled time series model with random effects to test the following model:

Black Search Rate Ratio= Share Black City + Share Black Force + Share Black City* Share Black Force + Segregation Index + Percent Obama + City Size + % in Poverty + Officer per 100,000 citizens + Crime Rate

This model will use the police agency as the unit and year as the time variable. Since I am interested in the differences between agencies, I cannot use fixed effects to correct for unit effects, therefore I will use random effects that will control for unit effects that were not included in the model.

¹ This limitation is due to the lack of earlier datasets on the Census API server

Analysis and results

Table 3: Model Predicting Black Search Rate Ratio

VARIABLES	Model 1	Model 1- Restricted	Model 2
Share Black in City	-1.409 (1.200)	-2.068 (1.710)	-2.380 (1.765)
Share Black in Force	16.235*** (3.327)	17.290*** (4.220)	17.550*** (4.273)
Black in City * Black in Force	-33.282*** (9.326)	-34.394*** (12.822)	-34.829*** (12.961)
Segregation	0.017** (0.008)	0.014 (0.011)	0.013 (0.011)
% Obama	0.024*** (0.008)	0.028** (0.011)	0.030** (0.012)
City Size	0.036 (0.032)	-0.115 (0.094)	-0.146 (0.101)
% in Poverty	-1.803 (1.795)	0.247 (2.569)	-0.118 (2.619)
Officer per 100,000	-0.001 (0.002)	-0.001 (0.003)	-0.003 (0.004)
Crime Rate			0.000 (0.000)
Constant	0.479 (0.674)	0.386 (0.948)	0.473 (0.962)
Observations	248	188	188
Number of Agencies	67	48	48
R-Square: Within	0.01	0.00	0.00
R-Square: Between	0.51	0.39	0.39

Standard errors in parentheses

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

Table 3 shows the results of the pooled time series regression. Model 1 includes every control besides the crime rate. I also restricted the first model to only those observations that the crime rate was not missing for, this should demonstrate whether any differences between Model 1 and Model 2 are due to data loss or are a result of the added crime rate control. Model 2 reports the results with the crime rate control included. Model 1 has a within R-squared of .01 and a between R-squared of .51, showing that this model explains almost no within-unit variance in the agencies, but does a fairly good job at explaining

the variance between agencies. Given the lack of over time variance in one of the main theoretical independent variables, force demographics, this was to be expected.

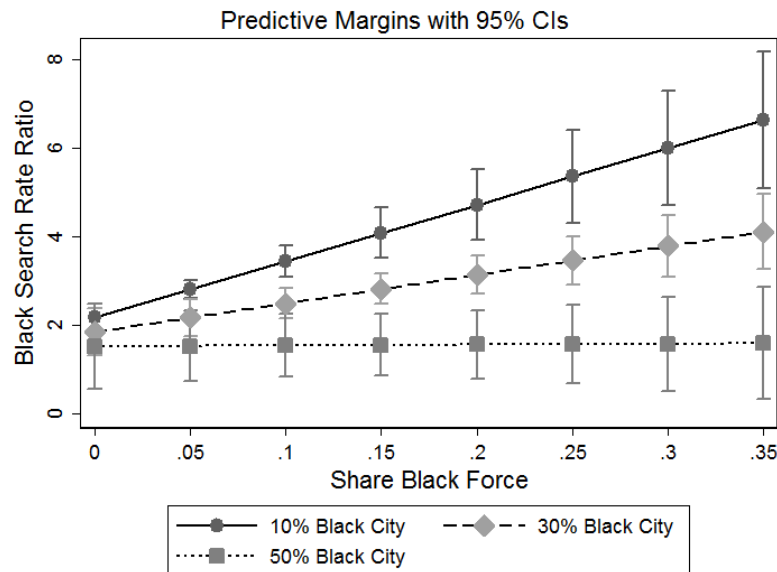


Fig. 1: Marginal Effects of Model 1

Due to the presence of an interaction term, the coefficients presented cannot be interpreted directly, instead it is necessary to use a marginal effect graph to interpret the effects of demographics in the city and in the force. Figure 1 shows the marginal effect graph for model 1 as the share of the force and the city that is Black varies, holding all other variables to their mean. The different lines represent different city demographics, rising from 10% to 50% Black population, the x-axis represents the percentage of Black officers on the force, ranging from 0% to 35%. My hypotheses predicted that cities with a larger minority population would have police agencies that racially profiled less, and that as the percentage of Black officers on the force rose, so too would racial disparities, which would be observed as an increase in the search rate ratio. However, I also predicted that this effect was contingent on the percentage of Black population in the city: as the city became more Black, this effect would reduce to zero.

Figure 1 clearly demonstrates support for my hypotheses. First, cities with larger minority populations almost always have lower racial disparities. When the share of Black officers in the force is low, the effect of a higher Black population is indistinguishable, but once the Black share in the force rises, it is clear that cities with a large minority popu-

lation are racially profiling less. This provides evidence for my claim that large minority populations can more effectively keep police from profiling them, or at least supports the idea that agencies in cities with a large minority population engage in racial profiling less. This is an important finding: if larger minority cities had engaged in racial profiling more than small minority cities, then my arguments for why these relationships depended on city demographics would not have been supported and other mechanisms would have been needed.

Second, all else equal, having more Black officers in a force is correlated with an increase in racial disparities. However, this effect goes away as the size of a city's Black population increases. This is evident in the slopes of the marginal effects: when percent Black in the city is small, these slopes are positive, indicating that more Black officers leads to an increase in search disparities. However, the slopes of the lines decrease as the Black share in the city increases, until eventually, there is no effect of adding Black officer to a force. These effects are substantively large: in a 30% Black city, going from hiring no African American officers to hiring 30% (that is hiring in parity with city demographics) results in African American drivers being searched 200% more than their White counterparts are. Marginal effect plots for the other models are included in Appendix ..., they show no meaningful differences from the results in Model 1. Given the large amount of data missing in the crime rates variable, and the lack of new meaningful information, I present the results of Model 1 alone.

Among the control variables, segregation and partisanship have statistically significant effects, having p-values below the .05 level. Segregation has the expected sign - more segregation is correlated with more racial disparities. The effect of segregation dropped out of significance in the second model, however this is probably due to data loss, not the meaningful addition of the crime rate control, because the segregation effect also disappeared in the restricted first model. If the effect of segregation were dependent on model specification (that is dependent on the inclusion of the crime rate control), I would expect that limiting the dataset but not including the confounding factor would not eliminate the effect of segregation on racial profiling practices. However, this is not the case, and it is the loss of data

associated with including crime controls, which eliminates the effect of segregation. The effect of segregation is somewhat modest, going from a score of 0 to 10, that is going from racial integration to needing 10% of a city to move to achieve racial integration, would lead to a .17 increase in the search rate ratio.

While partisanship had a statistically significant effect, having a p-value below the .01 level in Model 1 and below the .05 level in the other models, it was in the direction opposite to my predictions. This means that as the vote share for Obama increased, so did racial disparities. This effect is also quite large, a 10% increase in the Obama vote share is correlated with a .2 increase in the disparity index. This means that Blacks would be searched 20% more than Whites would, all else equal. This finding is quite puzzling. I think this result may have to do with the presence of both percent Black in the city, city size, and partisanship in the same model, which may confound the results given how highly correlated these concepts generally are.

The other control variables - city size, poverty rate, officer/citizen ratio, and the crime rate - were not significant in all three models, having p-values above the .05 level and .1 level.

As stated earlier, these results are not sufficient to separate the two mechanisms proposed in my theory: the effects of socialization pressures on minority officers and minority threat reactions of majority officers. My findings support the aggregate effect of either/both of these mechanisms, namely that a more diverse force has worse racial disparities contingent on city demographics. If the data were more detailed, then it would be possible to identify if it was minority or majority officers producing the change. However, it is not possible given the current status of traffic stop data in the United States.

Conclusion

Discussion

This project proposed a limited test for a novel theory. As stated earlier, it was not able to separate out the organizational socialization effect from the majority reaction effect, due

to a lack of necessary data. Furthermore, the sample of agencies in my data was biased towards large agencies. This limits the exportability of these findings; some scholars have suggested there are important differences in perceptions of racial profiling in smaller police agencies (Wilson Wilson and Thou 2015). Lastly, the exportability of these findings to other bureaucracies may be limited; the police are a very distinct institution that has a deep history when it concerns troubled relationships with minorities. This was also only one measure of policy outputs towards minorities, it is highly possible that minority officers produce nice outcomes for minorities in other facets of their job. Keeping these reservations in mind, the test still provided interesting evidence in support of the proposed mechanisms.

One very surprising finding, beyond those proposed by the theory, was that more Democratic cities had worse racial disparities. However, it is important to note two important caveats. First, the measure of partisanship was at the county, not city level. This is a clear measurement error in an independent variable, which is methodologically problematic, violating an OLS assumption. I also included both voting for the Democratic candidate, city size, and racial demographics, meaning the result is the effect of partisanship controlling for the Black population and urbanization. In essence, this is the effect of non-Black non-urban liberalism. Future scholars should investigate this further, to determine if this was due to methodical error, or is a truly interesting finding that requires new explanations.

Conclusion

This research began by examining one of the many questions posed during the unrest in Ferguson: were the racial disparities in Ferguson PD practices due to a lack of diversity in their police department? There is a strong literature that would have suggested that a more diverse force would have produced better outcomes for their minority citizens, but this research project has argued it may not be as simple as that.

I examined the link between passive and active representation, asking if we could expect minority representatives to ever act worse towards other minorities, and what is the response of majority group members to a diversifying workplace. I hypothesized that a diversifying workplace would be bad for minority clienteles, but only in cities with a small minority

population. I found support for this hypothesis. I also found limited support that more segregation leads to more disparities, and very interestingly found that more Democratic cities had worse racial disparities. Unfortunately, as discussed earlier, it was not possible to separate the effect of the two mechanisms offered in this thesis with current data sources. Yet it would be possible to test these separate effects in other fields of study besides the police and racial disparities. Furthermore, these findings raise several important concerns about minority representation theory, and future scholars should consider both the effect of organizational socialization on minority representatives and the reaction of majority bureaucrats. Finally, this research has shown that it is important to consider how bureaucratic representation relationships may vary systematically between different agencies and areas. In this study, I have shown how the effect of minority representation depends on the racial demographics of the city.

It is important to remember that this research does not inherently suggest that hiring minorities will lead to negative consequences for the minorities in the community served by a given agency. It suggests that we need to consider the reactions of the majority, and pre-empt these in order to ensure that diversifying police agencies has positive effects and reduces racial profiling. Future research should investigate if racial bias training has any effect on this relationship; it is the opinion of this author that they may be effective in keeping majority officers from reacting negatively.

APPENDIX A: Exclusion of Crime Rates

The marginal effects were only presented for Model 1 in interest of space. This Appendix will present the marginal effect plots for the restricted model and Model 2, along with a short analysis to show these model specifications did not change the findings.

Figure 2 will present the marginal effects for the restricted model, Figure 3 will present the marginal effects for Model 2. Both figures provide the same support for my hypotheses: adding minority officers increases racial disparities, but as the city becomes more Black this effect approaches zero. The only notable difference is that the confidence intervals have become wider, due to a large restriction in data. Crime rate scores lack predictive power and would lead to a sacrifice in data - taken together, that warrants its exclusion from the model.

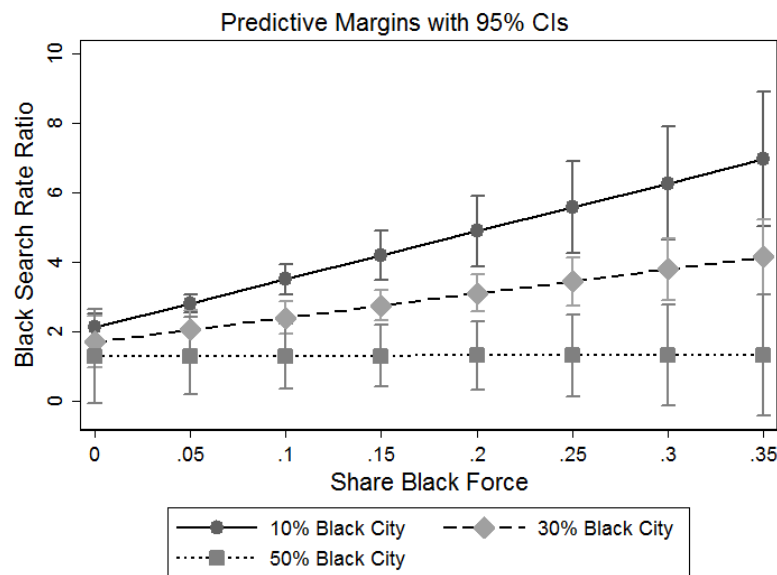


Fig. 2: Marginal Effect for Restricted Model

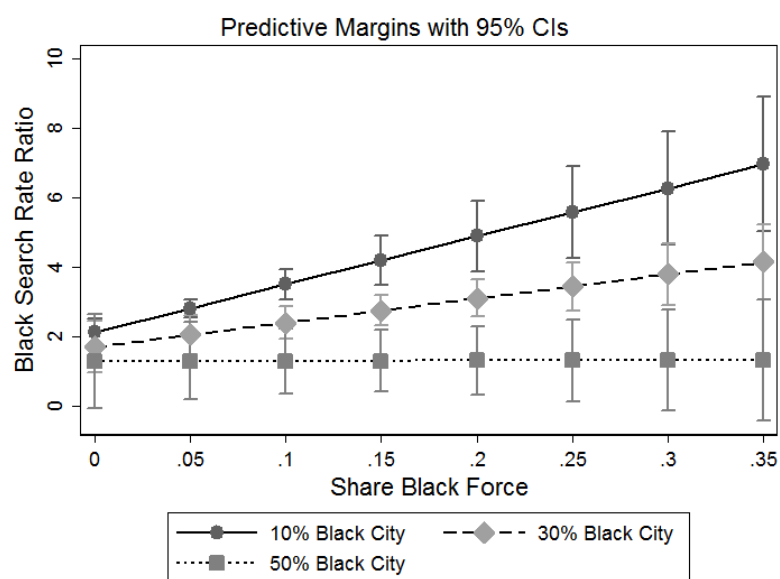


Fig. 3: Marginal Effect for Model 2

APPENDIX B: Curvilinear Effects

It could be argued that the use of a linear model is inappropriate when trying to measure minority threat effects, which are generally curvilinear. This Appendix will demonstrate that the main findings are robust to the inclusion of curvilinear effects, and extreme amount of complexity added to the model is not warranted.

The curvilinear model is as follows, in the interest of space the share of the force that is Black will be abbreviated as BF and share of the city that is Black will be abbreviated as BC:

Black Search Rate Ratio = $BC + BF + BC * BC + BF * BF + BC * BF + BC * BC * BF + BF * BF * BC + BC * BC * BF * BF + \text{Segregation Index} + \text{Percent Obama} + \text{City Size} + \% \text{ in Poverty} + \text{Officer per } 100,000 \text{ citizens} + \text{Crime Rate}$

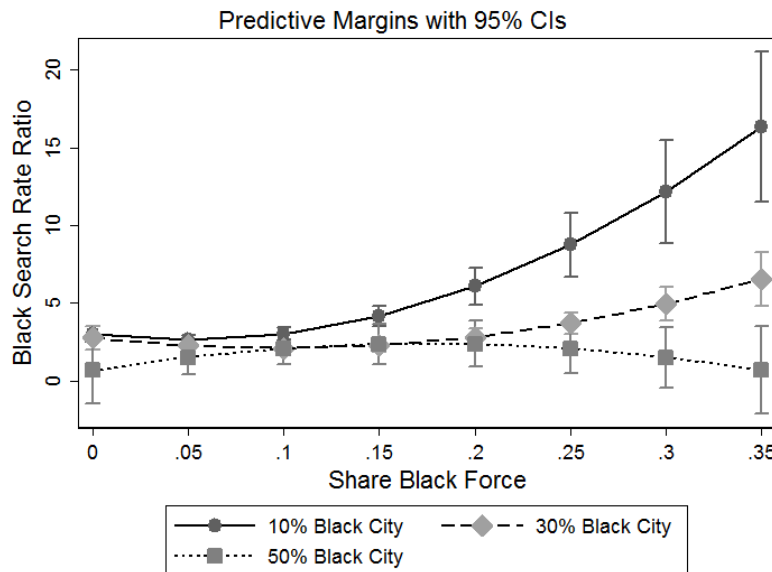


Fig. 4: Marginal Effect for Curvilinear Model

It is apparent this model is extremely complex, and the presence of multiple more than two-way interactions makes the outputs incomprehensible. Figure 4 shows the marginal effects of this model. The end results is roughly the same: the slope is generally positive and decreases as the share of the city that is Black increases. This model was not chosen for the demands it makes on relatively small dataset, and also for comprehensibility.

REFERENCES

- Baumgartner, Frank R., Leah Christiani, Derek A. Epp, Kevin Roach, and Kelsey Shoub. 2017. Racial Disparities in Traffic Stop Outcomes. *Duke Forum for Law and Social Change*, forthcoming.
- Blalock, H. M. J. Toward a Theory of Minority-Group Relations. , 1967.
- Brown, Anna. "Republicans More Likely than Democrats to Have Confidence in Police." Pew Research Center. Pew Research Center, 13 Jan. 2017. Web. 02 May 2017.
- Cayer, N. J., and Lee Sigelman. "Minorities and Women in State and Local Government: 1973-1975." *Public Administration Review*, vol. 40, no. 5, 1980, pp. 443.
- Chiricos, Ted, Michael Hogan, and Marc Gertz. "Racial Composition of Neighborhood and Fear of Crime." *Criminology*, vol. 35, no. 1, 1997, pp. 107-128, doi:10.1111/j.1745-9125.1997.tb00872.x.
- Cornwell, Christopher, and J. E. Kellough. "Women and Minorities in Federal Government Agencies: Examining New Evidence from Panel Data." *Public Administration Review*, vol. 54, no. 3, 1994, pp. 265-270.
- Cox, Stephen M., et al. "Interim report of traffic stops statistics for the state of Connecticut." Rocky Hill, CT: Division of Criminal Justice (2001). Dicker, Todd J. "Tension on the Thin Blue Line: Police Officer Resistance to Community-Oriented Policing." *American Journal of Criminal Justice*, vol. 23, no. 1, 1998, pp. 59-82, doi:10.1007/BF02887284.
- Eith, Christine, and Matthew R. Durose. "Contacts between police and the public, 2008." Washington, DC (2011).
- Epp, Charles R., Steven Maynard-Moody, and Donald P. Haider-Markel. Pulled over: How police stops define race and citizenship. University of Chicago Press, 2014.
- Fagan, Jeffrey, and Garth Davies. "Street Stops and Broken Windows: Terry, Race, and Disorder in New York City." *Fordham Urban Law Journal*, vol. 28, no. 2, 2000, pp. 457.
- Hall, Grace, and Alan, Saltzstein. "equal-Employment in Urban Governments - the Potential Problem of Interminority Competition." *Public Personnel Management*, vol. 4, no. 6, 1975, pp. 386.
- Huff, C. R., and John M. Stahura. "Police Employment and Suburban Crime [Northern and Northeastern States, 1970-72]." *Criminology*, vol. 17, no. 4, 1980, pp. 461-470, doi:10.1111/j.1745-9125.1980.tb01309.x.
- Keiser, Lael R., et al. "Lipstick and Logarithms: Gender, Institutional Context, and Representative Bureaucracy." *American Political Science Review*, vol. 96, no. 3, 2002, pp. 553-564, doi:10.1017/S0003055402000321.
- Kellough, J. E., and E. Elliott. "Demographic and Organizational Influences on racial/ethnic

- and Gender Integration in Federal Agencies." *Social Science Quarterly*, vol. 73, no. Mar 92, 1992, pp. 1-11.
- King, Ryan D., and Darren Wheelock. "Group Threat and Social Control: Race, Perceptions of Minorities and the Desire to Punish." *Social Forces*, vol. 85, no. 3, 2007, pp. 1255-1280, doi:10.1353/sof.2007.0045.
- Kokkonen, Andrej, et al. "Migrationbased Ethnic Diversity and Social Trust: A Multilevel Analysis of how Country, Neighbourhood and Workplace Diversity Affects Social Trust in 22 Countries." *Scandinavian Political Studies*, vol. 37, no. 3, 2014, pp. 263-300, doi:10.1111/1467-9477.12027.
- Langton, M., and L. Durose. "Police behavior during traffic and street stops." (2011).
- Lipsky, Michael. "Street-Level Bureaucracy: Dilemmas of the Individual in Public Services." , 2010.
- Logan, John R. "Separate and unequal: The neighborhood gap for blacks, Hispanics and Asians in Metropolitan America." Project US2010 Report (2011): 1-22.
- Meier, Kenneth J. "Latinos and Representative Bureaucracy Testing the Thompson and Henderson Hypotheses." *Journal of Public Administration Research and Theory: J-PART*, vol. 3, no. 4, 1993, pp. 393-414.
- Meier, Kenneth J., and Jill Nicholson-Crotty. "Gender, Representative Bureaucracy, and Law Enforcement: The Case of Sexual Assault." *Public Administration Review*, vol. 66, no. 6, 2006, pp. 850-860, doi:10.1111/j.1540-6210.2006.00653.x.
- Mosher, F. C. Democracy and the Public Service. , 1968.
- Price, J. R. (2004). Selective and non-selective traffic enforcement in an urban police setting: A tool to analyze whether a police department is engaged in institutional racial profiling (Order No. 1421296). Available from ProQuest Dissertations & Theses Global. (305033188). Retrieved from <http://libproxy.lib.unc.edu/login?url=http://search.proquest.com/docview/305033188?accountid=14244>
- Quillian, Lincoln, and Devah Pager. "Black Neighbors, Higher Crime? the Role of Racial Stereotypes in Evaluations of Neighborhood Crime." *American Journal of Sociology*, vol. 107, no. 3, 2001, pp. 717-767, doi:10.1086/338938.
- Reaves, Brian A., et al. "State and Local Law Enforcement Training Academies, 2013." (2016).
- Roh, Sunghoon, and Matthew Robinson. "A geographic approach to racial profiling: The microanalysis and macroanalysis of racial disparity in traffic stops." *Police Quarterly* 12.2 (2009): 137-169.
- Selden, Sally C. The Promise of Representative Bureaucracy: Diversity and Responsiveness in a Government Agency: Diversity and Responsiveness in a Government Agency. Routledge Ltd, Armonk, 1997;2015;; doi:10.4324/9781315699196.

- Smith, Michael R., and Geoffrey P. Alpert. "Searching for direction: Courts, social science, and the adjudication of racial profiling claims." *Justice Quarterly* 19.4 (2002): 673-703.
- Tomaskovic-Devey, Donald, and Patricia Warren. "explaining and Eliminating Racial Profiling." *Contexts*, vol. 8, no. 2, 2009, pp. 34-39, doi:10.1525/ctx.2009.8.2.34.
- U.S. Census Bureau; American Community Survey, 2009-2015, Detailed Tables; generated by Jane Doe; using Census API
- United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. Law Enforcement Management and Administrative Statistics (LEMAS), 2000. 7 July 2001. Web.
- United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. Law Enforcement Management and Administrative Statistics (LEMAS), 2003. 10 May 2006. Web.
- United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. Law Enforcement Management and Administrative Statistics (LEMAS), 2007. 7 July 2011. Web.
- United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. Law Enforcement Management and Administrative Statistics (LEMAS), 2013. 6 July 2015. Web.
- Warren, P. Y. and Tomaskovic-Devey, D. (2009), Racial profiling and searches: Did the politics of racial profiling change police behavior?*. *Criminology & Public Policy*, 8: 343369. (doi:10.1111/j.1745-9133.2009.00556.x)
- Warren, Patricia, et al. "driving while Black: Bias Processes and Racial Disparity in Police Stops." *Criminology*, vol. 44, no. 3, 2006, pp. 709-738, doi:10.1111/j.1745-9125.2006.00061.x.
- Wilkins, Vicky M., and Brian N. Williams. "Black Or Blue: Racial Profiling and Representative Bureaucracy." *Public Administration Review*, vol. 68, no. 4, 2008, pp. 654-664, doi:10.1111/j.1540-6210.2008.00905.x.
- Wilson, Charles P., Shirley A. Wilson, and Malane Thou. "Perceptions of African American Police Officers on Racial Profiling in Small Agencies." *Journal of Black Studies*, vol. 46, no. 5, 2015, pp. 482-505, doi:10.1177/0021934715583596.