ROUTINE JUSTICE: THE INTERSECTION OF RACE, GENDER AND POLICE DISCRETION IN TRAFFIC STOPS

by

JEREMY S. BRIGGS

B.S., PITTSBURG STATE UNIVERSITY, 2004
M.S., PITTSBURG STATE UNIVERSITY, 2006

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Abstract

Racial profiling by the police on the nation’s streets and highways has attracted much attention over the past two decades from scholars, media figures, politicians and police administrators. Several highly publicized cases propelled the issue into national consciousness in the early and mid 1990s, bringing a new public awareness to an undoubtedly old problem. Despite the proliferation of research and political attention, many questions remain unanswered. Among the most common criticisms facing racial profiling research today is the literature's lack of theoretical development. Grounded in focal concerns theory and the concept of symbolic assailants, the present research draws upon both crime control and discriminatory frameworks of racial disparity in traffic stop outcomes. The findings suggest that, while police concerns of crime and safety diminish the effect of race/ethnicity and gender on stop outcomes, race and gender remain important predictors of police decisions. The implications are discussed.
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Dedication

I dedicate this dissertation to my three wonderful children, Dawson, Aayla and Ryker.
Chapter 1 - INTRODUCTION

Racial profiling by police on the nation’s streets and highways has attracted significant attention over the past two decades from scholars, media figures, politicians and police administrators. Several highly publicized cases propelled the issue into national consciousness in the early and mid 1990s, bringing a new public awareness to an old problem. Yet while racial controversy was not new to policing, profiling has become one of "the most important issues facing American policing" today (Withrow 2006:4).

The Emergence of Racial Profiling

The term "emergence" is a bit of a misnomer here. Race has arguably always been a relevant factor in American criminal justice. That said, racial profiling and driving while black/brown are phrases that carry particular meanings embedded in unique historical, social, cultural and political contexts. Driving while black first became news at a time of unprecedented drug enforcement, moral (and racialized) panic over the so-called crack epidemic, increasing violent crime rates, and rapid growth in criminal justice institutions.

Although the terms 'driving-while-black' and 'racial profiling' themselves are relatively new, profiling practices have been around for decades. Some of the earliest profiles used by law enforcement agencies were hijacker profiles; others included serial killer, drug courier, and terrorist profiles (Harris 2002)—each of these can be collapsed into the more general category of criminal profiling (Harcourt 2004). The fundamental characteristics of these "profiles" are that they all emphasize behavioral, situational, and environmental traits that, when considered in context, are believed to increase the likelihood that some individual or group is involved in
(specific) criminal activity. Racial profiling is different. Racial profiling is unique among other
criminal profiles because the primary indicator of suspicion, race/ethnicity, is non-behavioral
specific (Harcourt 2007). The sociological implications are clear: when used as a decisive
indicator of criminal behavior, racial profiling as both practice and policy is subject to enduring
stereotypes about race and criminality.

Racial profiling, as it is commonly known today, may have first received media attention
in 1985 when the Florida Highway Patrol (FHP) explicitly included race and ethnicity as an
indicator of illicit drug activity in their agency’s drug courier profile (Thistlethwait and
Wooldredge 2010). The FHP drug courier profile was designed to aggressively target drivers
suspected of drug trafficking along major interstate highways en route to and from 'source cities'
(i.e., cities that are known for illicit drug production and trafficking). Because drug trafficking
was believed to be disproportionately committed by racial/ethnic minorities, the FHP justified
racial profiling as rational and efficient police work in an effort to control crime (Withrow 2006).

Many police agencies across the U.S. adopted similar policies, particularly in cities the
along east coast in Maryland, Pennsylvania and New Jersey, and developed their own drug
courier profiles in which race/ethnicity was included as a major indicator of suspicion (Harris
2007). Soon, anecdotal accounts of discrimination emerged as minority drivers alleged they were
the victims of unfair treatment by the police on the basis of race (Harris 1997). As news of these
practices spread, the phenomenon was labeled "driving-while-black." The term has since become
embedded in the American lexicon and is now a common phrase, almost cliché.

Public backlash and political reaction to accusations of racial profiling quickly shifted the
national discussion. Few police agencies today prescribe the overt use of racial profiling to fight
crime—even drug crime—and many states have passed anti-racial profiling laws prohibiting the
practice (Gabbidon, Marzette and Peterson 2007). Three Presidents of the United States have publicly spoken out against racial profiling, including Presidents George W. Bush, Bill Clinton and Barack Obama. Despite the apparent consensus on the moral harms of racial profiling, the public still believes the practice is relatively common and it continues to be perceived as a major problem in American law enforcement (Withrow 2006).

The analysis of racial profiling should be viewed as an extension of the much more established body of literature on police discretion and the debate between crime control and discrimination in officer decision making. While racial profiling emerged as a special problem of the war on drugs in the 1980s and 90s, concerns about racism in police practices have been studied and written about for much longer. The insights of previous research on police discretion and officer decision making should inform today's racial profiling analysis, especially as it relates to police decision making that occurs after a traffic stop is already made. Much of the extant racial profiling literature, however, has not taken full advantage of this theoretical and empirical work (Engel and Calnon 2004; Withrow 2006).

One of the difficulties of studying racial profiling is that there is no universal consensus on its definition in the literature. Some argue that the term should be used only in reference to the phenomenon of racial and ethnic minorities being stopped by police in disproportionate numbers compared to whites. Others argue the term should include differential treatment of racial and ethnic minorities at any point in any police-citizen encounter, including enforcement actions after a stop is initiated. Others dismiss the term altogether in favor of terms such as racially-biased policing (which may also be more vague). For this dissertation, I use a somewhat broader variation on the first example to include the extralegal effect of race and ethnicity (and
intersections of race and gender) on police decisions to initiate and resolve traffic stops, including decisions to stop, warn, cite, search and arrest.

The Traffic Stop

Despite apparent similarities, there has been a disconnect between research on police discretion/decision making, dating as far back as the 1940s and 1950s, and the more recent body work on racial profiling in traffic stops (Withrow 2006). One reason for this disjuncture is the unique nature of the traffic stop. Early research on police decision making was primarily concerned with police behavior after an encounter had already been initiated. In other words, this work was concerned with what officers did after they made a police stop or otherwise engaged the public. In contrast, most of the early research on racial profiling in the late 1990s was concerned with officer decisions before the citizen encounter even took place—that is, in the decision to make the traffic stop. Racial profiling began as an analysis of the role race played prior to as opposed to after the stop.

This is an important distinction. For one, the precise influence of a driver's skin color on officer decisions to initiate a traffic stop is both difficult to conceptualize and to empirically measure. For many, particularly in the courts, the motivation of the officer is the key operative in questions of racial profiling: did the officer have racist motivations for making the stop? An officer's internal motivation, however, is an elusive thing (Banks 2003). Except under the rare circumstance where an officer confesses, "I stopped this driver because of her race," which is highly doubtful in a political environment obsessed with colorblindness (Brewer and Heitzeg 2008), researchers, law makers, administrators, and even the courts cannot easily ascertain the officer's intent (Harris 2002). Likewise, neither can officer intent be easily gleaned from an official police report. In most cases, expressed or implied motivation is likely assumed to be the
legal cause for making the stop (e.g., speeding)—which, in the case of traffic stops, officers can easily articulate. Practical and methodological issues aside, the courts have made identifying officer motivation problematic in the law as well. For example, in Whren v. United States (1996), the U.S. Supreme Court set a precedent that ostensibly eliminated officer motivation—racist or otherwise—as a relevant factor in court decisions regarding the constitutionality of a traffic stop under the 4th Amendment (more on this will be discussed in Chapter 2).

**Rethinking Traffic Stops**

Some of the more recent empirical work on traffic stops has analyzed the effect of legal and extralegal factors on discrete traffic stop outcomes (Engel and Calnon 2004; Lundman 2004). Such outcomes include decisions to issue citations, conduct searches, use force, and make arrests. One limitation in such work is that traffic stop outcomes are not necessarily discrete; multiple outcomes are possible in any given stop. For example, a driver stopped by the police may receive a traffic citation, but they could also be searched and arrested during the same stop. Another driver may be searched, but not arrested, another ticketed and handcuffed, etc. Rethinking traffic stop outcomes as a complex set of discrete and non-discrete possibilities should lead to more appropriate measurements that more closely resemble stops as they actually occur 'on the ground.' Analyzing stops outcomes in such a way should also facilitate more valid estimates of the important factors that affect police decisions. Previous empirical work has not yet fully explored the overlapping, non-discrete nature of traffic stop outcomes and the role that race/ethnicity plays in predicting them.

Racial profiling research has also been criticized for being largely atheoretical (Engel 2002; Tillyer and Hartley 2010). There have been few attempts to ground analysis of racial profiling in conceptual frameworks that offer deeper understanding of racial differences or how
other, legally relevant factors also play a part in these outcomes. I use a conceptual framework
drawing on focal concerns theory (Steffensmeier, Ulmer and Kramer 1998) and the notion of
symbolic assailants (Skolnick 1966) to construct hypotheses and guide my analysis. Focal
concerns theory emphasizes the importance of crime control and safety as embodied in the
concepts of blameworthiness and dangerousness. Symbolic assailants emphasize the racialization
of police perceptions of violence and danger. Together, these two theories offer a compelling
explanatory framework for predicting officer decision making.

In addition to an explicit theoretical framework and a rethinking of stop outcomes, I also
explore the intersectionality of race and gender. Racial profiling has been understood in the
literature primarily as biased policing against minority drivers and citizens. Other driver
characteristics are often included in the analyses, but characteristics such as race, gender, class
and age are typically framed as distinct variables, wholly separate from one another and
independent in their effects on police decisions to enforce the law. Intersectionality theory
understands race, class and gender not as distinct things, but as interlocking analytical categories
that simultaneously shape social relations. To explore the intersectional nature of race and gender
in a racial profiling context, I combine driver's race and sex for six different race-sex interaction
terms. In doing so, I first run analysis on traffic stops with race and sex as separate variables,
then run a second identical analysis again with these race and sex combined.

In sum, this dissertation attempts to make the following contributions to the literature: a)
provide an explicit theoretical framework grounded in focal concerns theory and the concept of
symbolic assailants; b) account for the complexity of non-discrete, multiple and overlapping stop
outcomes; c) explore the pretext hypothesis by analyzing the role of race and ethnicity on
discretionary traffic stops; and d) further explore the intersectionality of race and gender in traffic stops and traffic stop outcomes.
Chapter 2 - Racial Profiling and the Law

Racial profiling and the law are intimately connected to one another. This chapter briefly reviews that connection. I focus on two basic questions. First, can race (legally) factor into police decision making? More specifically, can citizen race and ethnicity be used by the police to articulate reasonable suspicion or probable cause? Second, if police use race in an illegal/unconstitutional way, what challenges or remedies are available in the law to the victims of this unconstitutional racial targeting? I frame these questions in terms of race and reasonable suspicion/probable cause as interpreted in the 4th Amendment to the U.S. Constitution, and race and equal protection of the law as interpreted in the 14th Amendment. A number key court cases over the last several decades have set important precedents related to these questions. The cases I outline below are by no means not an exhaustive list of jurisprudence on the complex questions of race and policing, but they are cases which have served as significant landmarks for future court decisions nevertheless.

It is important to recognize here that the legal system has undergone a major paradigmatic shift over the last half century with regards to identity politics and race. In response to civil rights challenges in the 1950s and 1960s and changing public attitudes towards race and ethnicity more generally, the language of the law in various forms has shifted from blatant racism to (more or less) racial neutrality today. This colorblind shift has brought with it new questions and unique problems for the analysis of race in criminal justice.

The central dilemma of the race question in the contemporary legal system is making sense of persistent, and in some cases growing, racial inequality—from housing and employment to sentencing and incarceration—despite formal neutrality of the law (Balbus 1977). In response to this dilemma, some contemporary scholars have been quick to make a distinction between
discrimination and disparity (Smith and Alpert 2002). Disparity of outcomes, so the argument goes, does not in-and-of itself prove discrimination. For example, if black drivers are stopped more frequently than white drivers, is that disparity due to discriminatory policing, differential driving habits between white drivers and black drivers, or something else? Disparity alone does not give us a conclusive answer. To answer the question we need to rule out alternative explanations. This distinction between disparity and discrimination has become a critical point of debate in the ongoing racial profiling discussion. In Chapter 3 I will look at how the question has been addressed in empirical and theoretical research, but first I examine how the dilemma has been framed in the law.

**Race and Reasonable Suspicion/Probable Cause**

It seems to follow from a colorblind logic that race should play no role in law enforcement. The explicit use of race is explicitly prohibited in a colorblind system. But is this really the case? Has the overt use of race been completely eliminated from criminal law and procedure, or are there exceptions to the colorblind maxim that allow race to openly factor in law enforcement decisions still today? For example, can officers ever use extralegal factors that, among other things, include race to articulate reasonable suspicion or probable cause to stop, cite, search, arrest, or seize? In short, the courts have consistently ruled that race can, legally, be considered by the police; the catch is that race cannot be the only factor influencing these decisions. In other words, if race is one factor among many used by the police to justify a stop or search, then the Supreme Court has said its use is acceptable.

The 4th Amendment of the U.S. Constitution provides one of the primary safeguards against what the original framers believed to be an overly intrusive system of government: the protection against unreasonable searches and seizures. The 4th Amendment reads:
The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

But how, or where, does the practice of racial profiling on roads and highways fit in the 4th Amendment? Modern day traffic enforcement was obviously not on the minds of the framers when they wrote the amendments. As such, much of the operative language in the 4th Amendment is ambiguous towards traffic stops. For example, are vehicles included among "persons, houses, papers, and effects" and therefore subject to the 4th Amendment's protections? Are warrants necessary in a vehicle search? What is an unreasonable search and seizure in a traffic stop compared to other forms of police-public contact (e.g., a pedestrian stop or serving a warrant at a residence)? What constitutes probable cause? Can race count towards reasonable suspicion or probable cause? Jurisprudence on some of these questions dates back more than one hundred years (Samaha 2005).

The Supreme Court established in the 1920s what is now commonly referred to as the vehicle exception to the 4th Amendment (U.S. v. Carroll, 1925). According to the facts of the case, George Carroll and John Kiro were arrested and later convicted in U.S. District Court for transporting 68 quarts of whisky/gin in an automobile during the time of national alcohol prohibition in U.S. history. Carroll challenged the arrest on the grounds that the officers searched his vehicle without a search warrant. The Constitutional question at stake was whether police could search an automobile without a search warrant but with probable cause that illegal contraband was contained therein. In a 7-2 decision, the Supreme Court agreed that a warrantless search of a vehicle does not violate the 4th Amendment if the search is based upon probable cause. In their reasoning, the Court recognized a "necessary difference" between immoveable structures (e.g., houses, office buildings, businesses) and moveable vehicles, citing the practical
realities of policing automobiles—such as the likelihood that evidence will be put out of officers' reach should they have to leave to get a warrant signed by a judge.

While on its face the *Carroll* decision was about the practical constraints of policing mobile vehicles, the case did not exist in a social vacuum. The time of national alcohol prohibition was a significant socio-political context that no doubt shaped the outcome of the case and its implications for the future. The decision marked one of the first steps the Court took to broadening police powers significantly in the fight against illicit chemical substances—a prelude to the war on drugs. In this sense, the *Carroll* decision foreshadowed the Court's interpretation of constitutional protections in the context of an expansive drug war to follow some fifty years later.

Though *Carroll v. United States* expanded police powers to search drivers in traffic stops, the more direct questions of race, profiles and probable cause and reasonable suspicion were not directly addressed until much later in history. In a criminal profile, such as drug courier profiles of the 1980s, there are many indicators included that, when considered as a whole by a trained and experienced officer, are supposed to signal the presence of criminal behavior (Harcourt 2007). But what kinds of indicators can be included lawfully? Can extralegal factors like a person's sex, age, race, or socioeconomic status be considered? When do common, extralegal and otherwise non-suspicious characteristics amount to reasonable suspicion or probable cause and in turn legally justify a stop, search or arrest? The U.S. Supreme Court addressed some of these questions in *U.S. v. Sokolow* (1989) when the Court considered the constitutionality of a search and seizure in which an officer relied on a drug courier profile consisting of a set of extralegal factors.
Andrew Sokolow was convicted in a U.S. District Court for possession of cocaine with the intent to distribute. DEA agents became suspicious of Sokolow in the Honolulu airport when he matched a set of indicators consistent with their drug courier profile: paying more than $2000 in cash for two roundtrip tickets to Miami, unchecked luggage, nervous demeanor, gold jewelry, and traveling under an alias. Although race was not explicitly mentioned by the law enforcement agents as an important indicator in their profile, the case's significance lies in the precedent of the Court allowing a law enforcement agency's use of a drug courier profile to selectively target suspects.

Like alcohol prohibition in *Carroll v. U.S.*, the context of a national drug panic proved to be a significant social and political backdrop to the Sokolow case. After an appeal, the U.S. Supreme Court granted certiorari "because of its serious implications for the enforcement of federal narcotics laws." The Court upheld the constitutionality of reasonable suspicion based on the series of extralegal indicators identified by the DEA. In doing so, the Court implicitly condoned the use of drug courier profiles—and while not openly mentioned in Sokolow, race was explicitly included in many drug courier profiles of the time (Covington 2001; Harris 2002).

Despite upholding the use of extralegal factors to form probable cause in Sokolow, the Court recognized the potentially serious implications of these profiles as it relates to discrimination, even if it remained fairly ambiguous toward the matter. Early defenders of drug courier profiles often argued that what may seem unsuspicious to the untrained eye can amount to reasonable suspicion when observed by an experienced and trained law enforcement officer (MacDonald 2003). In other words, some argue that profiles are just good police work. Opponents of profiles, on the other hand, argue that the indicators cited by law enforcement are vague, contradictory, susceptible to racial and ethnic stereotypes, and encourage the abuse of
officer discretion. In a dissenting opinion, for example, Justices Marshall and Brennan said that it is "highly significant that the DEA agents stopped Sokolow because he matched one of the DEA's 'profiles' of a paradigmatic drug courier" and they warned against the "mechanistic application of a formula" that is inherent in the use of these types of profiles.

A U.S. Court of Appeals took on a more direct question of race and reasonable suspicion in *U.S. v. Weaver* (1992). Arthur Weaver was convicted of possession of cocaine with intent to distribute. An officer became suspicious of Weaver in the Kansas City International Airport "because he was a 'roughly dressed' young black male who was carrying two bags and walking rapidly… down the concourse toward a door leading to a taxi stand." The officer confronted Weaver in the airport and, when Weaver attempted to leave, the officer followed him to a taxi. Weaver was arrested when he refused to let the officer seize his bags. The central constitutional question was whether the officer had valid reasonable suspicion to pursue, stop, and ultimately conduct the warrantless search and seizure. More specifically, could the officer articulate reasonable suspicion based on the fact that Weaver was a "roughly dressed" black man arriving in Kansas City from Los Angeles, a known source city for illegal drugs? The court ruled in favor of the arresting officer, asserting that the totality of Weaver's race, "rough" clothing, and "rapid" movement from the airplane to the taxi stand justifiably led the arresting officer to believe he was a member of an "all-black Los Angeles street gang" bringing illegal narcotics into the Kansas City area.

The precedent set in *Weaver* was significant because race was not a coincidental or implicit factor in the case; Weaver's race was explicitly articulated as a deciding factor in the officer's decision to pursue, stop and search. In a dissenting opinion, judge CJ Arnold raised concerns about the implications of the court's decision. He argued that not only was "roughly
dressed" a vague and subjective indicator, but that there was no empirical evidence offered to the
court by the State that showed that blacks were more likely to be drug users or couriers (the very
basic assumption underlying most drug courier profiles of the time). Judge Arnold argued that to
use the suspect's race as a decisive factor for reasonable suspicion "reinforces the kind of
stereotyping that lies behind drug-courier profiles"—that is, the widespread belief that minorities,
blacks in particular, are disproportionately involved in illicit drug use and distribution.

Interestingly, the court's majority admitted that "some or all of the facts relied upon by
Agent Hicks [the arresting officer] could… when viewed by those having no experience in
surveilling and apprehending drug couriers, be viewed as innocent, nonsuspicion-raising details." 
Unfortunately there is no way to know how many other similarly situated passengers/travelers
Agent Hicks or other officers in the department stopped and searched in similar circumstances.
Nor can we know the race and demeanor of said suspects, innocent or otherwise, which could
bolster or refute the officer's claims. We, like the court, are left to take the officer's word for it.

Each of these cases set important precedents that ultimately helped shape the legal and
judicial backdrop to racial profiling today. Carroll loosened the constitutional protections
guaranteed by the 4th Amendment in vehicles and both Weaver and Sokolow blurred the
boundaries between legal and extralegal factors under the 4th Amendment. The following case
not only further expanded police powers (especially in traffic stops), but proved to be a major
roadblock in terms of challenging the reasonableness and constitutionality of a search and
seizure based on racial bias under the 4th Amendment (Alexander 2010).

Race and Pretext

Traffic stops for minor, routine infractions may lead to the discovery of more serious
crimes, including things like illegal weapons, drugs, paraphernalia, or outstanding arrest
warrants. The police sometimes use stops for the deliberate purpose of discovery (Harris 2002). A particularly contentious form of this practice is the use of routine traffic infractions as a pretext to stop and investigate for other crime—better known as fishing expeditions. For example, in a pretextual stop an officer will stop a driver for a minor traffic violation (e.g., a broken taillight) because they suspect the occupant is carrying illegal narcotics. In other words, the officer's intention for making the stop does not match the legal justification for the stop. Described by some as a constitutional loophole and a tool of discriminatory policing (see Harris 2002), the Supreme Court upheld the constitutionality of pretextual stops in Whren v. United States (1996).

In 1993, Michael A. Whren and James L. Brown became suspicious to plainclothes vice officers patrolling in an unmarked car. The officers witnessed Whren and Brown stopped at an intersection in their truck for an "unusually long time" (more than 20 seconds according to the officers). After the officers did a quick U-turn coming back to the truck, Whren and Brown made a right turn (without signaling) and sped off at what the officers described as an "unreasonable" speed. The officers soon stopped Whren and Brown when they came to an intersection with a red light. After the officers had Whren and Brown stopped, one of the officers approached the vehicle and saw what he believed to be two plastic bags of crack cocaine in Whren's hands. The officers then searched the vehicle and arrested Whren and Brown upon finding illicit drugs.

Whren and Brown appealed their conviction on the basis that the officers did not have probable cause or reasonable suspicion to stop and search their vehicle for illicit drugs. They argued that the officers used minor traffic violations (i.e., right turn without signaling and driving off at an unreasonable speed) as a pretext to investigate for drugs. Whren and Brown further argued no reasonable officer, under the same conditions, would have conducted an
investigatory stop for illicit drugs based on minor traffic infractions. Both the Court of Appeals and the U.S. Supreme Court rejected Whren and Brown's argument.

In getting to heart of the matter—the allegation that the officers were discriminating against Whren and Brown because of what they looked like, not because they broke any (drug) law known to the officers at the time of the stop—the Supreme Court argued that the "subjective intentions [of officers] play no role in ordinary, probable cause 4th Amendment analysis." Whren and Brown's argument rested on the notion that because no reasonable officers would have made the initial stop without probable cause to believe they were in possession of illicit drugs, the stop violated the 4th Amendment. The Court rejected Whren's 'would have' 4th Amendment test in favor of a 'could have' test. The Court reasoned that if an officer could have made the stop based on probable cause that a law had been violated—however minor that violation may be, traffic infractions included—then the stop is valid and does not violate the 4th Amendment. Furthermore, any subsequent search and seizure made in such a stop is not invalidated just because the stop was based on a pretext—assuming no other constitutional violations occurred in carrying out that search and seizure. Although the practice of using a technical violation of the law as a pretext for a stop was not new to policing before Whren (see Tiffany et. al 1967 and Wilson v. Township 1993), any constitutional ambiguity about the practice was settled after the landmark decision.

The broader implications of Whren are two-pronged. First, the Court rejected Whren's claims of discrimination on the basis that the subjective intentions of officers are not applicable to 4th Amendment scrutiny. As long as an officer has a bona fide legal reason to justify the stop, it does not matter if the officer did so with ulterior motives, racist or otherwise—at least not under the 4th Amendment. In the majority opinion, the Court said that the "constitutional basis
for objecting to intentionally discriminatory application of laws is the Equal Protection Clause, not the 4th Amendment." The equal protection clause is contained within the 14th Amendment of the U.S. Constitution. The Court's reasoning effectively shut down racial profiling discrimination challenges under the 4th Amendment (Withrow 2006).

Second, the expansive nature of traffic codes regulating driving behaviors make the 'could have' test of Whren particularly heavy-handed from a civil liberties point of view. Given the complicated and extensive nature of traffic laws, any simple drive around the block will likely result in the violation of some technical traffic law(s). Traffic codes therefore represent a unique category of law because violations are both ubiquitous and also easily observed by officers (should they choose to look for it). When routine traffic infractions constitute probable cause to make an investigative stop, officers have virtually unlimited authority to stop anyone, anytime, for any reason at all. In a 1967 interview, one officer put it this way:

You can always get a guy legitimately on a traffic violation if you tail him for a while, and then a search can be made. In the event we see a suspicious automobile… we will usually follow the vehicle until the driver makes a technical violation of a traffic law. Then we have means of making a legitimate search. (Tiffany et al. 1967: 131)

The ubiquity of traffic violations combined with the constitutionality of pretextual stops makes traffic enforcement a compelling tool in crime control efforts but also a potentially divisive tool of discrimination (Cole 1999).

Race and Equal Protection of the Law

In rejecting discrimination challenges under the 4th Amendment in Whren, the Supreme Court essentially narrowed all such avenues to the 14th Amendment's equal protection clause (Alexander 2010). The due process and equal protection clause of the 14th Amendment reads:

[...] nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.
The pivotal questions for the 14th Amendment and racial profiling are: (a) does equal protection preclude any racial bias in police decisions to enforce the law; and (b) what are the standards for proving unconstitutional racial bias?

I begin the Supreme Court's jurisprudence on these questions with *United States v. Armstrong* (1996), a case alleging selective, discriminatory prosecution. The Supreme Court made it clear that the threshold of proof needed to prove discrimination under the 14th Amendment was all but impossible to satisfy—and this may prove especially true for racial profiling cases (Withrow and Dailey 2012). Christopher Lee Armstrong alleged that he was subject to selective and racially biased prosecution after being convicted for violating federal crack cocaine laws. To prove this challenge under the 14th Amendment, the Supreme Court stated that the appropriate threshold is a "credible showing of differential treatment of similarly situated persons." In the majority opinion, the Supreme Court ruled that Armstrong "failed to identify individuals who were not black and could have been prosecuted for the offenses for which [Armstrong] was charged, but were not so prosecuted." In other words, in order to successfully prove he was subject to selective and racial discrimination in violation of the 14th Amendment's equal protection of the law, Armstrong must prove that selective racial discrimination already existed before his case. Ironically, the Supreme Court rejected Armstrong's attorney's motions for discovery of government records—the very things Armstrong needed to demonstrate patterns of prior discrimination (Alexander 2010).

At least two cases since *Armstrong* have shed light on how a racial profiling challenge to the 14th Amendment would hold up in court. Both of these cases reinforce the onerous threshold explicated in *Armstrong*; not only must a plaintiff prove a discriminatory effect in the administration of justice (i.e., that significant racial disparity exists in pertinent justice
outcomes), but they must also prove discriminatory intent (i.e., that officers, prosecutors, judges, were knowingly and deliberately discriminatory on the basis of race).

In *Chavez v. Illinois State Police* (2001), a case alleging racial profiling, the plaintiffs failed to meet even the first level of proof: discriminatory effect. Plaintiffs offered as evidence information from two Illinois State Police databases; one contained information on citations and warnings and the other came from field notes on stops resulting in seizures, arrests, officer injuries, and damaged police property. The court found both databases insufficient to prove discriminatory effect, arguing that the necessary information (e.g., race/ethnicity of drivers and a reliable benchmark) could not be ascertained from the reports.

In *United States v. Dugue-Nava* (2004), plaintiff's successfully proved discriminatory effect in the selective targeting of Hispanic motorists, but failed to meet the second level of proof: discriminatory intent. Dugue-Nava, who is Hispanic, was convicted for the possession of illegal narcotics after being stopped for a traffic violation and subsequently searched by an Illinois State Police officer. Dugue-Nava and his attorneys used a statewide racial profiling study to "compare the deputy's stops by race against stops made by highway patrol officers working on the same interstate highway" (Withrow and Dailey 2012: 131). The study revealed that the deputy who stopped Dugue-Nava stopped Hispanic drivers at a significantly higher rate than similarly situated deputies. But while the court agreed the study proved clear discriminatory effect, it could not prove discriminatory intent. The court ruled that while the study measured racial and ethnic disparity in police stops, it did not measure the officer's perceptions and motivations for making the stops. Intent, therefore, could only be inferred from patterns of disparity—not proven. It is difficult to imagine what, if any, level of data—beyond a confession—could successfully prove an individual officer's internal motivations were based on
race and race alone. It seems, therefore, that racial profiling challenges based on the 14th Amendment's equal protection clause are, like those based on the 4th Amendment's protection against unreasonable searches and seizures, unlikely to be successful.

**Summary**

Reinforcing the rugged individualism (Shelden 2010) of colorblindness, the jurisprudence I outlined above consistently reproduced the prevailing notion that discrimination is about individual intent, not social inequity/disparity—however systematic and apparent it may be. To prove discrimination under the Constitution, the burden is on the victim to prove the police officer, prosecutor or judge blatantly intended to and in fact did treat the citizen differently because of their race—and because of their race alone. One of the problems with the position that the courts have taken is that it is overly individualistic and obscures the reality of institutional racism—racism that has worked its way into the everyday language and functions of the system in subtle and seemingly neutral ways. The requirement that discriminatory intent can be proven only when race is the sole factor motivating police stops is a virtually impossible standard to meet. Race is rarely the only factor affecting police decisions—and when it is, cases such as *Whren* provide an easy "out" by allowing officers to point to any minor, technical violation of the law as a race-neutral justification for the stop. The options for legitimate challenges against the criminal justice system have been systematically narrowed over time by the courts. This has reduced the likelihood that challenges will be brought before the courts in the first place, which in turn strengthens the perception that the system is indeed colorblind and fair (Alexander 2010).

In terms of racial profiling and police decisions to initiate and enforce traffic stops, the first question I asked was whether race and ethnicity can be factored into the police decision
making process. Weaver and Sokolow make it clear that officers can use race to form reasonable suspicion, even as part of a profile, so long as race is not the sole reason for their decision to stop, cite, search, or arrest. Furthermore, as long as a legal reason for the stop can be articulated by the police, the 4th Amendment is not violated by even discriminatory intent of the officer (Whren v. United States, 1996).

Principles of equal protection under the law, embodied in the 14th Amendment, have far less meaning when there are few legitimate and successful avenues to challenge unconstitutional practices. There have been few successful challenges to racial discrimination under the equal protection clause of the 14th Amendment (Alexander 2010) and the courts have repeatedly upheld a near impossible standard of proof—the burden to prove both discriminatory effect and the discriminatory intent.

The rule of law and colorblind ideals suggest that extralegal categories such as race and ethnicity, sex and gender, sexuality, class, religion should not determine criminal justice outcomes. The colorblind ideal, of course, has never been realized in practice in the U.S. From slave patrols in the 18th century to Jim Crow segregation, policing has always been shaped by social divisions along the lines of race and ethnicity (Stokes 2007). There have been glaringly similar racial and ethnic divisions reproduced in the current era of justice—an era defined by mass incarceration and a draconian war on drugs—as in the previous eras of Jim Crow apartheid and slavery (Shelden 2007; Alexander 2010; Waquant 2001). The now ubiquitous war on drugs, started by Nixon in the early 1970s and revamped and reenergized under Reagan in the 1980s, brought with it attitudes and policies that have led to increasing racial and ethnic inequality in the criminal justice system (Western 2006). These trends have been reinforced by the courts on multiple fronts. The jurisprudence of the war on drugs era has arguably weakened and perhaps
even reversed many civil rights victories of the last 50 years (Alexander 2010). In some ways, the war on drugs has brought with it the exact opposite of civil rights: the expansion, not limitation, of State power to discriminate against minorities.

In *Whren v. United States* the Supreme Court insulated the subjective intentions of police from any 4th Amendment scrutiny while conducting searches and seizures. In *Armstrong v. United States* (1996), the Supreme Court protected the already powerful office of prosecution from special scrutiny under the 14th Amendment. Prosecutors are often regarded as the most powerful criminal justice actors, possessing widely unchecked discretionary powers to pursue, initiate, or divert criminal cases—and they do so with the weight of State resources at their disposal. The court applied the strict standards of proof following *Armstrong* and similar cases to two cases alleging racial profiling against the police in *Chavez* (2001) and *Dugue-Nava* (2004). The courts required plaintiffs to prove knowing and deliberate discriminatory intent by racially biased officers—a standard that was not fully met in either of the two cases and is extremely unlikely to be met in future cases.
Chapter 3 - Racial Profiling and Police Discretion

Research on racial profiling fits within a larger tradition of research on the scope of police discretion, selective enforcement and work attempting to isolate the various legal and extralegal factors that influence police decision making. Legal factors are those characteristics that are legally relevant to the suspected violation at hand. Typical legal factors include police-observed offenses and discovery of illicit contraband, strength of the evidence, seriousness of the offense, and age of the suspected offender (for status offenses), the presence of victims and the willingness of victims to press charges against the suspect. In contrast, extralegal factors are characteristics not directly related to a legal violation, but may affect officer decisions to enforce the law regardless. Typical extralegal factors include citizen and officer demographics—such as race, class, gender, and age—community context, citizen appearance and demeanor, and the presence of victims or innocent bystanders.

The analysis and distinction between legal and extralegal factors in police decision making is crucial because it serves as a tangible way of teasing out the debate between crime control and discrimination. Most reasonable analyses would not expect to see only legal factors influence police decisions in a just system, but knowing more precisely influence of both legal and extralegal factors can give us insight into the role discrimination may be playing in the enforcement of law.

Choices and the Power to Choose

The administration of justice is filled with choices. Walker and Katz (2011) define discretion as “an official action” by an agent of the criminal justice system “based on that individual’s judgment about the best course of action” (p. 360). From police decisions to stop
drivers on roads and highways to sentencing decisions by judges in the courtroom, discretion is a reality of the criminal justice system.

**The Scope of Police Discretion**

Officer discretion has long been considered an important issue in modern policing. Mastrofski (2004) defines police discretion as "the leeway that officers enjoy in selecting from more than once choice in carrying out their work" (p. 101). Typical discretionary actions in general law enforcement may include patrolling one area more heavily than another, strict enforcement of certain offenses over others (i.e., "crackdowns"), pursuing a vehicle the officer believes is suspicious, stopping and questioning juveniles on the street, administering a verbal warning in lieu of a ticket, writing an official crime report, searching a stopped driver for illicit drugs, making an arrest, using physical force, and so on. Some of the most salient structural and situational features of general law enforcement that ensure high levels of "leeway" in police decisions include unique police authority, the low visibility of patrol work, decentralized police organization, situational exigencies (Bittner 1970), and the structure of the law.

Police have considerable authority in their everyday work. Unlike many other professional occupations, discretion in general law enforcement agencies (i.e., local, county, and state patrol agencies) increases as one moves down the organizational hierarchy (Seron et al. 2004). Described by one set of scholars as a "witch's brew of authority and autonomy," policing is organized in a such a way that high levels of officer discretion at the bottom is inevitable (Skogan and Meares 2004:68). Working alone or in pairs, patrol officers are rarely directly observed by police supervisors or the community (though the age of the internet and small, portable video/audio devices has perhaps affected both). The potential for abuse—including racial profiling—to go unnoticed or unreported is greater in low-visibility environments.
Furthermore, police organization is highly decentralized; officers are expected to exercise their professional judgment in a wide array of citizen encounters that may not fit neatly within standard operating procedures. Due partially to the low-visibility of patrol work, officers are also expected, for the most part, to hold themselves accountable of any wrong doing. As such, the organization of general law enforcement systematically puts low-level patrol officers in the position of making critical decisions in routine, day-to-day work.

The implications of high levels of discretion in routine patrol work have attracted much concern in the literature (Carbado 2002; Kelly 1994; Mastrofsky 2004; Seron, Pereira, Kovath 2004; Sherman 1984; Skolnick and McCoy 1981). Much of this literature has focused on abuses of officer authority in the unfair or harsh treatment of particular populations (e.g., juveniles, the poor, and racial/ethnic minorities). As gatekeepers of the criminal justice system, police have unique authority to bring some people in and keep others out. This is problematic, constitutionally and morally, when certain groups of citizens are submitted to differential police treatment because of their group status and not simply for their criminal offending. Typical notions of fairness hinge upon the notion that police decision making follows legalistic, colorblind standards. The rule of law, particularly the legal doctrine of due process and equal protection of the law, embodies these ideals of fairness and justice—rational legal standards and procedures, not the prejudices of powerful agents or institutionalized discrimination should determine legal outcomes. We know, however, that legal factors alone do not always explain the realities of police behavior in practice. Crime control efforts are often at odds with constitutional guarantees of fair and equitable treatment (Harcourt 2004; Samaha 2005; Wesley 1953). Despite the dual mandate of the police to both fight crime and uphold constitutional liberties, the pursuit
of crime control often comes at the expense of due process because of the inherent conflict between the two models of justice.

The Myth of Full Enforcement

The full enforcement myth is the popular belief that the police enforce all crimes to the full extent of the law, all of the time. Although the full enforcement myth pervades mainstream assumptions about the police—likely due, in part, to the active impression management of police agencies themselves as well as exaggerated images of the hyper-masculine, crime-fighting street cop in popular culture—both practical and socio-political factors constrain full enforcement.

Fifty years ago Herman Goldstein (1963) argued that a "policy of 'full enforcement' implies that the police are required to enforce all criminal statutes and city ordinances at all times against all offenders" (p. 140). For full enforcement to exist, accordingly, officers must be "without authority to ignore violations, to warn offenders when violations have in fact occurred, or to do anything short of arresting the offender and placing a charge against him for the specific crime committed" (Goldstein 1963:140). The broad scope of discretion, however, coupled with the practical realities of routine patrol work make the notion of full enforcement problematic.

Practically speaking, the police do not directly observe or become aware of every crime, much less have the time and resources to enforce each of these crimes. Choices about what, where, how and when to enforce the law must be made, by agencies and individual officers and supervisors alike. Moreover, even when police become aware of violations, they do not always act on them with formal enforcement action (e.g., an arrest). Donald Black's (1976) classic research found that the police made arrests in just half of those cases where they had legal cause to do so. In contrast to full enforcement, the tendency is under enforcement, even for more
serious crimes and those cases where a "willing complainant is present, asking the police to make an arrest" (Mastrofski 2004:110).

**Factors of Selective Enforcement**

Individual choices of officers do not occur in a social, historical, or political vacuum. The problem of differential treatment of citizens by race, class and gender spans structural, organizational, and individual levels of policing (Riksheim and Chermak 1993). Institutional and political forces can constrain the choices of individual officers particularly via policy or law (Mastrofski 2004). The obvious racial profiling example is the inclusion of race in drug courier profiles by certain police agencies in the 1980s and 90s. Racial profiling policies reflected "the institutionalization of organizational assumptions about race and criminal suspicion" (Miller 2009:4). Spatial variation in terms of where police patrol is deployed in a city is another example of policy that can affect racial and ethnic disparities in policing outcomes (Glover 2007).

Selective enforcement is also shaped by larger socio-political forces. The police are, of course, law enforcers not law makers. New police enforcement of alcohol laws during 1920s alcohol prohibition was not simply a product of individual officer choices, but of much larger cultural and political forces of the time. Similarly, the contemporary war on drugs significantly increased selective and punitive police attention on (certain) drug crimes and (certain) drug using populations over a short period of time (Beckett et al. 2006). This was less because of individual officer choices and more because of systematic changes in law and policy. Furthermore, as a matter of law and policy, police attention has not been applied to all drug crimes equally. For example, despite relatively high rates of prescription drug abuse nationally (second only to marijuana according to the 2008 National Survey of Drug Use and Health), far more police resources are devoted to the enforcement of classic "street drugs" (e.g., marijuana, powder and
crack cocaine, amphetamines, heroin). Likewise, crack cocaine received far more attention from the police, law makers, and the media in the 1980s than did powder cocaine during the same time period (Beckett et al. 2006).

Collectively, these punitive drug policies have had a disproportionately affect on minorities. In 2006, blacks represented about 14 percent of all illicit drug users (similar to their representation in the general population), but comprised 35 percent of those arrested for drug offenses and 53 percent of drug convictions (Mauer 2013). Despite having rates of illicit drug use similar to that of whites, about three-fourths of those in prison for drug offenses are people of color (Mauer 2013). While individual officer choices may certainly influence some of these disparities, the policies behind them clearly play an important role as well.

Structural class bias appears to be another major factor behind many policies of selective enforcement—particularly in the deployment of police services—and likely contributes to the racial disparities in policing outcomes as well. Pepinski (1984) contrasted "streets from the suites" to illustrate how police resources are strongly biased toward enforcement of the most disadvantaged populations in society. Police deployment and routine enforcement practices (e.g., patrolling, investigating, detaining, questioning, searching for evidence of criminal conduct) is as possible in the business suites as it is in the streets from a legal perspective, but it is entirely implausible from a political perspective (Pepinsky 1984). Indeed, suite crime receives far less police attention than street crime despite evidence that more personal and economic harm results from white-collar and organizational (i.e., suite) crimes (Reiman and Leighton 2010).

Many scholars have discussed the implications of emphasizing street crime over organizational and white collar crime, pointing to predictable disparities along intersecting lines of race, class and gender (Goode 2002). With an emphasis on the streets, the citizens who come
under police surveillance tend to be the most disadvantaged in society. The visibility of disadvantaged groups on the street make suitable targets for law enforcement; drug enforcement in particular has had much greater success targeting low-level street dealers and users, who often happen to be disproportionately poor men and women of color, than high-level distributors and wealthy users, who tend to be privileged white men (Goode 2002; Jenkot 2008; Maher 1997). The result is an institutionalized bias that emphasizes the crimes of those at the lower rungs of society and diminishes the crimes of the most advantaged.

We know that selective enforcement is a reality of policing. We also know that structural elements of selective enforcement produce inherent biases in terms of where the police are deployed, what crimes are enforced, and who receives the bulk of that enforcement (Riksheim and Chermak 1993). At the same time, broad structural forces are not the only forces at play in the production of racial disparity. Individual officers make choices every day that contribute to the larger picture of race and criminal justice. Much policing research has examined the conditions under which individual officers choose to invoke the law by making a stop, conducting a search, writing a citation or making an arrest. A fuller understanding of the way racial disparities are produced 'on the ground' require a close examination of the important factors, legal and extralegal, that shape individual officer decision making.

**Officer Decision Making: Legal versus Extralegal Factors**

The decisions of officers at the individual level are an important piece of the larger picture of selective enforcement and racial disparity. Policy and the law have the potential to shape officer decisions, but there may also be a disconnect between the letter of the law and law as it is practiced (Black 1980). In reference to racial targeting on streets and highways, Miller (2007) notes that "unless [racial profiling] policies are enacted by patrol officers, shift
supervisors, middle managers, and police leadership, the policy may be viewed as merely symbolic" (253). Knowing when and what factors influence officer decisions to selectively investigate, search and punish drivers is necessary to account for the underlying causes of racial disparities in traffic stops. Largely unfettered discretion in routine traffic enforcement facilitates the possibility that officers' racial biases, overt or covert, will influence their enforcement decisions—even if those decisions conflict with policy or law.

Although disparities of race (and class, gender and age) in the criminal justice system are well documented, it is not entirely clear if discretion coupled with racist intent leads to disparate outcomes (Beckett et al. 2006). It is unlikely that extralegal factors like race are the only variables that significantly affect officer decision making. Most research suggests a number of factors are at play in officer decision making and racial disparities. When examining racial differences in officer decision making, then, it is necessary to consider the relative influence of both legal (e.g., seriousness of the crime, strength of evidence) and extralegal (e.g., citizen race, class, gender, age, demeanor) factors to help account for a wider set of plausible explanations.

The debate over which factors matter most in officer decision making was the subject of much of the classic policing research in the 1960s and 70s. The influence of extralegal factors such as race was a central focus of this research, and its role in police decision making continues to be vigorously contested in the field. Racial profiling research has largely neglected to fully consider much of the previous work on officer decision making despite the fact that both literatures are, in many ways, concerned with similar things (Engel and Calnon 2004).

One of the lessons of this early literature is that officer decision making and selective enforcement is always couched in a complex, multi-layered context (Riksheim and Chermak 1993). These contexts can contain any number of influential legal and extralegal factors at the
situational, organizational, community, and individual levels. The most influential legal factors examined in the literature tend to include seriousness of the crime (for example Shafer et al. 2006; Smith and Visher 1981; Stroshine et al. 2008) and strength of the evidence (see Bittner 1972; Pepinsky 1984). Salient extralegal factors in the literature include the preference of the victim (see Smith and Visher 1981), demeanor of the citizen (for example Gross and Livingston 2002; Westley 1953), race, class and sex of citizens (for example Bela-Walker 2003; Engel and Calnon 2004; Gross and Barnes 2002; Harris 2002, 1997; Martin 1999; Piliavin and Briar 1964; Smith and Visher 1981), and community characteristics (for example Durand 2009; Johnson 2004; Howell et al. 2004; Garrett 2000; Meehan and Ponder 2002; Smith 1986; Livingston 1997).

In 1958, the American Bar Foundation Survey provided one of the first formal reports of police misconduct that considered the impact of extralegal factors on officer decision making. The survey reported that racism, lawlessness and unprofessionalism were common aspects of police behavior. In a following major study, Piliavin and Briar (1964) observed and analyzed seventy-six separate police encounters with juveniles to empirically account for the factors that shaped officer decision making. They found that both legal and extralegal factors mattered. Their study marked one of the first attempts at understanding police decision making using rigorous social scientific methodology.

Piliavin and Briar's study was influential in highlighting the complexity of police decisions, but also the way race influences differential treatment of citizens at the hands of the police. They found that police departments not only tolerated, but openly endorsed high levels of individual officer discretion in the enforcement of juvenile crime. This endorsement was due in part to the rising professionalization movement in policing—the claim that officers, as
professionals, were trained in specialized street knowledge. Highlighting this discretion, officers seemed genuinely concerned about bringing juveniles into the formal system. Many officers expressed reservations against the arrest of juveniles and believed that official action could prove more detrimental than not in the long run because of the negative stigma associated with a criminal record. Not surprisingly, when officers did make an arrest the seriousness of the offense in question was important; the more serious the crime, the more likely officers would use arrest to punish the juvenile.

Alone with legal factors such as the seriousness of the crime, extralegal factors mattered as well in Piliavin and Briar's (1964) study. The appearance and demeanor of the juveniles in particular affected officer decisions to make an arrest. Uncooperative and/or disrespectful juveniles were more likely to be arrested than those the police perceived to be more submissive and compliant. Discrimination against black juveniles was common. Officers were more likely to stop and question juveniles without legal cause when these juveniles were black. Furthermore, the use of race as a determining factor in police decision making led to self-fulfilling consequences. Stereotypes about black criminal propensity influenced more punitive officer dispositions in their interactions with black juveniles. This disproportionate punitiveness increased the likelihood of formal sanctions like arrest, which in turn was seen as evidence that justified the stereotype of black juvenile offenders.

The findings of Piliavin and Briar's study sparked growing scholarly interest in police discretion and decision making. Scholars were interested in the role that race played in officer decision making in particular. Some argue, however, that since the civil rights social movements of the 60s and 70s, blatant racism in law, policy and policing has mostly given way to a more legalistic, colorblind model of policing (Withrow 2006). A new challenge has thus emerged for
researches to explain existing racial disparity in policing outcomes while couched in an era of colorblindness and the language of racial neutrality (Glover 2007). The picture painted by the extant literature is a complex one, and a combination of both legal and extralegal factors appear relevant.

Many scholars since Piliavin and Briar (1964) have found legal factors to be among the most influential determinants of police behaviors (for example Black and Reiss 1972; Alpert, Macdonald, and Dunham 2005; Terrill and Paoline 2007). Seriousness of the alleged offense is one of the most consistent predictors of police decisions to administer sanctions. For example, the police are more likely to make an arrest when the alleged offense is a felony compared to a misdemeanor (Black and Reiss 1970; Sherman 1980; Riksheim and Chermak 1993). In addition to the seriousness of the offense, Black and Reiss (1970) found that officers are more likely to make an arrest when they observe the offense themselves. Similarly, Mastrofski (2000) found that the likelihood of arrest rose significantly with the strength of the evidence.

Other work examining arrest decisions illustrate the complexity of police decision making, however. Smith and Visher (1981) found that police arrest decisions reflect both legal and extralegal considerations. Specifically, they found that the arrest decision was influenced by dispositional preferences of the victim (e.g., when the victim does not want to press charges against the suspect), the race of the suspect, the demeanor of the suspect, and the presence of innocent bystanders. Smith and Visher (1981) also found that while girls and women committed fewer crimes over all, men and women were equally likely to be arrested—a finding that contradicted the popular notion that females are more likely to receive leniency by the police.

Looking at officer decisions not to invoke the law, Terrill and Paoline (2007) found that nonarrest was far more common (in the order of about 4 to 1) than arrest, even controlling for
presence of legal evidence and seriousness of the offense. In those cases of nonarrest, officers employed a wide range of rationales for why they chose alternatives to arrest—ranging from suspect demeanor, officer empathy, paper work avoidance, and notions of what is "just punishment"—illustrating in greater detail the complexity of (non)arrest decisions (p. 326). In their multivariate analysis, the researchers found no evidence for the direct influence of race, sex and income on nonarrest.

There is some evidence that place matters as a situational and extralegal factor in police decision making. The relationship between race and place has received much discussion in the literature, particularly in how police agencies direct more patrol to poorer, typically minority areas with increased scrutiny and surveillance of citizen behaviors (Alpert et al. 2007). These patrol assignments can in turn lead to higher likelihoods of stops, citations, searches and arrests for residents and pedestrians of the target areas (Meehan and Ponder 2002). When areas of a city or town are racially and ethnically segregated (and most major cities in the U.S. remain quite segregated), places may become proxies for citizen race (Glover 2007).

In a study of police profiling practices in Kansas by The Police Foundation (2003), researchers looked at the distribution of police stop and search practices across real city space. They found that some patrol beats had much higher rates of stops and searches compared to others. Beats with higher recorded crime rates and beats with higher proportions of minority residents saw the highest rates of stops and searches. More importantly, profiling practices that disproportionately targeted black and Hispanic drivers for routine traffic stops varied significantly from place to place, but were more likely in beats with greater proportions of minority residents. It is unclear from the study, however, if citizen behavior or other plausible legal factors (e.g., type of traffic infraction) affected the disproportionate stops and searches of
minorities in those places. Another study by Novak and Chamlin (2012) found that areas with higher density of racial minority residents increased search rates, but did so only for whites in 'black spaces' (294).

Stroshine, Alpert, and Dunham (2008) utilized observational data from two metropolitan areas to develop a set of "working rules" that police use to determine courses of action while on patrol. The researchers organized these "rules" into 12 substantive themes: the importance of time and place; the importance of appearance; the importance of information; the importance of behavior; fairness; threshold; pissing off the police; safety; one act evolves into another; keeping busy; work shirking; and other rules (Stroshine et al. 2008:322-334). The authors argued these rules highlight the multidimensionality of police decision making. In other words, many different factors may have an important influence on officer decisions and one factor, such as race, cannot explain officer decision making completely. Indeed, in the author's study only a few of the verbatim statements by officers explicitly used race when indicating the circumstances that raised their suspicions. One officer stated that "[i]n an all-black area, whenever they see a new vehicle, they will check it out and make sure it's not stolen" and that they also do this "because it's a low income housing area" (p. 325). Another officer explained that "Whites in Black neighborhoods are either buying drugs, soliciting prostitutes, or lost," whereas "Blacks in 'beat up' cars in white neighborhoods between 9 a.m. and 12 p.m. might be getting ready to rob a house" (p. 323).

While the relative infrequency of officers' explicit use of race in developing suspicion or taking enforcement action appears to support Stroshine et al.'s claim that race and ethnicity has little effect on officer decision making, the authors ignore the ways in which race may operate in implicit or subtle ways via racial-neutral language (Bonilla-Silva 2003; Glover 2007). Factors
that seem colorblind on the surface may be still shaped by subtle preconceptions and stereotypes about race and crime (Alexander 2010; Smith and Alpert 2007). Given the incendiary nature of the politics of race in the U.S.—bolstered by the significant media attention racial profiling has received over the last two decades—officers may be especially wary of openly admitting to outsiders that race plays a major role in their decision making (Bonilla-Silva 2003). Popular notions of colorblindness and political correctness make it remarkable that officers would ever openly admit to outsiders that race plays any role in their enforcement decisions. As such, officers may frame their accounts of suspicion in decidedly race-neutral terms. For example, one officer said that he checks out certain parks because "many drug deals occur there" and he will also deliberately patrol "known drug areas" looking for "suspicious activity" (Stroshine et al. 2008:323). It is possible that racial and ethnic bias is still at work in these decisions, even when they are reported in the race-neutral language of place and crime (Harris 2002).

There has been some debate over whether and what characteristics of individual officers matter when it comes to the exercise of discretion and racial bias. Researchers have especially emphasized the potential influence of officers’ race, sex and education. Walker and Katz (2008) warn that “the characteristics of individual officers do not appear to have a major influence on police behavior” (p. 367). The results of empirical studies thus far have been mixed. Looking at officer decisions to ticket stopped drivers, Gilliard-Matthews et al. (2008) found that Black officers are slightly less likely to ticket black traffic-code breakers in 2002 than in 1999, while white officers were more likely to ticket all drivers of color in 1999 and 2002. Donohue and Levitt (2001) found that an increase in black police officers in a department was associated with only slightly higher arrest rates for whites, while higher white officers in a department was associated with a small increase in non-white arrests. Studies in New York City and San Jose
departments found that Black and Hispanic officers received complaints in similar proportions to their representation in the departments (Walker and Katz 2011). Hickman and Piquero (2009) found that, in 496 large municipal departments, minority officer representation in the department did not have an effect on the probability of receiving citizen complaints.

In general, the above research indicates both legal and extralegal variables affect police practices, and likely in complex ways. Police respond to the seriousness of the crime, calls for service, preferences of the victim, suspect relationship to the victim, and suspect deference to officer authority in decisions to initiate an encounter, cite, and arrest suspects. Police also appear to employ a wider net of suspicion and apply harsher sanctions to those in disadvantaged social positions/neighborhoods, including poorer suspects, juveniles, and racial/ethnic minorities (Black 1970; Gilliard-Matthews et al. 2008; Harcourt 2004; Mastrofski 1984; Meehan and Ponder 2002; Pepinsky 1984; Piliavin and Briar 1964; Smith and Visher 1981).

Several "take home messages" can be also drawn from the extant literature in regards to race and officer decision making. The police seek to maximize control in citizen encounters by acting in ways that maintain "inequality of power and authority between police and the public" (Smith and Visher 1981:175). The police respond more harshly in circumstances that interfere with or at least challenge this disparity of power in order to reaffirm their authority in the situation. This power gap and "social distance" between police and citizens may help explain harsher enforcement of racial/ethnic minorities and the poor compared to whites and the more wealthy (Black 1976). The police also tend to allocate more patrol resources to disadvantaged areas and are more likely to employ aggressive tactics in these areas. Likewise, if the police perceive minorities as more threatening or less submissive to officer authority, they may be quicker to act more harshly compared to whites (Harcourt 2004; Pepinsky 1984). African
Americans, for example, are more likely to hold antagonistic views of the police compared to whites (Jones-Brown 2007). Stereotypes painting minorities as the "symbolic assailant" (Skolnick 1966) may increase officer expectations of conflict in citizen encounters with minorities, in turn leading to self-fulfilling prophecies and more punitive outcomes (Smith and Alpert 2007).

**Racial Profiling and Traffic Stops**

Traffic stop encounters are an important context of racial disparity in policing and warrant special analysis for a couple reasons. First, a traffic stop encounter is the most common form of police-initiated contact with the public, accounting for about fifty percent of all face-to-face citizen contact in 2005 (Durose et al. 2007). Second, traffic stops are largely proactive—unlike reactive calls for service, for example, officers have a tremendous amount of discretion in choosing which traffic stops to initiate.

Although most traffic enforcement is considered largely routine and uneventful, traffic stops can also be used as a proactive method of crime-fighting. For example, traffic stops were an especially exploited tool in drug interdiction on particular stretches of highways in the 1980s and 1990s (Harris 2002). Legal authority flowing from citizens' reduced expectations of privacy in automobiles, the power to stop and search drivers, passengers and vehicles provides officers with a broad range of lawful means to discover evidence of criminal conduct (e.g., an arrest warrant or illicit contraband) that otherwise would have remained hidden. The implications of this broad scope of discretion on civil liberties and racial disparities makes traffic stops especially pertinent in discussions of police decision making.
Officer Decisions to Initiate the Stop

One of the first questions asked by early empirical studies of racial profiling was whether racial minorities were being singled out and stopped more frequently than white drivers. The first major empirical analyses of this question was the New Jersey Turnpike study. The study was prompted by a lawsuit began in 1990, State v. Pedro Soto, alleging that New Jersey state troopers were improperly using driver's race to conduct traffic stops. The defendants' main expert witness, John Lamberth, set out to empirically test the allegation.

Lamberth compared police data on traffic stops, citations and arrests between 1988 and 1991 to observational data estimating I-95 driving population and speed limit violations by race (Harris 2002). To estimate the driving population along the relevant stretch of highway, observers counted drivers at randomly chosen times and days, noting the (perceived) race of drivers. To measure drivers who were speeding, researchers used a rolling survey technique—trained observers drove in vehicles at the posted speed limit along different stretches of highway and recorded the drivers who passed them, thus obtaining a benchmark for the population of speeding drivers. In all, these data included observations of forty-two thousand cars (Harris 2002).

The results of the New Jersey study were striking. Though black drivers represented about 13% of the driving population on the highway where alleged abuse took place, they comprised roughly 73% of those stopped and arrested by the police. Importantly, there was no statistical difference in driving behavior between black drivers and white drivers; both groups in fact violated traffic laws equally and frequently—speeding being the most common offense. The only real difference between these groups of drivers that could have influenced police decisions to stop, according to Lamberth and defendants in State v. Pedro Soto, was skin color. Based on
these findings, Lamberth claimed that the racial disparities were more likely than not the result of racial profiling.

A similar study from around the same time, stemming again from lawsuits claiming racial bias in police stop practices, found similar results. Data from observations along I-95 in Maryland showed that black drivers represented about 17 percent of the driving population found to be speeding but comprised about 73 percent of all those drivers stopped and subsequently searched (Lamberth 1996).

Together, the New Jersey and Maryland cases substantiated widespread suspicions (and confirmed what many communities of color already knew all too well): that police routinely used race as an indicator of citizen criminal propensity. Police responses ranged from denial to justification (see Harris 2002), but growing political and cultural concerns over the racially charged phenomenon eventually gave way to a legitimacy crisis in policing (Miller 2007; Withrow 2006). In response to increased public scrutiny, many police agencies across the country openly condemned the practice and began to collect demographic data (some voluntarily, some mandated by Federal and State law) for traffic stops.

Collectively, most studies of police-collected data confirm that minority drivers are stopped disproportionately in traffic encounters. Withrow (2006), for example, reviewed twenty-four studies ranging from 1996-2004, nineteen of which found minorities were stopped at disproportionate rates compared to their representation in the general population or some other population benchmark. It is not clear from these studies, however, if racial bias was a direct cause of the disparity.

In thinking about disproportionate stop frequencies among whites and minority drivers, the reason for the stop is important. There are a number of plausible legal reasons, from petty to
severe, that may influence an officer's decision to make a stop. Like decisions to arrest, decisions to initiate stops likely vary in accordance with the seriousness of the observed traffic infraction: the more serious the infraction, the more likely officers are to make a stop. Likewise, the seriousness of the traffic violation or the type of traffic violation likely correlate with the outcome of the stop. As critics of the Whren v. U.S. decision argue, and as many anecdotal accounts have attested to, minorities appear to be disproportionately stopped on pretext (Harris 2002; Lundman and Kaufman 2003). The "pretext hypothesis" suggests that searches are more likely in stops of minority drivers when the reason for the traffic stop is a minor violation (such as a cracked windshield, for example). Stops for more serious traffic violations, on the other hand (such as reckless driving) should be more likely to result in a citation or an arrest than a stop for a minor vehicle defect.

The relationship between driver race and the reason for the stop, while implied in many discussions of racial profiling, remains under analyzed empirically. There is some evidence that whites are more likely to be stopped for moving violations and more serious offenses while black drivers are more likely to be stopped in situations where officers have high levels of discretion (Novak 2004; Greenwald 2003; Withrow 2002). The evidence is limited, however, and there remains much room in the literature for the analysis of race and the reason for the stop.

**Officer Decisions After the Stop**

While many early empirical analyses of racial profiling emphasized disparities in police decisions to initiate stops of minorities compared to whites, research has increasingly looked to the outcomes of traffic stops (Donohue and Levitt 2001; Engel and Calnon 2004; Gilliard-Matthews et al. 2008; Knowles, Persico and Todd 2001; Novak 2004; Lundman 2004; Schafer, Carter, Katz-Bannister and Wells 2006; Smith and Petrocelli 2001; Withrow 2007; Zingraff et al.
2000). Officers are confronted with a number of potential courses of action in any given traffic stop. Such decisions may include questioning the driver and any passengers, searching the vehicle and/or driver, and the administration of sanctions such as warnings, citations, and arrests. The evidence of racial disparities in these potential courses of action are complex and mixed; empirical results vary depending on the data examined and which stop outcomes are analyzed.

Findings of racial differences in police decisions to sanction (warnings, citations, and arrests) drivers have been mixed, especially for citations. Some studies have found that blacks and Hispanics are more likely to receive a citation (Cox et al. 2001; Engel and Calnon 2004; Farrell et al. 2004; Gillard-Matthews et al. 2008) whereas others have found the opposite (Novak 2004; Schafer et al. 2006; Smith and Petrocelli 2001; Zingraff et al. 2000). There is some evidence that minorities are more likely to be arrested in traffic stops (Spitzer 1999; Engel and Calnon 2004; Withrow 2002, 2003), though there are notable exceptions. For example, Novak (2004) and Smith and Petrocelli (2001) both found that minority drivers are less likely to receive a citation or be arrested compared to white drivers.

Though relatively rare, traffic stop searches represent a particularly intrusive form of police coercion. Racial disparities in police decisions to search are also among the most consistent findings in the racial profiling literature. Most racial profiling studies to date have found that black and Hispanic drivers are searched at disproportionately high rates compared to white drivers (Fallik and Novak 2012; Tillyer and Klahm 2011). In addition to the likelihood of a search occurring, knowing the "successfulness" of searches is important because it can serve to confirm officer suspicions of the driver's culpability. Though finding illicit evidence in a search does not rule out racial discrimination by the police, it is at least a conservative estimate of crime- as opposed to race-driven policing.
A successful search is typically defined in the literature as a search that uncovers illegal evidence—when examining searches in aggregate, the group-level likelihood that searches uncover illicit contraband is commonly referred to as the "hit rate" (Harcourt 2004). One of the most common, and oldest, justifications for profiling practices on the basis of race/ethnicity is the belief that minorities are more likely than whites to be carrying illegal contraband (e.g., such as in the transportation of illegal drugs). While the likelihood of discovering evidence in a traffic stop and search has received relatively little multivariate analysis, it is a quickly growing area of concern in racial profiling research (Lundman 2004; Novak 2012; Tillyer and Klahm 2011).

Some scholars have argued that that if hit rates are greater for minorities than whites, then disproportionate searches of minority drivers indicates that police are motivated by legal factors, not racial bias (Gross and Barnes 2002; Knowles et al. 2001). If, on the other hand, hit rates are lower for minorities compared to whites, then disproportionate searches of minority drivers could be considered evidence of racial bias. The empirical findings of racial differences in search hit rates have consistently found that searches of minority drivers are not more likely to uncover evidence of illicit activity (for example Engel and Calnon 2004; Knowles et al. 2001; Lamberth 1996; Lundman 2004; McCorkle 2003; Schafer et al. 2006; Zingraff et al. 2000). Few of these studies, however, have taken into full account the legal authority to search (Fallik and Novak 2012). Because policy or other legal factors may compel an officer to make a search (e.g., searches following an arrest), it is unclear in most studies if the search was compelled by policy or driven by an officer discretion. In one of the few studies that differentiated between discretionary and non-discretionary searches, Schafer et al. (2006) found that minority drivers are more likely to be subject to non-discretionary searches compared to whites (though minorities were no more likely to be found with illicit contraband). In contrast, Tillyer and
Klahm (2011) found that black citizens were more likely than whites to be found carrying illegal contraband in discretionary searches and less likely than whites to found with contraband in mandatory/non-discretionary searches. As it stands, there is still much room in the literature to examine the distinction between discretionary and non-discretionary searches as it relates to racial and ethnic (and class and gender) differences.

With a few exceptions, most studies examining the incidence of racial profiling have been based on police-collected data (Lundman 2004). Additionally, most analyses of racial differences in stops and stop outcomes have been at the bivariate level and have not controlled for other plausibly important legal and extralegal factors using multivariate statistical techniques (Withrow 2006). One of the more comprehensive analyses of traffic stop outcomes using non-police collected data and multivariate techniques was conducted by Engel and Calnon (2004). Using self-report data from the 1999 Police-Public Contact Survey, Engel and Calnon (2004) found evidence for racial/ethnic bias in several discrete traffic stop outcomes. Controlling for other legal and extralegal variables, black and Hispanic drivers who were stopped and subsequently searched were 50 percent and 42 percent more likely, respectively, to experience a search compared to white drivers. The odds of black drivers receiving a ticket were 47 percent greater than white drivers and the odds for Hispanics were 82 percent greater. Black drivers were also 79 percent more likely to be arrested and 2.1 times more likely to have force used against them in a traffic stop compared to whites. Even when legal variables such as the reason for the stop and the discovery of illegal contraband (drugs or weapons) were controlled for, driver race and ethnicity significantly predicted traffic stop outcomes. Young black and Hispanic males were significantly more likely to be ticketed, searched, arrested, and have force used against them than older, white, and female drivers.
Despite the proliferation of racial profiling research over the past two decades, the findings of this work have been mixed. Many studies have found significant racial disparities in the likelihood of being stopped by the police. Few studies, however, have empirically measured discretion as it is related to driver race, class, gender and being stopped. Though some analyses have found that minority drivers are more likely than white drivers to receive formal sanctions (citations or arrests) in traffic stops, others have found that minority drivers are no more likely to receive sanctions compared to white drivers. One of the most consistent findings in the literature is the disproportionate rate at which minority drivers are searched. Likewise, minority drivers appear no more likely to be carrying illegal contraband compared to white drivers (Harcourt 2007). Despite this consistency, however, very few studies have examined the racial and ethnic disparities in searches while also accounting for the legal authority to conduct a search. As such, it is unclear from the literature as a whole if the level of officer discretion in searches varies by race and ethnicity (Schafer et al. 2006) and if this has an impact on the likelihood of discovering evidence of wrongdoing. Furthermore, most studies to date have analyzed racial and ethnic disparities at the bivariate level and few have accounted for the numerous other plausible legal and control factors that may also influence police decisions to initiate, investigate, and punish drivers in traffic stops (Engel and Calnon 2004; Fallik and Novak 2012; Lundman 2004; Schafer et al. 2006; Tillyer et al. 2012).

Contradictory evidence combined with important theoretical and empirical limitations leaves many questions in the racial profiling literature unanswered. First, many previous studies of racial disparities in traffic stops have been limited in terms of the legal and other control factors considered alongside race and ethnicity. Likewise, there is little theoretical development in the racial profiling literature to provide direction in terms of explaining the relationship
between legal and extralegal factors and the debate between crime control and discrimination in traffic stops. In other words, even in those cases where significant disparity exists between white drivers and minority drivers, there are several other factors, legal and extralegal, that may provide plausible explanations for these differences (Warren et al. 2006). Second, previous bivariate and multivariate examinations of stop outcomes have treated each stop outcome as a discrete possibility (e.g., a stop that results in a citation vs a stop that results in an arrest). But stop outcomes are not discrete or naturally mutually exclusive; multiple enforcement outcomes may occur in any given traffic stop (e.g., a stop that results in both a citation and an arrest). Third, previous studies have found mixed evidence of racial disparities in police decisions to initiate an automobile stop. One of the biggest methodological limitations of this body of research is there is no universally accepted way of measuring base line traffic populations—this is particularly problematic in studies considering the proportional rates of stops by racial and ethnic groups. Some have suggested that the police are more likely to stop minority drivers for more discretionary reasons compared to white drivers, but this proposition remains under analyzed in the empirical literature. As such, the relationship between discretion and the decision to stop minority drivers remains unclear. Finally, most examinations of racial profiling have not accounted for the interlocking nature of race, ethnicity and gender in traffic stops.

**Theory: Making Sense of the Disparities**

Despite notable exceptions, studies of racial profiling in traffic stops have generally found some evidence for racial and ethnic disparities between white and non-white drivers in certain traffic stop outcomes. The most consistent evidence of racial disparity in the literature exists between white drivers' and black drivers' likelihoods of being searched during a traffic stop. Other work has also suggested that black and Hispanic drivers are more somewhat more
likely than white drivers to be stopped, cited and arrested. More recent work, however, has found evidence to suggest that racial disparities in stops, citations, arrests and searches may be explained by legal and other control factors. As such, there are contradictions the empirical literature about the extent of racial and ethnic disparity in select traffic stop outcomes. There is still less consensus in the literature as to what explains the disparity when it does exist—whether crime control concerns are driving the differences or if it is discrimination.

There has been little explicit theoretical attention aimed at racial profiling in empirical work thus far as well. That said, there are two basic theoretical positions brought to bear on racial profiling, often indirectly or implied (which I have spoke to already), in the literature and each frames racial disparities differently. These two positions represent broad and competing perspectives on police decision making in general, but are applicable to the narrower question of racial profiling in traffic stops too. I refer to these positions as the "crime control" and the "discriminatory" perspectives of policing. Arguments from the crime control perspective generally assume that police decision making is driven by legal factors and concerns about public safety. The crime control perspective assumes that policing is primarily shaped by citizen behavior, not citizen social status (e.g., black, white, man, woman). According to this perspective, racial disparities are the result of the rational motivation of police to maximize effective crime-fighting and the differential participation in crime and violence by racial minorities. The discriminatory perspective, on the other hand, assumes that racial disparities in policing are the result of conscious or unconscious racial bias, which can manifest at the individual or institutional level (or both). In other words, the discriminatory perspective asserts that police decision making is shaped in large part by what citizens are, not what citizens do.
The empirical racial profiling literature has not fully resolved the dispute between these two perspectives. One reason for this is that the literature as a whole points to both crime control concerns and discrimination as possible factors that shape policing decisions and has done so without clear theoretical frameworks to explain the distinction between the two. Additionally, the more narrow field of racial profiling in traffic stops is still young and lacks the level of theoretical development that exists in other, more established criminal justice literatures (Tillyer and Hartley 2010). To help fill this gap, I develop a theory of policing vehicle stops that draws on elements from both crime control and discriminatory perspectives. Specifically, I use focal concerns theory (Steffensmeier et al. 1998) and the notion of "symbolic assailants" (Skolnick 1966, 1995) to frame my hypotheses and guide my analysis. My goal is to more explicitly distinguish between the relative importance of crime control and legal factors compared with discriminatory and extralegal factors in police decisions to initiate and resolve traffic stops.

**Efficient Policing and the Crime Control Perspective**

The crime control perspective of policing assumes that the police are primarily motivated by crime and disorder. This is, after all, police goal number one dating at least as far back as the so-called origin of modern policing in 1829 London (see Lentz and Chaires 2007 for a historical critique of "Peel's Principles"). Crime control principles assume that the police are primarily concerned about legal factors that infer culpability (or at least reasonable suspicion of guilt) in an effort to fight crime and maintain order in the community. Following this logic, racial and ethnic disparities in policing outcomes should be explained by differential offending rates of those groups. As former Chief of the Los Angeles Police Department, Bernard Parks, stated, "It's not the fault of police… It's the fault of minority males for committing the crime. In my mind it is not a great revelation that if officers are looking for criminal activity, they're going to look at the
kind of people who are listed on crime reports" (quoted in Lundman 2004:310). In other words, the crime control perspective assumes that racial disparities are an accurate reflection of criminal offender populations.

Arguments taking the crime control view of the police are often accompanied by colorblind language, and typically equate racial neutrality with standards of fairness and equal protection of the law (Miller 2007). At the same time, the crime control perspective does not rule out considerations of race and ethnicity in enforcement decisions. The question and apparent contradiction of racial specificity and colorblindness is especially relevant in contemporary legal scholarship: Can race be used by the police in the lawful and rational pursuit of justice? The answer, for many crime control advocates, lies in the extent to which race signals actual criminal propensity in individuals. This seemingly contradictory logic has been referred to by some as "reasonable racism" or "colorblind racism" (Brewer and Heitzeg 2008; Kennedy 1997). However, if actual traffic or drug law violations vary by race and ethnicity, then racial profiling may be little more than a rational attempt to maximize effective enforcement (MacDonald 2001; Harcourt 2007).

There are other plausible ways in which race can be explicitly used by law enforcement—not necessarily because of overt racial bias or unlawful discrimination but because race, along with other factors, constitutes reasonable suspicion or probable cause. For example, the race of citizens can be explicitly used by the police in suspect descriptions (see Bela-Walker 2003 for a critique of this practice). Furthermore, a "totality of the circumstances" argument (for example, see *U.S. v. Weaver*, 1992) asserts that the consideration of race is rational when it is but one factor among many that signal to the seasoned officer that a crime has been committed.
The crime control perspective is often framed as simply good police work (see MacDonald 2001 and Harris 2002). Regardless of race and ethnicity, if you run a red light, you get pulled over. Regardless of race and ethnicity, if you are found with cocaine in your vehicle, you get arrested. The crime control perspective on racial disparities, then, hinges on the differential offending thesis: the notion that minorities commit a disproportionate amount of crime compared to whites. At the national level, official estimates of crime lend some credence to the assertion that blacks commit proportionately more crime than whites. For example, consider these statistics: in 2010 blacks made up about 13 percent of the U.S. population but 38 percent of homicide offenders; blacks are arrested for illicit drug offenses at 2-11 times the rate as whites; and in 2010 racial and ethnic minorities made up more than 60 percent of the U.S. prison population (Peterson 2012). While the representativeness of official measures of crime are problematic—meaning they are biased measures of the racial and ethnic makeup of the total criminal offending population—they remain widely used by criminal justice officials as conventional estimates of criminal offending.

The differential offending thesis underlies crime control justifications for racial disparities in criminal statistics. But compared to official measures of violent and property crime, it is even less clear from the available evidence that minorities engage in disproportionately more traffic offenses than whites. There have been relatively few attempts to directly measure total traffic offending by race and ethnicity (Withrow 2006). Part of the reason for this may be the nature of traffic laws and driving habits. Ostensibly speaking, it is likely that traffic law violations are pervasive among the driving population because of the sheer volume of technical codes regulating vehicles and driving behavior (Harris 2002). Similarly, the low level of seriousness and the victimless nature of most traffic offenses make precise estimates of
traffic offending by different demographic groups difficult to measure with official statistics. When a violent or property crime is committed, there is often a clear victim. In the case of most minor traffic violations, there is no record of it and no clear victim to report it. For these reasons, it is difficult to say with certainty what total traffic offending populations look like, much less the racial proportions of total traffic offending.

Despite the difficulties associated with measuring total traffic offending, there have been a few notable examples of research which has attempted to measure samples of traffic law violators in geographic-specific areas. For example, Covington (2001) and Lamberth (1994) found that racial minorities are no more likely to speed than whites. In contrast, Lange, Blackman and Johnson (2001) found that black drivers were overrepresented and white drivers underrepresented among speeders along a 65mph stretch of New Jersey turnpike (Withrow 2006). MacDonald (2003) reported that although black drivers account for an estimated 10 percent of the driving population, they account for 16 percent of drivers involved in accidents resulting in an injury and 13 percent of drivers involved in accidents resulting in death—though it is unclear if the disproportionate representation of black drivers in accidents involving injury or death is indicative of their increased propensity for aggressive driving or something else (Withrow 2006). In short, the results of these studies are mixed and inconclusive.

The level of discretion involved in different traffic offenses is also important from a crime control perspective. Speeding, while the most common reason for a traffic stop (Eith and Durose 2011), is only one among many legal reasons for which drivers can be stopped by the police. Traffic offenses can include vehicle defects, record checks, moving violations (e.g., stop sign/light violations), and drunk driver check lanes to name a few. While most scholars in the literature consider the level of discretion in traffic stops to be relatively high compared to other
policing decisions, there has been little empirical examination of variations in levels of discretion involved in traffic enforcement (Alpert et al. 2005).

Variations in police discretion and selective enforcement of traffic stops are likely affected by many situational (e.g., variable traffic patterns by area of city/town/highway/road and by day/month/year) and legal factors (e.g., seriousness of the offense). It is also likely that levels of discretion in traffic stops are not evenly distributed across different types of offenses or even within similar types of offenses. Some offenses, because of department policy or because of their seriousness, may compel officers to take action. For example, an officer arguably exercises less discretion when they stop a speeder driving 20 miles an hour over the speed limit compared to a speeder driving 3 miles an hour over the limit. The location of where the offense is observed may also affect the exercise of discretion—speeding in residential and school zones may be perceived as more dangerous than speeding on the highway or in rural areas. General traffic patterns may also matter—speeding in areas/times with greater traffic congestion (e.g., large metropolitan areas during rush hour) may be perceived as more dangerous and receive more police attention than areas/times with less traffic congestion.

Discretion can vary across different types of traffic offenses as well based on their real or perceived seriousness. For example, speeding may present the officer with less discretion than a minor vehicle defect, such as a broken rear view mirror. A stop light violation (running a red light) will likely involve less discretion than minor speeding in other cases. Furthermore, department policy may increase or decrease the level of discretion for certain types of traffic offenses. A department may initiate, for example, an anti-speeding campaign that mandates patrol officers to crack down on (all) speeding in particular areas with strict enforcement.
For these reasons and likely more, there is arguably significant variation in levels of police discretion across different and even within similar types of traffic offenses. It is also possible that variable discretion is related to the racial distribution of traffic stops. More specifically, some have suggested that racial minorities are more likely to be stopped for discretionary reasons than white drivers. Although it is implied in much of the racial profiling literature, there have been few attempts to empirically test the assumed relationship between driver race and the level of discretion in traffic stops (Alpert et al. 2005; Stroshine et al. 2008).

**Racial Bias and Discriminatory Policing**

The discriminatory perspective, in contrast to the crime control perspective, assumes that race/ethnicity is a significant factor in police decision making. Proponents of this perspective typically argue that the police apply the law disproportionately to certain groups because of inherent police bias, not because those groups are disproportionately more likely to offend compared to other groups. This bias can manifest in different ways and at different levels of analysis. At the individual level, discriminatory policing can occur through officers' conscious racial prejudice or through a more subtle, unconscious racial bias (Smith, Makarios and Alpert 2006). Discriminatory policing may also occur at the institutional level when laws, policies and practices have a disproportionately harsh effect on racial minorities.

A growing strand of discriminatory policing research frames racial disparities in traffic stops as a product of racial stereotypes and social conditioning (Smith and Alpert 2007; Warren et al. 2006; Welch 2007). Work drawing on racial stereotypes typically argue that minorities receive more police attention and harsher treatment because the police perceive them as being more dangerous and criminally culpable compared to whites. Unlike the overt racism of the past, scholars have increasingly argued that contemporary bias against minorities is largely
unintentional and unconscious (Welsh 2007). Smith and Alpert (2007), for example, frame racial stereotypes in police decisions to stop, cite and arrest drivers as a "*nonmotivational* but biased response to minority citizens by the police" (1264; emphasis added).

Different scholars have theorized different mechanisms for how racial stereotypes shape officer attitudes and influence officer behavior on the street. Smith and Alpert (2007) argue that unconscious racial bias is the result of stereotype formation originating from differential exposure to deviant groups and/or through "illusory correlation mechanisms" (1279). Differential exposure simply refers to the fact that police often engage with the public in largely negative contexts, followed by the false impression that the citizens they come into contact with represent all citizens of that racial group. In contrast, illusory correlation essentially refers to an individual's overestimation of a relationship between two classes of events, people or things based on preconception, not direct evidence or experience (Hamilton and Gifford 1976; Smith and Alpert 2007). In other words, it is the perception that two things are related when they are not, or the strength of the actual relationship is weaker than believed.

There is some evidence to suggest that illusory correlation is more likely to function in a top-down manner—members of a majority are more likely to attribute negative and exaggerated stereotypes about a minority than the other way around (Hamilton and Gifford 1976; Hamilton et al. 1985; Mullen and Johnson 1990). A top-down illusory correlation is consistent with a sociological perspective of power and social distance between the majority and minority populations. This social distance and differential access to power shapes interactions and normative expectations between police and citizens in important ways (Black 1976; Clark and Sykes 1975). This may be seen in policing when an officer's preconceptions about a racial minority's legal culpability is not based on direct, articulable evidence, but rather is based on
internalized stereotypes about race and crime stemming from and reinforced by larger social, cultural, and historical race relations.

The precise connections between attitudes and police behavior, however, are unclear (Goff and Kahn 2012). In one of the most systematic studies between officer attitudes and officer behavior, Worden's (1989) analysis of Police Services Study data revealed little about the connection between officers' self-reported attitudes and researcher-observed behaviors of officers on patrol. Worden's (1989) study has been critiqued on a couple different important points. One, officer attitudes were measured via a survey questionnaire rather than through more in-depth observation or interviews, limiting its ability to pick up on nuances of meanings. Two, the Police Services Study did not include data on racial stereotypes specifically, making it difficult to apply its findings to racial profiling (Goff and Kahn 2012). But while increased empirical verification is needed, the connection between biased attitudes about race and police behavior is still a plausible one (Smith and Alpert 2007; Welsh 2007).

Symbolic Assailants and Racialized Images of Danger

The term "symbolic assailant" was originally used by Jerome Skolnick (1966) to describe the stereotypical "other" figure that exists in the collective consciousness of the police and which comes to shape officer expectations on the beat. Skolnick defined the symbolic assailant as a "perceptual shorthand" used by patrol officers to identify classes of people they believe are potentially dangerous for the purposes of control and safety (45). This shorthand includes "gestures, language, and attire" that is associated with violence and dangerousness (1966:49). The symbolic assailant is also a racialized figure (Skolnick 2007). Poor, young, men of color have come to epitomize the symbolic assailant in the U.S.—a phenomenon sometimes referred
to as the "criminalblackman" (Russell-Brown 1998) and represents the widespread conflation of race (and age and gender) and crime in society.

There are several sociological reasons why young, poor, racial and ethnic minority men in particular fit the stereotypical image of the symbolic assailant in the eyes of the police. There is a deep seated legacy of American apartheid in which politically and socially marginalized racial minority groups have been cast off as "dangerous classes" by the elite (Massey 1993; Shelden 2007). Throughout history, there has been a recurring tendency of powerful groups to target, punish and scapegoat segments of the population they deem different, menacing, threatening, inferior, dangerous (Colvin and Pauly 1983; Currie 1995). The history of drug prohibition in the U.S., for example, demonstrates repeated, deliberate efforts at targeting marginalized groups for blame of larger societal ills (Reinarman 1994). From the opium and cocaine panics of the early 1900s to the harsh sentencing policies of crack cocaine in the contemporary war on drugs, racial minority groups and the poor have long been associated with images of danger and subject to disproportionate social control (Beckett, Nyrop, Pfingst, and Bowen 2006).

In the contemporary era of mass incarceration, persistent disparities between whites and nonwhites serving time in prison also likely contribute to the widespread stereotype that racial minorities are more dangerous than whites (Alexander 2010; Banks 2003). The U.S. correctional system—now with an estimated 7 million adult U.S. citizens currently under some form of correctional supervision—has undergone incredible growth over the last several decades and this growth has disproportionately affected racial and ethnic minorities. In 2006, greater than three quarters of a million Black men were in prison or jail and 2 million under some form of correctional supervision (Brewer and Heitzeg 2008). An estimated "1 in 3 black males, 1 in 6
Hispanic males and 1 in 17 white males are expected to go to prison during their lifetime” (Rosich 2007:17). While women represent a very small portion of those imprisoned—just under 7% of all U.S. prisoners in 2010—women's incarceration rate has been increasing at more than double that of men's over the last two decades. Like minority men, minority women have seen a disproportionate share of these increases. In 2010, black and Hispanic women were approximately 3 and 1.5 times more likely, respectively, to be in prison than white women (Guerino, Harrison, and Sabol 2011).

**Focal Concerns of the Police**

Borrowing the term from Walter Miller's (1958) theory of deviance and lower class cultural norms, Steffensmeier (1980) developed a version of focal concerns theory to explain judicial decision making and sentencing disparities. Steffensmeier et al. (1998) further posited that judges are influenced by three primary concerns when making sentencing decisions: blameworthiness of the offender, protection of the community, and practical constraints. Recent work has proposed the application of focal concerns theory to policing to help explain officer decision making in the context of racial profiling (Higgins, Vito and Grossi 2012; Tillyer and Hartley 2010). A focal concerns approach draws upon legal and extralegal factors in criminal justice decision making and, along with the concept of symbolic assailants, allows the integration of both crime control and discriminatory perspectives of policing.

The first focal concern, blameworthiness, refers to the legal culpability of an offender and the seriousness of the harm caused by the offense. Applying this focal concern to policing in traffic stops, blameworthiness suggests that officers' warning, citation, search and arrest decisions are based on the type and seriousness of the traffic offense and driver culpability.
The second concern, protection of the community, is similar to blameworthiness in that the seriousness of the offense and driver culpability are relevant decision making factors. But protection of the community also involves a prediction about an offender's future dangerousness/potential for violence and immediate threat to the community or innocent bystanders. In traffic stops, officer concerns about driver dangerousness and community safety likely manifest in decisions to cite, search or arrest drivers. Officers may rely on many different situational cues or "red flags" to predict a driver's potential dangerousness and threat to the community. For example, an officer may be concerned with the driver's demeanor (e.g., a driver's aggressive or argumentative mannerisms), the presence of bystanders (e.g., passengers in the vehicle), or the driver's prior contacts with the police (i.e., a pattern of offenses).

The third concern, practical constraints, refers to organizational and individual-level constraints and consequences that define the working criminal justice environment. According to Steffensmeier et al. (1998), these include time constraints, budget concerns, relationships with other criminal justice actors, and high degrees of uncertainty regarding the offender's ability to serve time or function in the community. In policing, time constraints and high degrees of uncertainty in police-public contacts are likely to have a significant impact on the officer's ability to fully and rationally enforce the law. This should be particularly relevant in traffic stops because of the limited amount of information officers have about the vehicles and drivers they stop, the levels of risk associated with traffic enforcement, the limited amount of time officers have to assess the safety of the situation and make enforcement decisions, and the inherent tension between an officer and a citizen in a vehicle stop (Gibson, Walker, Jennings and Miller 2010; Sklansky 1998; Sykes and Clark 1975). Practical constraints in traffic stops may further
vary by what time of day the stop happened (e.g., night versus day) and how long the traffic stop lasted.

Steffensmeier et al. (1998) argued that judges develop a perceptual shorthand about offenders that is shaped by attributions and stereotypes of age, race and gender within the context of practical constraints in the courtroom. Reliance on a perceptual shorthand of guilt and dangerousness—the symbolic assailant—is arguably more relevant in police work than the courtroom because officers have far less control over the situation, less information about suspects and citizens with whom they come into contact, and less time to assess the situation on the street than judges do in the courtroom.

**Summary**

The disparate findings of both literatures on police discretion and racial profiling in traffic stops suggest that both crime control concerns and discrimination matter in predicting police decisions on patrol. However, the dearth of explicit theory in racial profiling analysis has provided little direction for explaining and interpreting these findings. More recently, there has been a call for a clearer theoretical research agenda among racial profiling scholars (Engel et al. 2002; Tillyer and Hartley 2010). A focal concerns approach (Higgins, Vito and Grossi 2012; Steffensmaier et al. 1998; Tillyer and Hartley 2010) coupled with the notion of stereotypical images of danger and symbolic assailants (Skolnick 1966, 1995; Jones-Brown 2007) allow the conceptual integration of both crime control and discriminatory perspectives of policing and provide a more direct theoretical framework for estimating the relative importance of legal and extralegal factors in traffic stop outcomes.
Expectations

The literature outlined above has addressed the question of race and policing outcomes in different ways with a variety of data sources. Subsequently, the racial profiling and policing literatures have produced mixed results and recommendations. Recent direction in the racial profiling work (see Tillyer and Hartley 2010) has suggested that focal concerns and symbolic assailant approaches can provide useful frameworks for interpreting and explaining police decisions in traffic stops. Drawing on these concepts and the broader debate between crime control and discriminatory perspectives of policing, I expect the following relationships.

There is mixed evidence in the literature regarding the influence of driver race and ethnicity on different traffic stop outcomes (Engel and Calnon 2004; Harcourt 2004; Lundman and Kaufman 2003; Schafer et al. 2006; Smith and Petrocelli 2001; Warren et al. 2006; Withrow 2006). There has also been limited examinations of driver race as it intersects with driver sex in traffic stop outcomes (Tillyer and Engel 2013). The discriminatory perspective and symbolic assailants approach predicts that race/ethnicity and gender will be significant factors in police decisions to warn, cite, arrest and search drivers. Therefore,

Hypothesis 1a: Minority drivers will experience more serious traffic stop outcomes compared to white drivers.

Hypothesis 1b: Minority men will experience more serious traffic stop outcomes compared to white men drivers and women drivers of any race or ethnicity.

The crime control perspective and focal concerns approach suggest that police decision making is primarily motivated by blameworthiness of suspects and potential danger in situations of limited knowledge, time and resources. Despite the constraints of traffic stop environments, which may lead to the increased risk of racial stereotyping in officer decision making, the focal concerns approach predicts that traffic stop outcomes will primarily be affected by legal and
behavioral factors associated with driver blameworthiness and danger to others, regardless of race/ethnicity (or gender). Therefore,

Hypothesis 2a: The effects of driver race and ethnicity on stop outcomes will be mediated by legal factors and driver behavior.

Hypothesis 2b: The effects of the interaction of driver race and sex on stop outcomes will be mediated by legal factors and driver behavior.

One of the early allegations in the racial profiling debate was that the police often stop minority drivers based on a technical pretext (such as a minor traffic violation) in order to search for illicit contraband or evidence of some other, more serious crime absent any probable cause to do so. There is limited empirical work testing this allegation and much of the extant evidence is anecdotal (see Harris 2002). A focal concerns and symbolic assailants approach can provide a useful framework to explore the question of pretext. Driver blameworthiness associated with a legal traffic violation may be an important factor in police decisions to stop drivers, but perceptions of danger and seriousness of the violation can also be tainted by preconceptions about racial minorities and crime/danger. According to Steffensmeier et al. (1998), this is particularly true in criminal justice environments characterized by practical constraints. The police decision to initiate a traffic stop exemplifies this context. The decision to stop a driver for a relatively minor offense (e.g., a minor vehicle defect) is highly discretionary and the police have little to no information about a driver's personal history or potential threat before they make the stop, thus making the police susceptible to a perceptual shorthand of race, crime and danger (i.e., symbolic assailants). A focal concerns and symbolic assailants approach to pretext suggests that officer decisions to stop drivers are more likely to be influenced by these racial stereotypes of danger in stops that are discretionary compared to stops that are non-discretionary. Therefore,

Hypothesis 3a: Minority drivers will be more likely to be stopped for discretionary reasons compared to white drivers.
Hypothesis 3b: Minority men will be more likely to be stopped for discretionary reasons compared to white men drivers and women drivers of any race/ethnicity.
Chapter 4 - METHODOLOGY

Data

Data for the following analyses come from the 2008 Police Public Contact Survey (PPCS). The PPCS is a nationally representative, self-report survey sponsored by the Bureau of Justice Statistics that was designed to measure citizens' face-to-face interactions with the police. The PPCS has been conducted a total of 5 times, with versions in 1996 (pilot), 1999, 2002, 2005 and 2008. The survey samples all U.S. residents ages 16 and older and includes a set of questions asking citizens specifically about contacts with the police occurring through police-initiated traffic stops.

The PPCS is a supplement to the annual National Crime Victimization Survey (NCVS). The 2008 NCVS sample consisted of 72,566 individuals ages 16 or older (the legal driving age in most states). The PPCS interviewed a subset of 57,978 individuals ages 16 or older with about a 90 percent response rate. Of those interviewed, 38.5 percent (22,301 respondents) were conducted in person and 61.5 percent (35,677 respondents) by telephone. The 2008 PPCS was weighted to produce a national estimate of 236,511,832 persons age 16 or older (Eith and Durose 2011).

Of the 57,978 respondents, 9,549 had face-to-face contact with the police in 2008. The possible reasons for face-to-face contact with the police included traffic related contact (driver or passenger in a traffic stop; driver or passenger involved in a traffic accident), contact where the respondent reported a problem to the police, contact where the police provided service to the respondent, contact related to a crime investigation, and other reasons. I restricted the sample to include only those respondents who were drivers stopped by the police (n=4,160).
The PPCS is particularly useful for analyzing police decision making in traffic stops for a number of reasons. First, it marks the only nationally representative data set that measures police-citizen contact in traffic stops. Most racial profiling studies rely on official police-collected data and are limited to the particular characteristics unique to the jurisdiction of the agency collecting the data. Second, the PPCS includes a detailed set of questions on a number of legal and extralegal factors that are pertinent to police focal concerns and symbolic assailants in police-citizen contacts. The PPCS includes data on a number of driver, officer, community, and situational characteristics of traffic stops. Third, the PPCS collects data on a number of meaningful police enforcement outcomes in traffic stops, including warnings, citations, arrests, and searches. The survey's skip patterns in the questionnaire also produce a complex mix of discreet and multiple outcomes for each traffic stop, which more likely approximates the complex mix of possibilities in real-world traffic enforcement.

**Dependent Measures**

**Traffic Stop Outcomes**

The PPCS asked drivers stopped by the police about the outcome(s) of their most recent traffic stop. I focus on five primary stop outcomes in the PPCS: warning, citation, arrest, search, and no outcome beyond the stop. Each of these are presented as dichotomous yes or no questions in the survey questionnaire (e.g., "During this contact were you given a warning?"). Drivers who were warned in a traffic stop could report they received either a written or verbal warning. Drivers who were searched could report whether the police asked for permission to conduct the search and whether they gave the officer consent to search. As mentioned earlier, these outcomes are not mutually exclusive in practice. For example, a driver can be ticketed, arrested, and searched in a single stop. The PPCS allows for this complexity, and with the exception of
warnings and citations (i.e., a driver cannot report both a warning and a citation in a traffic stop), respondents could report more than one stop outcome. Figure 4.1 graphically displays the overlapping nature of traffic stop outcomes as measured by the PPCS.

Figure 4.1 - Universe of Possible Traffic Stop Outcomes, PPCS 2008

Estimating the important factors associated with stop outcomes becomes more complex when there is significant overlap between outcomes. To my knowledge, no prior research using PPCS data has accounted for the possibility of multi-outcome traffic stops. Rather, prior research has treated various outcomes as discreet possibilities (for example Engel and Calnon 2004,
Lundman and Kaufman 2003; Gilliard-Matthews et al. 2008). I address the complicated nature of traffic stop outcomes by identifying a total of 12 *possible* mutually exclusive outcomes (Table 4.1).

**Table 4-1** Possible stop outcomes following survey skip patterns

<table>
<thead>
<tr>
<th>Traffic Stop Outcome, 2008 PPCS (n=4160)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No outcome</td>
</tr>
<tr>
<td>2. Warning only</td>
</tr>
<tr>
<td>3. Citation only</td>
</tr>
<tr>
<td>4. Arrest only</td>
</tr>
<tr>
<td>5. Search only</td>
</tr>
<tr>
<td>6. Arrest and warning only</td>
</tr>
<tr>
<td>7. Arrest and citation only</td>
</tr>
<tr>
<td>8. Search and warning only</td>
</tr>
<tr>
<td>9. Search and citation only</td>
</tr>
<tr>
<td>10. Search and arrest only</td>
</tr>
<tr>
<td>11. Search and warning and arrest</td>
</tr>
<tr>
<td>12. Search and citation and arrest</td>
</tr>
</tbody>
</table>

These categories were constructed by following the PPCS questionnaire skip patterns. Some of these outcomes are highly unlikely and arguably contradictory in practice. For example, an arrest and a warning in the same stop is not a plausible outcome. Additionally, some of the categories are somewhat redundant and some had too few observations to run valid inferential statistics. Of the 12 possible categories, 7 had observations in the data: no outcome beyond the stop (n=670); citation only (n=2206); verbal or written warning only (n=1110); arrest only (n=26); ticket and search (n=61); warning and search (n=16); arrest and search (n=71).

To make the dependent variable more empirically and theoretically meaningful, I recoded these 7 categories into 4 mutually exclusive outcome categories (see Table 4.2).
Table 4-2 Mutually exclusive stop outcomes, 2008 PPCS

<table>
<thead>
<tr>
<th>Outcome Category</th>
<th>Total n=4160</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Warning only/no outcome</td>
<td>1780</td>
</tr>
<tr>
<td>2. Citation only</td>
<td>2206</td>
</tr>
<tr>
<td>3. Search and warning/search and citation</td>
<td>77</td>
</tr>
<tr>
<td>4. Arrest only/arrest and search</td>
<td>97</td>
</tr>
</tbody>
</table>

Of the 4,160 drivers stopped: 1) 1,780 drivers reported receiving a warning only (verbal or outcome) or no other outcome; 2) 2,206 drivers reported receiving a citation only; 3) 77 drivers reported either being searched and warned only or searched and cited only; and 4) 97 drivers reported being arrested only or arrested and searched. This distribution is also more theoretically meaningful as well. There is a logical progression of seriousness/intrusiveness in the recoded outcome categories, where a warning or no other outcome is the least intrusive outcome and an arrest plus a search is the most serious and intrusive. In the analyses that follow, stops that result in a warning or no other outcome is the reference category. This allows a more intuitive, and direct comparison between more serious (i.e., citations, searches, and arrests) and less serious (i.e., warnings and no other police action) stop outcomes.

Two outcome categories now contain drivers who reported being searched. However, there is an important distinction between searches that occur with an arrest and searches that do not. Distinguishing between different types of search outcomes is one of the advantages of analyzing multi-outcome versus discreet outcome traffic stops. This is particularly useful for searches because searches that occur without an arrest should differ in terms of officer discretion compared to searches that occur with an arrest.
Searches that do not occur with an arrest indicate the likelihood that the search was conducted because of the officer's (unfounded) suspicions and perceptions about the driver's dangerousness and/or culpability. This outcome has important implications for the symbolic assailants hypothesis, which predicts that driver's race (and sex) affect officer perceptions of danger and culpability. Both a focal concerns and a symbolic assailants approach further imply that officers are more likely to act on these perceptions in highly discretionary contexts (Tillyer and Hartley 2010).

The level of officer discretion in searches that occur with an arrest is more limited compared to searches without an arrest for a couple reasons. The temporal sequence of events in this case is important—searches may be conducted before or after an arrest, and each sequence has important implications for officer discretion and the focal concerns/crime control hypotheses. In the 2008 PPCS, about 56 percent of searches were conducted before an arrest and 44 percent after an arrest. Searches that are conducted before an arrest increase the likelihood that the search turned up illegal evidence, thus giving the officer probable cause (blameworthiness) to make an arrest. The 2008 PPCS indicates that the police found illegal items in roughly 30 percent of searches conducted before an arrest (author calculation).

Searches that are conducted after an arrest increase the likelihood that the search was mandated by department policy. After an arrest is made many departments mandate that their officers conduct searches of vehicles and drivers to ensure the officer's safety from potential weapons, and to collect an inventory of the arrested driver's property (Withrow 2006). Therefore, searches that occur both before or after an arrest indicate limited officer discretion and increased driver blameworthiness compared to searches that occur before an arrest.
Discretionary Stops

There is some evidence in the literature to suggest that the police sometimes use minor, discretionary traffic stops as a pretext to act on suspicions that drivers are involved in more serious crime (Harris 2002; Withrow 2006; Whren v. United States 1996). The pretext hypothesis also suggests this practice is disproportionately used against racial minorities, particularly black and Hispanic motorists. To test this hypothesis, I analyze the relationship between driver characteristics with the reason for the traffic stop. There are eight mutually exclusive reasons for traffic stops in the 2008 PPCS: speeding; vehicle defects; record check; drunk driver check lane; turn signal and lane change violation; stop sign/light violation; and other miscellaneous offenses. Because of the idiosyncratic and unpredictable nature of traffic stops for miscellaneous offenses, I removed them from analysis of Hypothesis 3.

<table>
<thead>
<tr>
<th>Reason for traffic stop</th>
<th>Total n=3648</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Speeding</td>
<td>2046</td>
</tr>
<tr>
<td>2. Drunk driver check lane</td>
<td>88</td>
</tr>
<tr>
<td>3. Stop sign/light violation</td>
<td>348</td>
</tr>
<tr>
<td>4. Turning or lane violation</td>
<td>272</td>
</tr>
<tr>
<td>5. Record check</td>
<td>262</td>
</tr>
<tr>
<td>6. Vehicle defect</td>
<td>466</td>
</tr>
<tr>
<td>7. Seatbelt violation</td>
<td>166</td>
</tr>
</tbody>
</table>

*Misc. traffic offenses dropped from analysis

Theoretically speaking, all traffic stops are discretionary—there is some degree of choice involved in every stop an officer makes. However, certain types of stops are arguably more discretionary than others. For example, a stop for a minor vehicle defect is clearly more discretionary than a stop that occurs in a drunk driver check lane. Often, a vehicle defect is
ambiguous and minor, including things such as a burnt out license plate lamp, a broken/loud muffler, or a cracked rear view mirror. Likewise, because of the high maintenance requirements of automobiles, vehicle defects, minor or otherwise, are also quite common (Harris 1999). The ubiquitous and minor nature of defects introduces more officer choice and more selective enforcement in traffic stops involving vehicle defects. Record checks, too, are typically more discretionary than many other reasons for traffic stops. Stops for record checks are often conducted by officers on the basis of a suspicion that the driver is culpable for a more serious crime, such as a arrest warrant or a stolen vehicle (Harris 2002). In contrast, check lanes for drunk drivers are mandatory—they require by law or policy that officers stop every car travelling through the designated area (Samaha 2005). Conservatively speaking, other traffic violations such as speeding and stop sign/light violations have the potential to be more dangerous and arguably decrease (compared to stops based on vehicle defects and record checks) the degree of officer choice in making the stop.

Table 4.4 Discretionary Stops, 2008 PPCS

<table>
<thead>
<tr>
<th>Stop Category</th>
<th>Total n=3648</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Non-discretionary stop\textsuperscript{a}</td>
<td>2754</td>
</tr>
<tr>
<td>2. Discretionary stop\textsuperscript{b}</td>
<td>894</td>
</tr>
</tbody>
</table>

\textsuperscript{a}Includes speeding, drunk driver check lane, stop sign/light and turning/lane violations
\textsuperscript{b}Includes vehicle defects, record checks, and seatbelt violations

To test the assertion that the police are more likely to stop minority drivers for discretionary reasons compared to white drivers, I differentiate between stops for traffic offenses that the literature has suggested tend to be more discretionary and stops that tend to be less discretionary (See Table 4.4). I construct a dichotomous reason for the stop variable that distinguishes between discretionary and non-discretionary stops where discretionary reasons=1
and non-discretionary reasons=0. Traffic stops for vehicle defects, record checks and seatbelt violations are coded in the discretionary category (n=894), and stops for speeding, drunk driver check lanes, stop sign or stop light violations, and turning or lane violations are coded in the non-discretionary category (n=2754).

**Independent Measures**

The PPCS contains a number of legal and extralegal factors that could possibly influence officer behaviors in traffic stop encounters with citizens. The theoretical framework above predicts that racialized and gendered notions of symbolic assailants will shape police decision making so that driver race and sex will significantly shape traffic stop outcomes. At the same time, the theoretical framework predicts that focal concern measures of blameworthiness and dangerousness ought to have the strongest effect on stop outcomes and mediate the effect of driver race and sex. In addition to driver characteristics and focal concern measures, I also identify several possible control variables that may also correlate with officer behavior in traffic stops.

**Driver Characteristics**

There are several demographic characteristics of drivers captured in the PPCS relevant to the concept of symbolic assailants, including driver race, ethnicity, sex, age, and class. The sociohistorical conflation of race (and gender) and crime indicates that the most salient characteristics of symbolic assailants will be driver race and sex. I measure driver's sex as female=1 and male=0. I use four dichotomous measures of driver race and ethnicity so that black, non-Hispanic=1, else=0; Hispanic=1, else=0; and other (includes Asian, Pacific Islander, Eskimo, American Indian, more than one race, and non-specified race not of Hispanic descent)=1, else=0. White, non-Hispanic drivers are the excluded reference category. Driver's
age is measured as a continuous variable beginning at age 16. The only measure of social class in the 2008 PPCS is employment status. Driver's employment status is measured as a dichotomous variable where employed=1 and not employed=0.

Few studies of racial profiling have looked at the intersection of driver race and sex. To explore the interaction effects of driver race and sex in traffic stops, I create eight additional dichotomous, interaction terms for driver race and sex combined. These categories include white men, white women, black women, black women, Hispanic men, Hispanic women, other men, and other women. White men is the excluded reference category.

**Focal Concern Measures**

Steffensmeier, Ulmer and Kramer (1998) argued that focal concerns of blameworthiness and protection of the community are based on the seriousness and associated harm of an offense, as well as a prediction about potential dangerousness of an offender. Blameworthiness and perceptions of dangerousness is not as straightforward in traffic stop decisions as it is via sentencing decisions in the courtroom. I argue that blameworthiness in a traffic stop will be most associated with the alleged traffic violation leading to the stop and that predictions about dangerousness in a traffic stop will be most influenced by the driver's demeanor and deference toward the officer. Traffic stops for more serious reasons should be more likely to lead to an official sanction (citation or arrest) compared to stops for less serious reasons. Likewise, drivers who are more aggressive and show less deference to the officer should be more likely to experience a citation, arrest or a search compared to drivers who are more compliant.

**Blameworthiness**

The PPCS measures data on the traffic offense by asking drivers to report the reason for the stop as told to them by the officer. The available reasons include speeding, vehicle defect,
record check, drunk driver roadside check lane, seatbelt violation, turn or lane change violation, stop sign or stop light violation, or some other unlisted reason. Each of these reasons are mutually exclusive in the PPCS—drivers cannot report more than one reason for a traffic stop. I construct dichotomous variables for each of the reason categories (yes=1, else=0). Speeding is the excluded reference category for stop outcome models.

In addition to their most recent contact with the police, the PPCS asks respondents to list the total number of prior face-to-face contacts they had with the police in the previous year. This variable is a continuous measure in numbers of prior face-to-face contacts. Some have argued that the number of prior contacts may be a proxy indicator for unmeasured driver characteristics which make them more likely to have negative experiences with the police (see Lundman and Kaufman 2003). I use the number of prior contacts as an indicator for blameworthiness for two reasons. First, the greater the number of prior contacts increases the likelihood that the driver has police records on file when they are stopped. Prior records, traffic or otherwise, may signal to the officer a perception of driver culpability (Lundman and Kaufman 2003). Second, the number of prior contacts may indicate a pattern in offending (traffic or otherwise) that is associated with the driver's blameworthiness when stopped by the police.

**Dangerousness**

I use two measures dangerousness of the driver from the PPCS: driver demeanor and the presence of vehicle passengers. Much previous research has shown (e.g., Smith and Visher 1981) driver demeanor to be an important behavioral factor that shapes police perceptions of a citizen's potential dangerousness. Driver demeanor in traffic stops, however, has been largely neglected in the empirical literature on racial profiling (Withrow 2006). Respondents to the 2008 PPCS can
report whether they (the driver) argued, cursed, or verbally threatened the officer. Demeanor is measured as a dichotomous variable, where 1=argued, cursed, or threatened the officer.

Second, the 2008 PPCS allows respondents to indicated whether they had passengers in the vehicle when they were stopped. Having passengers in a vehicle during a traffic stop can affect perceptions of danger to the community in a couple of ways. One, if passengers include minors or young children, then the traffic offense may pose an immediate threat to those innocent bystanders in the vehicle. Second, if the vehicle is occupied by a group of what the police perceive to be symbolic assailants (e.g., a group of adolescents of color), then the police may perceive the occupants as "up to no good" and a potential threat to the community and the officer (Pilivian and Briar 1968). While the PPCS does not collect data on the age, race or sex of the passengers, it does ask respondents how many passengers were in the vehicle during the stop. Having passengers in the vehicle during a traffic stop is measured in the analysis below as a dichotomous variable where yes=1, no=0.

Practical constraints

Practical constraints limit the ability of officers to make fully informed, rational decisions based on legal, crime control factors alone. Traffic stops by their nature pose a fair amount of constraints on an officer's rational decision making (e.g., limited information about drivers, limited visibility inside vehicles, limited time to assess the seriousness of the situation, risk of surrounding traffic), and some specific factors may increase or decrease those constraints. I use two measures of practical constraints relevant to traffic stops: the time of day when the stop occurred and the length of the stop in time. First, the time of day of the stop is measured as a dichotomous variable that distinguishes between nighttime stops and daytime stops (nighttime=1; daytime=0). I argue that nighttime stops pose more constraints than daytime stops
because of the limited visibility at night. Second, the length of the stop is measured as a continuous variable in minutes ranging from 1 to 200 minutes. I argue that the shorter the stop in minutes, the greater the constraints on officer decision making. In contrast, the longer the stop in minutes, the more time the officer has to assess the situation and gather legally relevant information on the driver.

**Control Factors**

The 2008 PPCS includes data on several additional factors that the literature has suggested may be important to stop outcomes, including community characteristics, officer characteristics, situational characteristics of the stop, and other controls. The 2008 PPCS asks drivers about the race of the officer(s) who stopped them and how many officers were involved in the stop. Drivers can specify officers as black, white or another race. I construct three dichotomous variables where white officer(s)=1, else=0; black officer(s)=1, else=0; and officers of another race =1, else=0. White officers is the excluded reference category. The number of officers involved in the stop is measured as a dichotomous variable where more than one officer=1 and only one officer=0.

The 2008 PPCS estimates a general size of place measure referred to as a core-based statistical area (CBSA). Drivers are matched with one of three categories of residence: in a CBSA and in the principal city; in a CBSA but not in the principal city; and not in a CBSA. From this measure, I construct three dichotomous variables for each of these categories. CBSA, in the principal city is the excluded reference category. In addition to CBSA status, the 2008 PPCS collects info on whether the traffic stop took place where the driver lives. Respondents can specify if the stop took place in their city/town/village of residence, in a city/town/village but not their residence, or not in a city/town/village. I construct three dichotomous measures for each
residence category. Stops that occur in a city/town/village but not the driver's residence is the excluded reference category.

Finally, the PPCS asks respondents how often they drive. I code three dichotomous measures of driving frequency: drivers who report driving every day; drivers who report driving a few days a week; and drivers who report driving either a few days a month, a few times a year, or almost never. Drivers who report driving almost every day is the excluded reference category.

**Analysis**

I use multinomial logistic regression to examine relative importance of legal and extralegal factors in stop outcomes and binary logistic regression to analyze the factors associated with the reason for the stop. Analyses of traffic stop outcomes using binary logistic regression techniques have been increasingly employed in recent research (for examples see Engel and Calnon 2004; Gilliard-Matthews et al. 2008; Lundman and Kaufman 2003; Lundman 2004; Worrall 2006). Binary regression techniques allow estimation of the likelihood of some event that has only two possible outcomes (i.e., happened or did not happen) and are useful in the analysis of discrete traffic stop outcomes (Pampel 2000).

Multinomial logit is an appropriate technique for categorical variables as well, but unlike binary logistic regression it allows for estimation of dependent variables with more than two categories. This technique is a good fit for traffic stop analysis because police are routinely confronted with multiple decisions in initiating, investigating and resolving traffic stops. Because multiple outcomes are possible in a traffic stop, multinomial logistic regression can provide a more nuanced framework of trends in traffic stop data than binary logistic models.

Ordered probit analysis also considers multiple-category dependent variables. Unlike multinomial logit, however, ordered probit assumes that dependent variable categories are
inherently rank ordered. Traffic stop outcomes are arguably rank ordered in terms intrusiveness/seriousness. For example, drivers who only receive a verbal warning in a stop for speeding experience less police intrusion than drivers who are searched in a stop for speeding. What makes this assumption problematic for the ordered probit technique, however, is that it is not clear if degrees of intrusiveness change uniformly across outcome categories. In other words, is the step up in the effect of legal, extralegal and control factors between receiving a warning and receiving a citation the same as the step up in the effect of those factors between receiving a citation and being arrested? Intuitively, it makes sense that a warning is less intrusive/serious than an arrest. What is not clear is how much more intrusive/serious an arrest is over a warning, nor if the effects of the independent variables vary in degrees between outcome categories. For these reasons, I limit my analyses to non-ordered multinomial logistic models of stop outcomes.
Chapter 5 - FINDINGS

Descriptive statistics for all measures are reported in Table 5.1. A citation only was the most common reported stop outcome (54%), followed by a warning only or no reported outcome (41%), an arrest only or an arrest and a search in the same stop (3%), and finally searches with either a ticket or a warning in the same stop, but no arrest (1%). This pattern is consistent with previous literature which consistently finds that more serious outcomes (e.g., searches and arrests) also tend to be the most infrequent traffic stop outcomes (Engel and Calnon 2004; Lundman 2004). For the discretionary stops model, drivers who reported being stopped for a discretionary reason (i.e., a vehicle defect, record check, or seatbelt violation) made up 25 percent of the sample compared to 75 percent who reported being stopped for a non-discretionary reason (i.e., drunk driver check lane, speeding, stop sign/light or turning/lane violation).

Women made up 42 percent of drivers stopped by the police and the average age of stopped drivers was roughly 41 years. White drivers made up 76 percent of the sample (44% white men; 32% white women), black drivers 9 percent (5% black men; 4% black women), Hispanic drivers 11 percent (7% Hispanic men; 4% Hispanic women) and drivers of "other" races/ethnicities 4 percent (3% men of other races; 1% women of other races).

The most common reason for a traffic stop was speeding (52%). The average number of prior police contacts in the previous 12 months reported by stopped drivers was 1.36. The average length of the stop was 11.83 minutes long. 31 percent of stopped drivers reported being stopped at night and 30 percent reported having passengers in the vehicle at the time of the stop. Only 1 percent of stopped drivers reported arguing, cursing, insulting, or verbally threatening the police.
This research is primarily interested in how driver race and sex, particularly the intersection of race and sex, affects police decisions to investigate and resolve traffic stops. For stop outcomes, hypothesis 1a predicts that minority drivers will have a greater likelihood than white drivers of being cited, arrested, and searched in traffic stops as opposed to being warned or reporting no outcome. Hypothesis 2a predicts that focal concerns measures will mediate the (independent) effects of driver race and sex on traffic stop outcomes. Tables 5.2 and 5.3 present bivariate analyses between driver characteristics and stop outcome categories. Tables 5.4 through 5.6 present the results of six multinomial logistic regression models testing Hypotheses 1a and 2a. Tables 5.7 through 5.9 present the results of six multinomial logistics models testing Hypothesis 1b and 2b, which include interactions terms for driver race and sex. Finally, Hypothesis 3a predicts that minority drivers will be more likely to be stopped for discretionary reasons compared to white drivers and Hypothesis 3b predicts that minority men drivers will be more likely to be stopped for more discretionary reasons compared to white men drivers and women drivers of any race/ethnicity. Table 5.10 presents the results of 3 binary logistic regression models testing these hypotheses.

Table 5-1 Descriptive Statistics, Police Public Contact Survey, 2008 (n=4160)

<table>
<thead>
<tr>
<th>Measures</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
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<tr>
<td><strong>Officer Action</strong></td>
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<tr>
<td><em>Stop Outcome</em></td>
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<td>3</td>
<td>.64</td>
<td>.64</td>
</tr>
<tr>
<td>-Warning only/no outcome (reference)</td>
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<td>1</td>
<td>.43</td>
<td>.49</td>
</tr>
<tr>
<td>-Citation only</td>
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<td>1</td>
<td>.53</td>
<td>.50</td>
</tr>
<tr>
<td>-Search and combo</td>
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<td>.02</td>
<td>.13</td>
</tr>
<tr>
<td>-Arrest and combo</td>
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<td>1</td>
<td>.02</td>
<td>.15</td>
</tr>
<tr>
<td>*<em>Reason for Stop (n=3648)</em></td>
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<td>-Discretionary</td>
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**Driver Characteristics**
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</tr>
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<td>.31</td>
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<tr>
<td>Other</td>
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<td>.20</td>
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**Intersection of Driver Race & Sex**

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<td>White men (reference)</td>
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<td>.43</td>
<td>.50</td>
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<td>.21</td>
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<td>.04</td>
<td>.20</td>
</tr>
<tr>
<td>Hispanic men</td>
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<td>.25</td>
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<tr>
<td>Hispanic women</td>
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<td>1</td>
<td>.05</td>
<td>.20</td>
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**Focal Concerns**

**Blameworthiness**

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<td>.49</td>
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<td>Vehicle defect</td>
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<td>.11</td>
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<td>Record check</td>
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<td>Drunk driver check lane</td>
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<td>.14</td>
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<td>Seatbelt violation</td>
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<td>.04</td>
<td>.19</td>
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<tr>
<td>Illegal turn/lane violation</td>
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<td>.07</td>
<td>.25</td>
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<tr>
<td>Stop light/sign</td>
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<td>1</td>
<td>.09</td>
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<tr>
<td>Other traffic offense</td>
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<td>.09</td>
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**Dangerousness**

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<tbody>
<tr>
<td># of prior contacts</td>
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<td>1.04</td>
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<tr>
<td>Driver argued/threatened police</td>
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<td>1</td>
<td>.01</td>
<td>.11</td>
</tr>
<tr>
<td>Passengers in vehicle</td>
<td>0</td>
<td>1</td>
<td>.30</td>
<td>.46</td>
</tr>
</tbody>
</table>

**Practical Constraints**

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</thead>
<tbody>
<tr>
<td>Length of stop in minutes</td>
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<td>200</td>
<td>11.83</td>
<td>11.28</td>
</tr>
<tr>
<td>Stopped at night</td>
<td>0</td>
<td>1</td>
<td>.31</td>
<td>.46</td>
</tr>
</tbody>
</table>
Controls

|                                                                 | 0 | 1 | .91 | .29 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
|-----------------------------------------------------------------|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Drives almost every day (reference)                             | 0 | 1 | .91 | .29 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
| Drives few times a week                                         | 0 | 1 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
| Drives few times a month/yr                                     | 0 | 1 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
| Single officer (reference)                                      | 0 | 1 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
| Multiple officers                                               | 0 | 1 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
| White officer (reference)                                       | 0 | 1 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
| Black officer                                                   | 0 | 1 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
| Other race officer                                              | 0 | 1 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
| CBSA, principal city (reference)                                | 0 | 1 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
| CBSA, not principal city                                        | 0 | 1 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
| Not in CBSA                                                     | 0 | 1 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
| Resident where stopped                                          | 0 | 1 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
| Not a resident where stopped                                    | 0 | 1 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |
| (reference)                                                     | 0 | 1 | .07 | .25 | .02 | .12 | .85 | .36 | .15 | .35 | .05 | .21 | .11 | .24 | .27 | .44 | .60 | .49 | .13 | .33 | .52 | .50 | .33 | .47 | .15 | .35 |

*Analysis of discretionary stops was restricted to a smaller population of stopped drivers due to the exclusion of stops for miscellaneous violations*

Stop Outcomes

To explore the relationship between stop outcomes and race/ethnicity, I began by running bivariate correlations of select driver characteristics and stop outcomes. Tables 5.2 and 5.3 present the zero order correlation matrices for driver race/ethnicity, driver sex, and the four mutually exclusive stop outcome categories (see Table 4.2 and corresponding discussion for a more in-depth explanation of these categories). Table 5.2 presents race and sex independent from one another and Table 5.3 includes the interaction terms for driver race and sex. There are several findings of note in these bivariate analyses. Consistent with hypothesis one, findings from Table 5.2 show that minority drivers are more likely to be positively associated with more serious stop outcomes and that white drivers are more likely to be positively associated with less
serious outcomes (i.e., warnings only or no other outcome). Black drivers were positively associated with stops resulting in a search or an arrest as the most severe outcome and Hispanic drivers were positively associated with stops resulting in a citation only, as were drivers of other races/ethnicities. In contrast, black, Hispanic and drivers of other races were all negatively associated with stops resulting in a warning or no other outcome. Contrary to the assumption in hypothesis one, however, Hispanic and drivers of other races were not positively associated with stops resulting in searches or arrests, the most serious stop outcomes. Women drivers were positively related to less serious outcomes and negatively related to more serious outcomes, including searches and arrests. Men were the exact opposite (not shown in table).

Table 5-2 Correlation Matrix: Stop Outcomes, Driver Race and Sex (n=4160)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Warn</td>
<td>.43</td>
<td>.49</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Cite</td>
<td>.53</td>
<td>.50</td>
<td>-92*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Search</td>
<td>.02</td>
<td>.13</td>
<td>-12*</td>
<td>-15*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Arrest</td>
<td>.02</td>
<td>.15</td>
<td>-13*</td>
<td>-16*</td>
<td>-02</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Female</td>
<td>.44</td>
<td>.50</td>
<td>03*</td>
<td>-09*</td>
<td>-06*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. White</td>
<td>.76</td>
<td>.43</td>
<td>10*</td>
<td>-08</td>
<td>-06*</td>
<td>-02</td>
<td>-002</td>
<td>1.00</td>
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<tr>
<td>7. Black</td>
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<td>.29</td>
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<td>1.00</td>
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<td>8. Hisp</td>
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<td>.31</td>
<td>-06*</td>
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<td>-07*</td>
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</table>

*p<.05 | two-tailed test

Table 5.3 presents some interesting changes to those findings reported in Table 5.2. White women drivers were the only group of women to retain the positive relationship with stops resulting in warnings/no other outcome (Hispanic women were even negatively related to warnings). Likewise, white women were the only group of women drivers to remain negatively associated with stops resulting in more serious outcome categories. Black and Hispanic women were positively associated with stops resulting in a citation only, but did not show any significant relationship with searches or arrests. Both black and Hispanic men were positively associated...
with experiencing a search and both white and black men drivers were positively associated with stops resulting in an arrest.

Table 5-3 Correlation Matrix: Stop Outcomes, Race and Sex Interaction (n=4160)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
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<th>9</th>
<th>10</th>
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<td>1.00</td>
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<td>3. Search</td>
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<td>-15*</td>
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<td>5. White female</td>
<td>.33</td>
<td>.47</td>
<td>.08*</td>
<td>-04*</td>
<td>-08*</td>
<td>-05*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>6. White male</td>
<td>.43</td>
<td>.49</td>
<td>.02</td>
<td>-03*</td>
<td>.02</td>
<td>.03*</td>
<td>-60*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Black female</td>
<td>.04</td>
<td>.20</td>
<td>-03</td>
<td>.03*</td>
<td>-01</td>
<td>&lt;.01</td>
<td>-15*</td>
<td>-18*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Black male</td>
<td>.05</td>
<td>.22</td>
<td>-02</td>
<td>-02</td>
<td>.10*</td>
<td>.05*</td>
<td>-16*</td>
<td>-20*</td>
<td>-05*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Hisp female</td>
<td>.05</td>
<td>.21</td>
<td>-05*</td>
<td>.06*</td>
<td>-02</td>
<td>-01</td>
<td>-15*</td>
<td>-19*</td>
<td>-05*</td>
<td>-05*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Hisp male</td>
<td>.06</td>
<td>.24</td>
<td>-04*</td>
<td>.02</td>
<td>.05*</td>
<td>.01</td>
<td>-18*</td>
<td>-22*</td>
<td>-05*</td>
<td>-06*</td>
<td>-06*</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Other female</td>
<td>.02</td>
<td>.20</td>
<td>-01</td>
<td>.02</td>
<td>-01</td>
<td>-10*</td>
<td>-12*</td>
<td>-02</td>
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<td>-03*</td>
<td>-04*</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Other male</td>
<td>.02</td>
<td>.15</td>
<td>-07*</td>
<td>.07*</td>
<td>.003</td>
<td>-.003</td>
<td>-11*</td>
<td>-13*</td>
<td>-03*</td>
<td>-04*</td>
<td>-03*</td>
<td>-04*</td>
<td>-02</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*p<.05 | two-tailed test

From the bivariate results we begin to get a sense of how race and stop outcomes might be connected, as well as how the intersection of race and sex might change the nature of that connection. But this is only part of the story. Multivariate analyses are needed to better isolate the independent effects of race/ethnicity, sex and gender on stop outcomes and in light of controls and other theoretically relevant factors. Table 5.4 presents the results from the first and
second multinomial logistic regression models. Model 1 contains control factors only. These are common factors that have been linked to police decision making in previous literature (Harris 2002; Withrow 2006), but are not included as independent measures of the theoretical framework I outlined above.

In the first multinomial model, driving frequency significantly affected all stop outcomes. Drivers who report driving a few days a week are significantly less likely than drivers who report driving everyday to be cited rather than warned only or report no other traffic stop outcome (hereafter referred to simply as "warned"). Drivers who report driving much less, from a few days a month to just a few times a year to almost never, are significantly more likely to be searched and arrested rather than warned in stops compared to those who report driving every day.

The race of officers significantly affected stops resulting in citations and searches, but not stops involving an arrest. Specifically, black officers and officers of "other" races are significantly more likely to cite rather than warn drivers than are white officers, and officers of other races are also more likely than white officers to search rather than just warn drivers. When there is more than one officer present during a traffic stop, the stop is more likely to end in citations, searches or arrests than a warning only.

A few community factors significantly affected stop outcomes. Drivers who reside in a CBSA but not in the principal city, and drivers who do not reside in a CBSA, are less likely than drivers who reside in a principal city CBSA to receive a citation versus a warning. CBSA status indicates where a driver lives, not necessarily where the stop occurred. To account for this discrepancy, the PPCS also asks drivers if the stop happened in the city/town where they live. Stops that occurred in a driver's home town/city, and stops that did not occur in a town/city at all
(e.g., rural areas or highways not in a city), are significantly less likely than stops that occur in the city/town where a driver lives to garner a citation versus a warning.

In all, these community characteristic findings suggests that, all else being equal, a driver is more likely to receive a citation versus a warning when they are away from home and in a large city. No community characteristics were significantly related to being arrested versus getting a warning, and only drivers not living in a CBSA were significantly less likely to be searched rather than warned compared to drivers living in a principal city CBSA.

Table 5-4 Multinomial Logistic, Models 1 & 2. Controls and Driver Characteristics. Beta Coefficients and Odds Ratios Reported (N=4,160).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Citation v. Warning b(O.R.)</th>
<th>Search v. Warning b(O.R.)</th>
<th>Arrest v. Warning b(O.R.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 1</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr few days week</td>
<td>-.368(.692)**</td>
<td>-.337(.714)*</td>
<td>.329(1.389)</td>
</tr>
<tr>
<td>Dr few days m/yr</td>
<td>-.056(.946)</td>
<td>-.119(.888)</td>
<td>1.922(6.838)**</td>
</tr>
<tr>
<td>Multiple officers</td>
<td>-.670(.512)**</td>
<td>-.732(.481)**</td>
<td>1.153(3.167)**</td>
</tr>
<tr>
<td>Black officer(s)</td>
<td>.447(1.564)**</td>
<td>.398(1.489)*</td>
<td>-.218(8.04)</td>
</tr>
<tr>
<td>Othr race off(s)</td>
<td>.326(1.385)*</td>
<td>.312(1.366)*</td>
<td>.912(2.490)**</td>
</tr>
<tr>
<td>CBSA, n.p.</td>
<td>-.255(.775)**</td>
<td>-.182(.833)*</td>
<td>-.202(.817)</td>
</tr>
<tr>
<td>Not in CBSA</td>
<td>-.786(4.56)**</td>
<td>-.713(4.90)**</td>
<td>-.776(4.60)*</td>
</tr>
<tr>
<td>Resident w/stp</td>
<td>-.328(.720)**</td>
<td>-.340(.712)**</td>
<td>.180(1.197)</td>
</tr>
<tr>
<td>Not stp in city</td>
<td>-.215(.807)*</td>
<td>-.229(.795)*</td>
<td>.294(1.342)</td>
</tr>
<tr>
<td>Driver</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>—</td>
<td>-.083(.920)</td>
<td>—</td>
</tr>
<tr>
<td>Black</td>
<td>—</td>
<td>.249(1.282)*</td>
<td>—</td>
</tr>
<tr>
<td>Hispanic</td>
<td>—</td>
<td>.371(1.449)**</td>
<td>—</td>
</tr>
<tr>
<td>Other race</td>
<td>—</td>
<td>.717(2.048)**</td>
<td>—</td>
</tr>
<tr>
<td>Age</td>
<td>—</td>
<td>-.011(.989)**</td>
<td>—</td>
</tr>
<tr>
<td>Employed</td>
<td>—</td>
<td>-.117(.889)</td>
<td>—</td>
</tr>
</tbody>
</table>

Model χ² 290.058** | 477.399**  
Pseudo R² .082       | .132
Model 2 features the addition of driver characteristics. Net of controls, the race and sex of drivers significantly affected stop outcomes. Women's likelihood of being cited versus warned was not significantly different than men's, but women were significantly less likely than men to be searched or arrested in a traffic stop compared to warned.

There were significant disparities between minority drivers and white drivers for all stop outcomes, though the effects were not the same for all minority drivers, nor were the effects the same for all outcomes. Black drivers, for example, were significantly more likely than white drivers to be cited and searched compared to warned, but not arrested compared to warned. Hispanic drivers were significantly more likely than white drivers to be cited rather than warned, but not searched or arrested compared to warned. Likewise, drivers of other races were significantly more likely to be cited rather than warned compared to white drivers, but not significantly different than white drivers in their chances of being searched or arrested versus warned. In addition to race and sex, driver age also had significant effects on stop outcomes. As driver age increases, the likelihood of being cited, searched or arrested versus warned decreases.

Hypothesis 1a predicted that minority drivers would be more likely than white drivers to experience more serious traffic stop outcomes. The findings in Model 2 provide mixed support for this hypothesis. Minority drivers were significantly more likely to be cited compared to warned, but not significantly more likely to be arrested versus warned compared to white drivers. Consistent with Hypothesis 1a, black drivers were nearly 4 times as likely as white drivers to be searched versus warned only, net of control factors. Hispanic drivers and drivers of other races, however, were no more likely than white drivers to be searched or arrested compared to warned.
Table 5.5 presents the results of Models 3 and 4, which contains the first two sets of focal concerns measures in addition to driver characteristics and controls. Model 3 features the addition of driver blameworthiness measured by the legal reason for the traffic stop. Possible reasons for the stop include speeding, vehicle defects, record checks, drunk driver check lanes, seatbelt violations, turning and lane violations, stop sign and stop light violations, and other, miscellaneous traffic offenses; speeding is the reference category. Model 4 features the addition of safety and dangerousness measures. This set of focal concerns is operationalized by the number of the driver's prior police contacts (other than the present traffic stop), the driver's demeanor (i.e., driver argued, cursed, or threatened the police), and the presence of bystanders as passengers in the vehicle being stopped.

In Model 3, all reasons for the stop (with the exception of seatbelt violations) were significantly less likely to result in a citation versus a warning compared to speeding. Seatbelt violations were no more or less likely than speed limit violations to result in a citation versus a warning. Traffic stops for drunk driver roadside checks had the lowest likelihood of resulting in a citation versus a warning. This makes sense since most who go through a roadside check lane are not being stopped because they broke a traffic law. Rather, check lanes are typically designed to stop everyone who comes through a particular area, not because of individual suspicion, but because of a general suspicion that drunk drivers are travelling through that area at that time. Traffic stops for miscellaneous offenses were significantly more likely than stops for speeding to result in an arrest rather than a warning. No other reason for the stop was significantly related to being searched or arrested versus warned. This may be expected because so few stops lead to a search or an arrest compared to citations and warnings in the first place.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Citation v. Warning</th>
<th>Search v. Warning</th>
<th>Arrest v. Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b(O.R.)</td>
<td>b(O.R.)</td>
<td>b(O.R.)</td>
</tr>
<tr>
<td></td>
<td>Model 3</td>
<td>Model 4</td>
<td>Model 3</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drives week</td>
<td>-.30(.74)*</td>
<td>-.30(.74)*</td>
<td>.52(1.67)</td>
</tr>
<tr>
<td>Drives m/yr</td>
<td>-.14(.87)</td>
<td>-.14(.87)</td>
<td>1.46(4.29)**</td>
</tr>
<tr>
<td>Multiple off.</td>
<td>-.43(.65)**</td>
<td>-.40(.67)**</td>
<td>.91(2.48)**</td>
</tr>
<tr>
<td>Black off.</td>
<td>.39(1.48)*</td>
<td>.38(1.46)*</td>
<td>-.75(.47)</td>
</tr>
<tr>
<td>Oth race off.</td>
<td>.36(1.4)*</td>
<td>.37(1.45)*</td>
<td>1.08(2.95)**</td>
</tr>
<tr>
<td>CBSA, n.p.</td>
<td>-.20(.82)*</td>
<td>-.20(.82)*</td>
<td>.14(1.15)</td>
</tr>
<tr>
<td>Not in CBSA</td>
<td>-.74(.48)**</td>
<td>-.74(.48)**</td>
<td>-.43(.65)</td>
</tr>
<tr>
<td>Resident</td>
<td>-.21(.83)**</td>
<td>-.19(.82)*</td>
<td>.27(1.30)</td>
</tr>
<tr>
<td>Not stp in city</td>
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<td>-.16(.85)</td>
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</tr>
<tr>
<td>Driver</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>-.15(.86)*</td>
<td>-.16(.85)*</td>
<td>-1.95(1.14)**</td>
</tr>
<tr>
<td>Black</td>
<td>.31(1.36)*</td>
<td>.32(1.38)*</td>
<td>1.31(3.69)**</td>
</tr>
<tr>
<td>Hispanic</td>
<td>.49(1.63)**</td>
<td>.49(1.63)**</td>
<td>.38(1.46)</td>
</tr>
<tr>
<td>Other race</td>
<td>.69(1.99)**</td>
<td>.68(1.97)**</td>
<td>.46(1.58)</td>
</tr>
<tr>
<td>Age</td>
<td>-.01(.99)**</td>
<td>-.01(.99)**</td>
<td>-.07(.93)**</td>
</tr>
<tr>
<td>Employed</td>
<td>-.16(.85)</td>
<td>-.14(.87)</td>
<td>-.47(.63)</td>
</tr>
<tr>
<td>Focal Concerns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defect</td>
<td>-1.42(.24)**</td>
<td>-1.41(.24)**</td>
<td>.20(1.22)</td>
</tr>
<tr>
<td>Record chk</td>
<td>-1.87(.15)**</td>
<td>-1.85(.16)**</td>
<td>-.65(.52)</td>
</tr>
<tr>
<td>Drunk dr chk</td>
<td>-2.25(.11)**</td>
<td>-2.27(.10)**</td>
<td>-1.48(.23)</td>
</tr>
<tr>
<td>Seatbelt</td>
<td>.25(1.29)</td>
<td>.25(1.29)</td>
<td>.65(1.91)</td>
</tr>
<tr>
<td>Turn/lane</td>
<td>-.58(.56)**</td>
<td>-.60(.55)**</td>
<td>.13(1.14)</td>
</tr>
<tr>
<td>Stp sign/light</td>
<td>-.42(.66)**</td>
<td>-.45(.64)**</td>
<td>-.27(.76)</td>
</tr>
<tr>
<td>Other offense</td>
<td>-1.02(.36)**</td>
<td>-1.04(.36)**</td>
<td>-.21(.81)</td>
</tr>
<tr>
<td># of contacts</td>
<td>—</td>
<td>-.13(.88)**</td>
<td>—</td>
</tr>
<tr>
<td>Demeanor</td>
<td>—</td>
<td>1.55(4.73)**</td>
<td>—</td>
</tr>
<tr>
<td>Passengers</td>
<td>—</td>
<td>.094(1.10)</td>
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</tr>
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</table>

Model $\chi^2$ | Model 3 | Model 4 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>874.252**</td>
<td></td>
<td>919.327**</td>
</tr>
</tbody>
</table>

Pseudo $R^2$ | .231 | .242 |

*p<.05 | **p<.01
Hypothesis 2a predicts that focal concern factors will mediate any race and sex differences in the likelihoods of experiencing more serious stop outcomes. If focal concern measures mediate race and sex, the relative strength of driver race and sex on stop outcomes should decrease after accounting for focal concern measures. The results of Model 3 show mixed support for this hypothesis. Women, for example, became significantly less likely than men to receive a citation versus a warning in Model 3. In Model 2, before including the reason for the stop, women were not significantly different from men in their chances of being cited versus warned. Additionally, except for drivers of "other" races, adding reasons for the stop affected the strength of driver race and ethnicity on citations. Coefficients for black and Hispanic drivers became larger for citations versus warnings, though the direction and overall significance did not change. This suggests that blameworthiness as measured by the traffic offense/reason for the stop does not mediate the effects of driver race and sex on citations compared to warnings.

In support of Hypothesis 2a, the strength of the relationship between black drivers being searched instead of warned only compared to white drivers became weaker after adding reasons for the stop in Model 3. This suggests that at least part of effect for black drivers' greater likelihood of being searched versus warned in a traffic stop is being mediated by the reason they are stopped. In contrast, after accounting for reason for the stop, black drivers became significantly more likely than white drivers to be arrested rather than warned. Before including reasons for the stop, there were no significant differences in black drivers' and white drivers' odds of being arrested versus warned.

Model 4 includes focal concerns of safety and dangerousness. This set of focal concerns are measured by the number of a driver's prior contacts with the police, the presence of
bystanders/passengers in the vehicle at the time of the stop, and the driver's demeanor toward the officer(s) measured as arguing, cursing or threatening the police. The number of prior contacts with the police was significantly related driver's likelihood of being cited versus warned—as the number of prior contacts increases, the likelihood of receiving a citation versus a warning is reduced by about 12 percent. The number of prior contacts with the police was not significantly related to the likelihood of being searched or arrested versus warned. Furthermore, having passengers in the vehicle did not significantly affect the driver's likelihood of being cited, searched or arrested compared to warned.

Driver demeanor was strongly related to the driver's likelihood of experiencing a more serious traffic stop outcome. Driver demeanor is measured dichotomously by whether the driver argued, cursed, or verbally threatened the officer during the stop. Drivers who reported arguing, cursing or threatening the police were about 4.7 times more likely to be cited compared to warned, 14.9 times more likely to be searched compared to warned, and 18.9 times more likely to be arrested compared to warned than drivers who did not argue, curse, or verbally threaten the police.

Hypothesis 2a predicts that the effects of measures of blameworthiness and safety/dangerousness will mediate the effects of driver race and ethnicity. The effects of driver race and ethnicity on citations versus warnings were minimal between Models 3 and 4 when accounting for the reason for the stop. The coefficients for Hispanic and other race drivers got smaller in Model 4, but the change was negligible and the direction and overall significance did not change. The coefficient for black drivers who were cited got larger between Model 3 and 4—though again, the overall strength of this change was small and did not change in direction or significance.
The effects of safety/dangerousness measures, particularly driver demeanor, on the effects of driver race/ethnicity were more pronounced for stops resulting in searches and arrests versus warnings than citations versus warnings. Black drivers were 3.69 times more likely than white drivers to be searched versus warned in Model 3, but 3.53 times as likely in Model 4. More importantly, the significance of driver race effects dropped out between Models 3 and 4 for black drivers reporting an arrest compared to a warning. Consistent with Hypothesis 2a, the effects of race for black drivers appears to be mediated by focal concern measures of safety and dangerousness for stops resulting in an arrest versus a warning. The addition of both sets of focal concerns measuring blameworthiness and safety/dangerousness had little impact on the effects of driver age, employment or control factors.

Table 5.6 presents the results of Model 5 and 6, which adds two measures of practical constraints in traffic stops. The first constraint, stops that occur at night, is featured in Model 5 while the second constraint, the length of the traffic stop in minutes, is introduced in Model 6. I separate these measures between Models because of the predicted direction of the effects each should have on stop outcomes. Steffensmeier et al. (1998) argue that practical constraints, limited time and information, increase the likelihood that criminal justice actors rely on racialized stereotypes when making decisions. Stops at night and the time length of the stop are reasonable measures of practical constraints in traffic stops. Stops at night should increase the effect of driver race on serious stop outcomes. In contrast, the longer the stop the effect of race on stop outcomes should decrease. To better isolate the independent effects of each measure on the effects of driver race and ethnicity, I introduce them one at a time in separate models.

In Model 5, drivers who were stopped at night were significantly less likely to receive a citation and significantly more likely to be arrested versus warned or no other outcome compared
to drivers stopped during day time. Stops at night were not significantly related to searches.

Adding this variable had no significant impact on the effects of driver race and ethnicity. Adding stops at night did, however, increase the strength of the effect of driver demeanor on citations and slightly reduced the strength of the effect of driver demeanor on arrest.

**Table 5-6** Multinomial Logit. Stop Outcomes, Models 5 & 6. Practical Constraints. Beta Coefficients and Odds Ratios Reported (N=4,160).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Citation v. Warning</th>
<th>Search v. Warning</th>
<th>Arrest v. Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b(O.R.)</td>
<td>b(O.R.)</td>
<td>b(O.R.)</td>
</tr>
<tr>
<td></td>
<td>Model 5</td>
<td>Model 6</td>
<td>Model 5</td>
</tr>
</tbody>
</table>

**Controls**

<table>
<thead>
<tr>
<th></th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drives week</td>
<td>-0.283(.753)*</td>
<td>-0.272(.762)</td>
<td>0.55(1.73)</td>
<td>0.469(1.598)</td>
<td>-0.42(0.66)</td>
<td>-0.54(0.58)</td>
</tr>
<tr>
<td>Drives m/yr</td>
<td>-0.101(.904)</td>
<td>-0.257(.77)</td>
<td>1.43(4.19)**</td>
<td>1.346(3.843)*</td>
<td>0.596(1.816)</td>
<td>0.56(1.74)</td>
</tr>
<tr>
<td>Multiple off.</td>
<td>-0.352(0.70)**</td>
<td>-0.40(0.67)**</td>
<td>0.87(2.39)**</td>
<td>0.523(1.688)</td>
<td>1.20(3.33)**</td>
<td>0.82(2.26)**</td>
</tr>
<tr>
<td>Black off.</td>
<td>0.360(1.433)*</td>
<td>0.29(1.34)</td>
<td>-0.649(0.52)</td>
<td>-0.411(0.663)</td>
<td>0.412(1.510)</td>
<td>0.57(1.77)</td>
</tr>
<tr>
<td>Oth race off.</td>
<td>0.36(1.44)*</td>
<td>0.40(1.49)*</td>
<td>1.07(2.93)**</td>
<td>1.23(3.41)**</td>
<td>0.323(1.382)</td>
<td>0.312(1.366)</td>
</tr>
<tr>
<td>CBSA, n.p.</td>
<td>-0.219(0.80)**</td>
<td>-0.20(0.81)</td>
<td>0.125(1.133)</td>
<td>0.252(1.286)</td>
<td>-0.168(0.845)</td>
<td>0.081(0.922)</td>
</tr>
<tr>
<td>Not in CBSA</td>
<td>-0.734(0.48)**</td>
<td>-0.70(0.495)**</td>
<td>-0.466(0.627)</td>
<td>-0.286(0.751)</td>
<td>-0.388(0.678)</td>
<td>-0.423(0.655)</td>
</tr>
<tr>
<td>Resident</td>
<td>-0.193(0.82)*</td>
<td>-0.18(0.837)*</td>
<td>0.288(1.333)</td>
<td>0.511(1.667)</td>
<td>-0.428(0.652)</td>
<td>-0.278(0.757)</td>
</tr>
<tr>
<td>Not stp in city</td>
<td>-0.17(0.85)</td>
<td>-0.088(0.916)</td>
<td>0.276(1.318)</td>
<td>0.709(2.032)</td>
<td>-0.519(0.595)</td>
<td>0.011(1.011)</td>
</tr>
</tbody>
</table>

**Driver**

<table>
<thead>
<tr>
<th></th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>-0.211(0.81)**</td>
<td>-0.15(0.86)</td>
<td>-1.94(1.44)**</td>
<td>-1.82(1.16)**</td>
<td>-0.87(0.42)</td>
<td>-0.57(0.57)*</td>
</tr>
<tr>
<td>Black</td>
<td>0.36(1.44)**</td>
<td>0.270(1.31)*</td>
<td>1.26(3.52)**</td>
<td>1.06(2.89)**</td>
<td>0.567(1.76)</td>
<td>0.472(1.60)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.47(1.60)**</td>
<td>0.42(1.52)</td>
<td>0.39(1.48)</td>
<td>0.37(1.45)</td>
<td>0.12(1.12)</td>
<td>0.028(1.03)</td>
</tr>
<tr>
<td>Other race</td>
<td>0.69(1.99)**</td>
<td>0.65(1.92)</td>
<td>0.44(1.55)</td>
<td>0.54(1.71)</td>
<td>-0.51(0.60)</td>
<td>-1.09(0.34)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.02(0.99)**</td>
<td>-0.01(0.99)**</td>
<td>-0.07(0.93)**</td>
<td>-0.07(0.94)**</td>
<td>-0.03(0.97)**</td>
<td>-0.03(0.97)**</td>
</tr>
<tr>
<td>Employed</td>
<td>-0.12(0.89)</td>
<td>-0.09(0.91)</td>
<td>-0.46(0.64)</td>
<td>-0.39(0.68)</td>
<td>-0.51(0.60)*</td>
<td>-0.42(0.66)</td>
</tr>
</tbody>
</table>

**Focal Concerns**

*Blameworthiness*

<table>
<thead>
<tr>
<th></th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defect</td>
<td>-1.24(0.29)**</td>
<td>-1.33(2.27)**</td>
<td>0.27(1.31)</td>
<td>-0.14(0.87)</td>
<td>-0.21(0.81)</td>
<td>-0.59(0.55)</td>
</tr>
<tr>
<td>Record chk</td>
<td>-1.88(0.15)**</td>
<td>-1.86(0.16)**</td>
<td>-0.59(0.55)</td>
<td>-0.47(0.63)</td>
<td>-0.77(0.46)</td>
<td>-1.26(0.28)</td>
</tr>
<tr>
<td>Drunk dr chk</td>
<td>-2.06(0.13)**</td>
<td>-1.89(0.15)**</td>
<td>-1.44(0.24)</td>
<td>-0.84(0.43)</td>
<td>0.23(1.26)</td>
<td>0.62(1.87)</td>
</tr>
<tr>
<td>Seatbelt</td>
<td>0.14(1.155)</td>
<td>0.16(1.17)</td>
<td>0.65(1.91)</td>
<td>0.94(2.56)</td>
<td>0.69(0.995)</td>
<td>1.00(2.73)</td>
</tr>
<tr>
<td>Turn/lane</td>
<td>-0.55(0.58)**</td>
<td>-0.63(0.54)**</td>
<td>0.11(1.11)</td>
<td>0.01(1.01)</td>
<td>0.58(1.79)</td>
<td>0.66(1.93)</td>
</tr>
<tr>
<td>Sign/light</td>
<td>-0.37(0.69)**</td>
<td>-0.36(0.68)**</td>
<td>-0.27(0.76)</td>
<td>-0.16(0.86)</td>
<td>-0.18(0.84)</td>
<td>-0.07(0.93)</td>
</tr>
<tr>
<td>Other offense</td>
<td>-0.98(0.37)**</td>
<td>-1.00(0.37)**</td>
<td>-0.15(0.86)</td>
<td>-0.43(0.65)</td>
<td>0.79(2.21)*</td>
<td>0.59(1.795)</td>
</tr>
</tbody>
</table>

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The coefficient for black drivers increased after adding stops at night into the model for citations versus warnings and increased in significance from the p<.05 to the p<.01 level. However, adding in stops at night decreased the coefficients for black drivers in searches and arrests and for all stop outcomes for Hispanic and other race drivers. While the significance did not change, the strength of female drivers' likelihoods of being cited, searched and arrested versus warned compared to men decreased after adding stops at night to the model.

Table 5.6 also contains the result of Model 6, which includes all independent factors with the inclusion of the length of the stop. The practical constraints of criminal justice decisions, according to Steffensmeier's (1998) focal concerns theory, limit criminal justice actors ability to make fully rational decisions. This increases the influence of stereotypes and preconceptions about race and crime. The police are limited by both time and information constraints, requiring them to make decisions on the fly as "street level bureaucrats" (Mastrofski 2004). While traffic stops are inherently more time limited than courtrooms, for example, focal concerns theory as described above suggests that the shorter the stop, the less time an officer has to make a fully informed, rational decision. This should increase the influence of driver race on officer decisions. The longer the stop, the less the effect of race on stop outcomes. The length of the stop in Model
6 was significant and positively related to stop outcomes. The longer the stop, the higher the likelihood that the driver was cited, searched, arrested compared to being just warned. In addition to significant and positive effects, adding the length of the stop to the model also reduced in strength the effects of driver race on stop outcomes.

The Interaction of Race and Sex in Stop Outcomes

Hypothesis 1b and 2b assess the relationship between the interaction of race and sex on stop outcomes. Tables 5.7 through 5.9 present the results of multinomial models replicating the stop outcome models above but with interaction terms for driver race and sex combined. Table 5.7 presents the results of Models 7 and 8. Model 7 includes control factors only (same controls as Model 1 above), and driver characteristics with race and sex interaction terms are included in Model 8.

Table 5-7 Multinomial Logit. Stop Outcomes, Models 7 & 8. Controls and Driver Characteristics, Race & Sex Interactions. Beta Coefficients and Odds Ratios Reported (N=4,160).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Citation v. Warning b(O.R.)</th>
<th>Search v. Warning b(O.R.)</th>
<th>Arrest v. Warning b(O.R.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 7</td>
<td>Model 8</td>
<td>Model 7</td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drives week</td>
<td>-.368(.692)**</td>
<td>-.337(.714)*</td>
<td>.329(1.389)</td>
</tr>
<tr>
<td>Drives m/yr</td>
<td>-.056(.946)</td>
<td>-.119(.888)</td>
<td>1.922(6.838)**</td>
</tr>
<tr>
<td>Multiple officers</td>
<td>-.670(.512)**</td>
<td>-.732(.481)**</td>
<td>1.153(3.167)**</td>
</tr>
<tr>
<td>Black officer(s)</td>
<td>.447(1.564)**</td>
<td>.398(1.489)*</td>
<td>-.218(.804)</td>
</tr>
<tr>
<td>Other officer(s)</td>
<td>.326(1.385)*</td>
<td>.312(1.366)*</td>
<td>.912(2.490)**</td>
</tr>
<tr>
<td>CBSA, n.p.</td>
<td>-.255(.775)**</td>
<td>-.182(.833)*</td>
<td>-.202(.817)</td>
</tr>
<tr>
<td>Not in CBSA</td>
<td>-.786(.456)**</td>
<td>-.713(.490)**</td>
<td>-.776(.460)*</td>
</tr>
<tr>
<td>Resident</td>
<td>-.328(.720)**</td>
<td>-.340(.712)**</td>
<td>.180(1.197)</td>
</tr>
<tr>
<td>Not stp in city</td>
<td>-.215(.807)*</td>
<td>-.229(.795)*</td>
<td>.294(1.342)</td>
</tr>
<tr>
<td><strong>Driver</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wht female</td>
<td>—</td>
<td>-.132(.876)</td>
<td>—</td>
</tr>
<tr>
<td>Blk male</td>
<td>—</td>
<td>.050(1.051)</td>
<td>—</td>
</tr>
</tbody>
</table>
In Model 2 above, which considered race and sex separately, women drivers' likelihood of being cited versus warned were no different than men's. However, after the inclusion of race and sex interaction terms, significant differences emerged between men's and women's likelihoods of being cited rather than warned. White women and other race women are no more likely to receive a citation versus a warning compared to white men, but black women, Hispanic women, and other race men are all significantly more likely to receive a citations versus a warning compared to white men. For citations, age and all other controls retained similar effects between race and sex interaction and non-interaction models. Furthermore, while women were significantly less likely than men to be searched and arrested versus warned in Model 2, only white women drivers were significantly less likely to experience a search or arrest compared to men in Model 8. Likewise, though black drivers were significantly more likely to be searched rather than warned compared to white drivers in Model 2, only black men are significantly more likely to be searched compared to white men.

Hypothesis 1b predicts that minority men will be significantly more likely to experience more serious traffic stop outcome compared to white men drivers or women of any race/ethnicity. Model 8 presents mixed support for this hypothesis. Contradictory to the
hypothesis, black and Hispanic women were more significantly more likely to experience a
citation versus a warning compared to white men, as were men of "other" races/ethnicities. For
searches, only black men, not Hispanic or other men, were more likely to experience a more
serious outcome compared to white men drivers. For arrests, while white women were
significantly less likely than white men to be arrested versus warned, black men, Hispanic men,
and men of other races were not significantly more likely to experience an arrest versus a
warning. This finding is contrary to what was expected in Hypothesis 1b.

Table 5-8 Multinomial Logit. Stop Outcomes, Models 9 & 10. Blameworthiness and
Dangerousness, Race & Sex Interactions. Beta Coefficients and Odds Ratios Reported
(n=4,160).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Citation v. Warning</th>
<th></th>
<th>Search v. Warning</th>
<th></th>
<th>Arrest v. Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b(O.R.)</td>
<td>b(O.R.)</td>
<td>b(O.R.)</td>
<td>b(O.R.)</td>
<td>b(O.R.)</td>
</tr>
<tr>
<td>Controls</td>
<td>Model 9</td>
<td>Model 10</td>
<td>Model 9</td>
<td>Model 10</td>
<td>Model 9</td>
</tr>
<tr>
<td>Drives week</td>
<td>-.301(.74)*</td>
<td>-.30(.74)*</td>
<td>.52(1.67)</td>
<td>.56(1.75)</td>
<td>-.419(.66)</td>
</tr>
<tr>
<td>Drives m/yr</td>
<td>-.14(.87)</td>
<td>-.14(.867)</td>
<td>1.46(4.29)**</td>
<td>1.41(4.11)**</td>
<td>.62(1.86)</td>
</tr>
<tr>
<td>Mult officers</td>
<td>-.43(.65)**</td>
<td>-.40(.67)**</td>
<td>.91(2.48)**</td>
<td>.87(2.39)**</td>
<td>1.31(3.69)**</td>
</tr>
<tr>
<td>Blk officer(s)</td>
<td>.39(1.48)*</td>
<td>.38(1.46)*</td>
<td>-.751(.47)</td>
<td>-.68(.51)</td>
<td>.28(1.16)</td>
</tr>
<tr>
<td>Othr off(s)</td>
<td>.36(1.44)*</td>
<td>.37(1.45)*</td>
<td>1.08(2.95)**</td>
<td>1.08(2.94)**</td>
<td>.36(1.44)</td>
</tr>
<tr>
<td>CBSA, n.p.</td>
<td>-.19(.82)*</td>
<td>-.20(.82)*</td>
<td>.14(1.15)</td>
<td>.13(1.14)</td>
<td>-.208(.81)</td>
</tr>
<tr>
<td>Not in CBSA</td>
<td>-.74(.48)**</td>
<td>-.74(.48)**</td>
<td>-.43(.65)</td>
<td>-.47(.63)</td>
<td>-.310(.73)</td>
</tr>
<tr>
<td>Resident</td>
<td>-.21(.81)**</td>
<td>-.19(.82)*</td>
<td>.27(1.30)</td>
<td>.30(1.36)</td>
<td>-.39(.68)</td>
</tr>
<tr>
<td>Not stp in city</td>
<td>-.17(.84)</td>
<td>-.16(.85)</td>
<td>.30(1.35)</td>
<td>.31(1.37)</td>
<td>-.51(.60)</td>
</tr>
<tr>
<td>Driver</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wht female</td>
<td>-.19(.83)*</td>
<td>-.21(.82)**</td>
<td>-1.95(.14)**</td>
<td>-1.97(.14)**</td>
<td>-.94(.39)**</td>
</tr>
<tr>
<td>Blk male</td>
<td>.13(1.14)</td>
<td>.12(.12)</td>
<td>1.28(3.61)**</td>
<td>1.21(3.35)**</td>
<td>.61(.83)</td>
</tr>
<tr>
<td>Blk female</td>
<td>.32(1.38)</td>
<td>.34(1.41)</td>
<td>-.91(.40)</td>
<td>-.88(.41)</td>
<td>-.41(.67)</td>
</tr>
<tr>
<td>Hisp male</td>
<td>.34(1.41)*</td>
<td>.34(1.40)*</td>
<td>.29(1.34)</td>
<td>.29(1.34)</td>
<td>-.078(.93)</td>
</tr>
<tr>
<td>Hisp female</td>
<td>.50(1.65)**</td>
<td>.49(1.63)**</td>
<td>-1.47(.23)</td>
<td>-1.49(.23)</td>
<td>-.63(.53)</td>
</tr>
<tr>
<td>Other male</td>
<td>1.12(3.07)**</td>
<td>1.12(3.07)**</td>
<td>.44(1.56)</td>
<td>.47(1.60)</td>
<td>.22(1.25)</td>
</tr>
<tr>
<td>Other female</td>
<td>.11(1.11)</td>
<td>.05(1.05)</td>
<td>-.46(.63)</td>
<td>-.61(.55)</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Table 5.8 presents the results of Models 9 and 10, which introduce measures for blameworthiness and safety/dangerousness for race and sex interaction terms. Like Model 8 compared to Model 2, the relative strength, direction, and significance of the theoretical and control factors remained the same in Models 9 and 10 compared to Models 3 and 4. Compared to speeding, all other reasons for the traffic stop (except seatbelt violations) were significantly less likely to result in citations versus warnings in Models 9 and 10. Driver demeanor, too, continued to be the strongest single predictor of citations, searches and arrests compared to warnings and no other outcome. The differences between models lie primarily in the race and sex interaction terms.
Hypothesis 2b predicts that the interaction effects for driver race and sex will be mediated by focal concerns of blameworthiness and dangerousness. The results of Models 9 and 10 show mixed support for this hypothesis. Most notably, white women drivers became significantly less likely than white men to be cited versus warned and black women drivers became no more likely than white men to be cited versus warned. This suggests that black women's likelihood of being cited versus warned is explained by the reason for the stop. In addition, Hispanic men became significantly more likely than white men to be searched compared to warned. Hispanic women and other race men continued to be significantly more likely than white men to be cited versus searched after reason for the stop was introduced. Likewise, white women continued to be significantly less likely than white men to be searched and arrested versus warned and black men remained significantly more likely to be searched versus warned compared to white men drivers—although the strength of these relationships were weakened slightly after introducing reason for the stop.


<table>
<thead>
<tr>
<th>Variables</th>
<th>Citation v. Warning</th>
<th>Search v. Warning</th>
<th>Arrest v. Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 11</td>
<td>Model 12</td>
<td>Model 11</td>
</tr>
<tr>
<td>Drives week</td>
<td>-.28(.75)*</td>
<td>-.28(.76)</td>
<td>.55(1.73)</td>
</tr>
<tr>
<td>Drives m/yr</td>
<td>-.08(.90)</td>
<td>-.24(.78)</td>
<td>1.43(4.19)**</td>
</tr>
<tr>
<td>Mult officer(s)</td>
<td>-.35(.70)**</td>
<td>-.41(.67)**</td>
<td>.87(2.40)**</td>
</tr>
<tr>
<td>Blk officer(s)</td>
<td>.36(1.44)*</td>
<td>.29(1.34)</td>
<td>-.65(.52)</td>
</tr>
<tr>
<td>Othr race officer(s)</td>
<td>.35(1.42)*</td>
<td>.38(1.47)*</td>
<td>1.07(2.93)**</td>
</tr>
<tr>
<td>CBSA, n.p.</td>
<td>-.22(8.11)**</td>
<td>-.20(8.2)*</td>
<td>.13(1.13)</td>
</tr>
<tr>
<td>Not in CBSA</td>
<td>-.74(4.48)**</td>
<td>-.71(4.49)**</td>
<td>-.47(.63)</td>
</tr>
<tr>
<td>Resident</td>
<td>-.19(8.3)*</td>
<td>-.17(8.4)*</td>
<td>.29(1.33)</td>
</tr>
<tr>
<td>Not stp in city</td>
<td>-.17(8.5)</td>
<td>-.09(9.1)</td>
<td>.28(1.32)</td>
</tr>
</tbody>
</table>

Driver
Table 5.9 presents the results of Models 11 and 12, which includes practical constraint measures. As with the non-intersectionality models, stops at night were significantly less likely than stops during the day to result in a citation versus a warning, and significantly more likely to result in an arrest versus a warning compared to stops during the day. The length of the stop was likewise associated with greater likelihoods of stops resulting in citations, searches and arrests.
compared to warnings. With the exception of driver characteristics, the introduction of both practical constraint measures did not significantly change the strength, direction, or significance of other theoretical and control factors.

The effects of practical constraints on driver race and sex effects were more complicated, particularly for stops resulting in citations only. Black women became significantly more likely than white men to be cited rather than warned after practical constraint measures were introduced. Hispanic women remained significantly more likely to be cited than white men, but the strength of this relationship was weakened and its significance dropped from the p<.01 to the p<.05 level. White women remained significantly less likely than white men to be cited rather than warned and the strength of this relationship increased slightly after introducing stops at night.

The strength of all the effects of race-sex groups on stop outcomes decreased after introducing the length of the traffic stop in Model 12. Hispanic men became no more likely than white men to be cited versus warned after accounting for the length of the stop. Black men's greater likelihood of being searched versus warned compared to white men remained significant, but decreased in slightly in strength. The length of the stop also decreased the strength of the relationship between white women's chances of being searched versus warned compared to white men. Furthermore, white women became no more or less likely than white men to be arrested versus warned after introducing length of the stop.

**Discretionary Stops**

There is some literature that suggests that police are more likely to use minor traffic violations as a pretext to stop and investigate minority drivers, particularly black and Hispanic drivers, for more serious offenses (Harris 2002; Withrow 2006). There has been limited
empirical analysis of the pretext hypothesis, however. I use data from the PPCS to categorize stops as either discretionary or non-discretionary based on the reason for the stop. Hypothesis 3a predicts that minority drivers are more likely than white drivers to be stopped for discretionary reasons. Hypothesis 3b predicts that minority men drivers are more likely than white men drivers and women drivers of any race/ethnicity to be stopped for discretionary reasons. To test these hypotheses, I analyzed the racial and ethnic (and sex) patterns in the reasons for traffic stops, controlling for other situational and contextual factors using binary logistic regression. Table 5.10 presents the results of three logistic regression models testing the effects of driver characteristics and important control factors on the likelihood of drivers being stopped for more discretionary reasons compared to less discretionary reasons.

Table 5-10 Logistic Regression. Discretionary Stops, Models 1, 2 & 3. Controls and Driver Characteristics. Beta Coefficients and Odds Ratios Reported (N=3,482).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Factors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drives few times a week</td>
<td>.319(1.376)*</td>
<td>.386(1.471)*</td>
<td>.363(1.437)*</td>
</tr>
<tr>
<td>Drives few times a m/yr</td>
<td>.358(1.431)</td>
<td>.257(1.293)</td>
<td>.193(1.212)</td>
</tr>
<tr>
<td>Black officer</td>
<td>-.283(.753)</td>
<td>-.416(.660)</td>
<td>-.327(.721)</td>
</tr>
<tr>
<td>Other race officer</td>
<td>-.219(.803)</td>
<td>-.286(.751)</td>
<td>-.234(.792)</td>
</tr>
<tr>
<td>CBSA, not principal city</td>
<td>-.039(.962)</td>
<td>.039(1.040)</td>
<td>.063(1.065)</td>
</tr>
<tr>
<td>Not in CBSA</td>
<td>.366(1.442)**</td>
<td>.464(1.590)**</td>
<td>.458(1.580)**</td>
</tr>
<tr>
<td>Resident where stopped</td>
<td>.609(1.839)**</td>
<td>.610(1.841)**</td>
<td>.595(1.812)**</td>
</tr>
<tr>
<td>Not stopped in city/town</td>
<td>.252(1.287)</td>
<td>.263(1.300)</td>
<td>.248(1.282)</td>
</tr>
<tr>
<td>Passengers</td>
<td>-.055(.947)</td>
<td>-.057(.945)</td>
<td>.587(9.49)</td>
</tr>
<tr>
<td>Stopped at night</td>
<td>.799(2.223)**</td>
<td>.761(2.140)**</td>
<td>.763(2.144)**</td>
</tr>
<tr>
<td><strong>Driver Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>—</td>
<td>-.355(.701)**</td>
<td>—</td>
</tr>
<tr>
<td>Black</td>
<td>—</td>
<td>.562(1.755)**</td>
<td>—</td>
</tr>
<tr>
<td>Hispanic</td>
<td>—</td>
<td>.431(1.538)**</td>
<td>—</td>
</tr>
<tr>
<td>Other race</td>
<td>—</td>
<td>-.391(.677)</td>
<td>—</td>
</tr>
</tbody>
</table>
In Model 1, few control factors had significant independent effects on the likelihood of being stopped for a discretionary reason. Drivers who report driving a no more than a few days a week were significantly more likely than drivers who report driving everyday to be stopped for more discretionary reasons. Black officers and officers of other races were no more or less likely than white officers to stop drivers for more discretionary reasons. Drivers who do not live in a CBSA were more likely to be stopped for a discretionary reasons compared to those who do live in a CBSA. On the other hand, drivers were more likely to be stopped for a discretionary reason in the city/town where they live than were drivers stopped where they do not live. Drivers were also more likely to be stopped for a discretionary reason when stopped at night compared to being stopped during the day. Because a vehicle defect can include a broken or burned out headlight/taillight, this may explain the higher likelihood of being stopped for a discretionary reason at night—it is an easy vehicle defect for officers to notice and therefore presents the officer with articulable evidence to support the stop.

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2 Log Likelihood</td>
<td>3419.988</td>
<td>3384.570</td>
<td>3378.678</td>
</tr>
<tr>
<td>Pseudo R² (Nagelkerke)</td>
<td>.066</td>
<td>.081</td>
<td>.084</td>
</tr>
</tbody>
</table>

* *p<.05 | **p<.01
Model 2 introduced driver characteristics in addition to control factors from Model 1. The effects of control factors on discretionary stops remained virtually unchanged from Model 1 to Model 2. Consistent with Hypothesis 3a, however, there were significant driver race effects on the likelihood of being stopped for a discretionary reason. Hispanic and black drivers were both significantly more likely to be stopped for discretionary reasons compared to white drivers. Drivers of other races were no more or less likely than white drivers to be stopped for a discretionary reason. Driver sex had a significant impact on the reason for the stop—women drives were significantly less likely than men drivers to be stopped for a discretionary reason. Interestingly, driver age did not have a significant effect on the likelihood of experiencing a more discretionary stop, despite driver age being significantly related to the likelihood receiving more serious stop outcomes as detailed in the previous analyses above. Driver employment did not have a significant impact on the reason for the stop as well.

Model 3 introduced interaction terms for driver race and sex. As with stop outcomes, the independent effects of race and sex on discretionary stops are made more complex when considering the intersection of race and sex together. While black and Hispanic drivers were more likely to be stopped for a discretionary reason compared to white drivers in Model 2, this was only true for black and Hispanic men in Model 3. Black and Hispanic women drivers were no more likely than white men drivers to be stopped for a discretionary reason, and neither were white women drivers for that matter. Women drivers of "other" races, however, were significantly less likely than white men drivers to be stopped for more discretionary reasons. Control factors, as between Models 1 and 2, remained largely unchanged between Models 2 and 3.
DISCUSSION AND CONCLUSION

Race and ethnicity is a lightning rod in American criminal justice. The controversy over police racial profiling in routine traffic stops is just one recent manifestation of racial conflict in a deeply-rooted history of racial conflict and inequality in the U.S. Racial profiling in vehicle stops and the "driving-while-black" phenomenon gained national attention in the 1990s following two high profile cases alleging widespread race-based stops along major interstates in New Jersey and Maryland (Lamberth 1996). Following these cases, empirical research on racial and ethnic disparity in vehicle stops quickened. Despite rapid growth, the profiling literature remains young in terms of its theoretical development and research methodology. This dissertation has attempted to partially address some of these gaps in the extant literature by: a) framing the hypotheses and analysis in an explicit theoretical model based on the concepts of police focal concerns and symbolic assailants; b) modeling for a number of pertinent control and independent variables relevant to both crime control and discrimination perspectives of racial disparity in traffic stops; c) utilizing a more nuanced operationalization of traffic stop outcomes that accounts for multiple outcomes in one stop; d) quantitatively exploring the question of race, police discretion and pretextual vehicle stops; and e) further exploring the intersectional effects of driver race/ethnicity and sex in traffic stops and stop outcomes.

There are several key findings of note pertinent to these goals. First, there were significant independent effects of driver race/ethnicity and sex on the likelihood of experiencing more serious outcomes compared to less serious outcomes. Second, the strength of the effects of driver race/ethnicity and sex on traffic stop outcomes were weakened, in general, with the introduction of focal concern measures. Third, select focal concern measures had the strongest independent effects on stop outcomes. Fourth, driver race/ethnicity and sex had significant
independent effects on the likelihood of being stopped for discretionary reasons. Fifth, including intersectionality measures for driver race and sex complicates the effect of race (and gender) in traffic stops.

**Race and Stop Outcomes**

Following a symbolic assailants/discriminatory perspective, hypothesis one predicts that race/ethnicity will have a significant effect on stop outcomes. Specifically, it predicts that racial and ethnic minority drivers will be more likely than white drivers to experience more serious stop outcomes. The findings reported Table 5.4 show partial support for this hypothesis. Black, Hispanic and drivers of other races/ethnicities were all significantly more likely than white drivers to be cited versus warned after stopped by the police. On the other hand, only black drivers were more likely than white drivers to be searched versus warned and there were no significant differences by race/ethnicity for stops resulting in arrests versus warnings. These findings suggest that, net certain control factors, race/ethnicity matters in police decisions to resolve a traffic stop, but that race/ethnicity matters less as the stop outcome gets more severe. It is important to note, however, that for black drivers, the greater likelihood of being searched versus warned compared to white drivers does not carry over to arrests. In other words, the greater rate of searches experienced by black drivers does not also mean a greater rate of arrests for black drivers. This is not trivial because while black drivers are more likely to be targeted for suspected wrong doing as evidenced by their greater likelihood of being searched, they are not correspondingly more likely than whites to be found engaging in illegal activity resulting in an arrest.

There were significant, independent effects of driver race, sex and age on the likelihood of more serious stop outcomes. Net control factors, women drivers were significantly less likely
to be searched rather than warned and significantly less likely to be arrested rather than warned compared to men drivers. Net controls, black drivers were significantly more likely than white drivers to be ticketed and nearly 4 times more likely than white drivers to be searched rather than warned in a traffic stop. Hispanic and other race/ethnicity drivers were significantly more likely than white drivers to be cited rather warned. Older drivers were significantly less likely than younger drivers to be cited, searched and arrested compared to warned.

**Focal Concerns and Stop Outcomes**

Following a more complex theoretical model grounded in police focal concerns, hypothesis two predicts that race/ethnicity effects on stop outcomes will be mediated by measures of blameworthiness, dangerousness, and practical constraints. The findings reported in Table 5.5 and 5.6 show partial support for this hypothesis as well. Consistent with the second hypothesis, there were significant changes in the effects of driver race and sex on stop outcomes after accounting for focal concern measures. The strength of the effects of driver race and ethnicity was weakened for black drivers who reported being searched versus warned, particularly after accounting for driver demeanor and the length of the stop in minutes. The strength of driver race and ethnicity for minority drivers who reported being cited rather than warned, however, increased slightly after accounting for the reason for the stop, suggesting that black drivers' likelihood of being cited is conditioned by the reason they are stopped. Interestingly, black drivers became more likely than white drivers to be arrested rather than warned after accounting for the reason for the stop as well. This change was reversed, however, after accounting for demeanor, passengers, and number of prior contacts in subsequent models. This should not be surprising, given that driver demeanor had the strongest independent effect on the likelihood of experiencing a more serious stop outcome.
Women's likelihood of being cited rather than warned compared to men also made an interesting shift after accounting for focal concern measures. In Model 2 for stop outcomes (see Table 5.4), before the inclusion of the first set of focal concern measures in the reason for the stop, women were not more or less likely than men to receive a citation rather than a warning. After accounting for the reason for the stop, and in each subsequent model after, women drivers were significantly less likely than men drivers to be cited versus warned. The strength of the effect for women drivers on searches and arrests versus warnings was weakened after the inclusion of focal concern measures, but significant difference remained.

Stops that last longer corresponded with greater likelihoods that the driver would be cited, searched, and arrested versus warned. It was hypothesized from a practical constraints perspective that the longer the stop lasts, the more time the officer has to gather more legally relevant information about the driver, and hence the effect of a driver's race should decrease. The strength of the effect race for minority drivers compared to white drivers did indeed decrease after accounting the length of the stop. There are alternative explanations, of course. The first, and perhaps simplest explanation, is that stops that result in more serious outcomes are likely going to last longer than stops that result in a simple warning or no other enforcement action to begin with. In other words, it takes longer, in most cases, to search and warn someone than it does to just warn them. This may not always be the case, but it is a reasonable assumption that the more serious the outcome, the longer the stop will last.

Second, there is anecdotal evidence that, when black and Hispanic drivers are stopped, they are sometimes stopped for much longer than white drivers (see Harris 1999) as a form of intimidation and informal punishment. I ran an ordinary least-squares regression analysis on length of stop (model not shown) for driver race, with the same control factors included in the
stop outcome models above, and the results confirm this relationship. Black and Hispanic drivers were significantly more likely to experience longer traffic stops than white drivers.

**Discretion and Pretext**

Hypothesis three addresses the question of driver race/ethnicity and officer discretion in initiating a traffic stop. Following a symbolic assailants/discriminatory perspective, hypothesis three predicts that racial and ethnic minority drivers will be more likely than white drivers to be stopped for a discretionary reason. The findings reported in Table 5.7 show some support for this hypothesis. The pretext argument in the literature suggests that minority drivers, particularly black and Hispanics, are stopped for discretionary reasons more than white drivers because racial stereotypes lead police to be more suspicious of them. My findings in the present analysis support this idea. Consistent with hypothesis three, black and Hispanic drivers were significantly more likely than white drivers to be stopped for a discretionary reason. Specifically, black and Hispanic drivers were roughly 1.8 and 1.5 times, respectively, more likely to be stopped for a discretionary reason compared to white drivers. For black drivers in particular, this finding may help explain why black drivers are more likely to be searched, but not arrested, versus warned. If they are being stopped more often for minor discretionary reasons in order for the police to search for other illegal activity, then search rates ought to be higher while the likelihood of finding illegal evidence leading to an arrest ought to be lower. This suggests that the police may cast a wider net for black drivers than for whites, basing stops and searches more on extralegal factors and less on legally relevant factors.

**Focal Concerns, Symbolic Assailants and Racial Profiling**

Focal concerns theory (Steffensmeier et al. 1998) has been used relatively successfully in the sentencing literature as an explanatory framework for judicial sentencing decisions, and has
recently been proposed as a potentially useful theory to explain racial profiling by the police (Tillyer and Hartley 2010). While there are clear distinctions between courtrooms and traffic stops, focal concerns propositions regarding the important factors affecting judicial decision making have applicability to the important factors affecting police decision making as well. The focal concerns approach to judicial decision-making recognizes the importance of legal factors embodied in notions of offender blameworthiness and dangerousness, such as seriousness of the crime. These considerations likely direct police decision making on patrol as well.

The last 50 years of policing research tells us that both legal and extralegal factors affect police enforcement decisions in police-citizen contacts (Ricksheim and Chermak 1993). Research on racial profiling in traffic stops, however, is still an emerging field. As such, the literature in this area is only beginning to explore theoretically grounded analysis of police decision making in vehicle stops. Theory is especially important in terms of distinguishing between the relative importance of different legal and extralegal factors, as well as in making sense of conflicting empirical evidence of racial disparities in stops and stop outcomes across disparate studies. A focal concerns approach (Steffensmeier et al. 1998), along with the notion of symbolic assailants in policing culture (Skolnik 1966), provide a plausible framework for helping to fill these gaps in racial profiling research.

While I can only indirectly infer about officer perceptions of racial minorities as symbolic assailants in these analyses, there is good reason to believe minority drivers are perceived differently than white drivers. The history of racism and discrimination in American culture, law and policies have left lasting legacies that continue to manifest in things like racial profiling today (Alexander 2010). Likewise, it is likely that the demographics of the U.S.
criminal justice system—arrest and prison population statistics in particular—contribute to persistent stereotypes about race, violence and crime (Massey 1993; Shelden 2007).

That said, traffic stops are a unique enforcement context, routine and mundane compared to other policing contexts (Walker 2007). While the occasional traffic stop may rise above the level of routine infractions to more serious crime, most do not (Eith and Durose 2011). On the surface, this makes it difficult to imagine how racial disparities in other crimes could have any direct effect on disparities in traffic stops. On the other hand, given the very recent history of racial profiling policies in drug interdiction, for example, and the legacy of racial apartheid in the U.S. (Alexander 2010; Bonilla-Silva 2003), it is also plausible that the police continue to harbor conscious or unconscious racial bias towards racial minorities, particularly blacks and Hispanics (Jones-Brown 2007; Welch 2007). This bias, together with the highly discretionary nature of routine traffic enforcement—of which black and Hispanic drivers are more often the targets—offers a compelling sociological context for the production of racial inequality in routine policing outcomes.

The widespread publication of crime measures exposes the public (and police) to the notion that minorities, particularly blacks and Hispanics, commit disproportionately more crime. These measures may also be used to inform organizational-level policy (Miller 2009) and individual-level expectations (Jones-Brown 2007; Smith and Alpert 2007) in police-citizen encounters. The police are, after all, in the business of generating official statistics. If the police believe, based on these measures, that blacks and Hispanics are more likely to be involved in criminal offending, from a crime control perspective it is plausible that the police would respond to these populations with greater scrutiny and perhaps more aggressive enforcement actions (Novak and Chamlin 2008; Petrocelli, Piquero and Smith 2003; Withrow 2006).
The larger sociohistorical context of past and persistent divisions along lines of race, class and gender in the criminal justice system bears significance on the contemporary racial profiling issue in law enforcement (Georges-Abeiye 2001; Stokes 2007). Policing is undoubtedly shaped by legal concerns about crime control and safety, but so too by extralegal concerns stemming from the divisive effects of power and persistent social inequality. What this means is that policing traffic stops, like other policing crime, is a political activity. As Bernard Harcourt (2004) notes, "The great illusion is that all we are doing is fighting crime. That crime is out there, that we know what it is, that we simply go after it. This is the deepest fallacy. The fact is, we make crime." (375). The power to enforce and choose when and whom to enforce are coupled with perceptions of danger and culpability that are tied to broader social divisions of race, class and gender.

The focal concerns approach (Steffensmeier et al. 1998) is primarily in line with the crime control perspective which posits that officer decisions are motivated by legally relevant factors, citizen behavior and danger. The concept of symbolic assailants (Skolnick 1966) is primarily in line with the discriminatory perspective, which posits that racialized stereotypes of criminality and violence shape the police decision making process. While these two perspectives are distinct, I argue that, theoretically speaking, crime control concerns cannot be separated from preconceptions about race anymore than race can be separated from gender; legal factors are interpreted by the police through the lens of race (and class and gender), conflating extralegal factors with legally relevant ones. That said, more than half a decade of policing research has repeatedly found that legal factors (e.g., seriousness of the offense) are the strongest predictors of police behavior (see Smith and Visher 1981), and more recent racial profiling work has suggested that the influence of race and ethnicity diminishes when legal factors are considered.
The essential question then is to what extent do racialized images and symbolic assailants influence police decision making in light of focal concerns of blameworthiness and danger? My findings support the notion that focal concerns of crime control and danger significantly shape stop outcomes and that these factors in general are stronger predictors of outcomes than race/ethnicity. At the same time, my analysis also found that driver’s race and sex continued to shape stop outcomes in important ways, even when controlling numerous theoretical and control variables.

Good police work is sensitive to suspicious factors that give officers cause to investigate and, if necessary, make an arrest or administer other sanctions (e.g., warning or arrest). In this sense, it follows that focal concerns about blameworthiness and danger should matter the most in even in traffic enforcement. As mentioned above, however, it becomes problematic when perceptions of blameworthiness and danger are themselves shaped by racialized stereotypes of crime and violence. Many scholars have pointed to conflation of blacks and crime before (Alexander 2010; Bonilla-Silva 2003; Brunson and Miller 2006; Jones-Brown 2007; Peterson 2012; Steen, Engen and Gainey 2005; Welch 2007). The cultural history of the United States is built upon ethnic notions (Riggs 1986) conflating race with dangerousness, violence, ignorance, drug use, and crime (Welch 2007). The cultural legacy of anti-black prejudice underlies contemporary racial inequality, both in and out of the criminal justice system (Alexander 2010; Skolnick 1995; Steen, Englen and Gainey 2005). In light of this literature, one would expect to see this conflation manifest in over-policing (e.g., excessive stops, arrests, searches, use of force) of black drivers, and particularly black men drivers, as a consequence of officers emphasizing extralegal suspicion driven by stereotype over legal suspicion driven by evidence (Jones-Brown 2007; Warren, Tomaskovic-Devey, Smith, Zingraff and Mason 2006).
The Gender of Racial Profiling

The intersectionality of race and sex remains an under analyzed area in racial profiling research. To explore the effects of intersectionality on traffic stop outcomes, I combined data on driver race and sex and duplicated the statistical models for stop and stop outcome hypotheses with these new interaction terms. There are several important patterns that arise in the data after accounting for the intersectionality of driver race and sex. For example, while women are consistently found in the literature to experience less serious stop outcomes than men (Harcourt 2007), even when accounting for situational/legal and environmental factors (Engel and Calnon 2004; Lundman 2004), my analysis found that this is mostly true for one group of women: white women. Black and Hispanic women's traffic stop experiences are closer to those of white men than they are of white women, with the exception of citations— in fact, black and Hispanic women are significantly more likely than white men to receive citations. Likewise, black drivers are found in much of the literature to be disproportionately searched compared to white drivers (Lundman 2003; Harcourt 2004; Withrow 2006; Engel and Calnon 2004). I found similar patterns on the independent effects of race/ethnicity as well. However, after accounting for the intersection of race and sex, it is black men who account for most of the difference in searches between black drivers and white drivers.

In the models that measured race and sex separately, some of the biggest stop outcome disparities existed between white drivers and black drivers. When combining data on driver race and sex, another pattern develops. Among white drivers, only white women were significantly more likely than white men to receive a warning as opposed to a ticket and/or arrest. Black and
Hispanic women's likelihood of receiving a warning versus a citation and/or arrest were comparable to white men's and did not experience the gendered benefit that white women did.

These findings suggest that we cannot make sense of racial disparities in traffic stops without also considering sex and gender. Race and gender are linked in important ways and significantly shape meaning of racial disparities in traffic stops. While there were very clear distinctions in terms of men's and women's traffic stop experiences, as well as between white drivers' and black and Hispanic drivers' experiences, alone these distinctions obscure how racial profiling is gendered and racialized simultaneously.

**Study Limitations**

While the use of self-report citizen data provides many benefits over police-reported data on traffic stops and stop outcomes, there are several limitations as well. The shortcomings of PPCS data have been enumerated before. Engel and Calnon (2004) outline several of these limitations. First, there are "theoretically relevant variables" that are not included in the PPCS (p. 67). For example, there are no measures of citizen income in the 2008 PPCS, no data on the condition of the driver's vehicle when stopped, only general estimates of community context, and no indication of what type of police agency the officer worked for (e.g., municipal, county, state). Furthermore, as discussed above, the temporal order in which a traffic stop unfolds is not captured well by the PPCS. For example, there is no way to know if a driver who reported being arrested and also reported arguing/threatening the police was arrested before or after they argued/threatened the officer.

Second, respondents to the PPCS report their own race and ethnicity. This is contrary to most police-collected traffic stop data—which typically involves an officer recording the driver's race and ethnicity on a traffic stop report as the officer perceives them. While race and ethnicity
data based on officer perceptions are likely more susceptible to racial/ethnic identification errors than self-reported race and ethnicity, officer perceptions of race are an essential aspect of racial profiling analysis. In other words, if there is discrepancy between what race/ethnicity a driver identifies as on the survey and the racial/ethnic category the officer perceives them to be, then what matters the most in terms of racial profiling? Because officer decision making is the primary dependent variable, officer perceptions are key. It is not clear if or how discrepancies of this sort may or may affect the findings, but there is no clear or practical way to resolve this limitation with PPCS data.

Third, the community context in which a traffic stop encounter occurs is only vaguely specified via the size of place measure where respondents live and whether they were residents where they were stopped. Likewise, PPCS data do not indicate any other community measures that would be of interest, including the racial make-up of the area where a stop took place, whether the stop occurred in a residential versus commercial area or the socioeconomic conditions of the community in which the stop occurred, for example.

Fourth, as a supplement to the NCVS, PPCS data "have many of the same potentially problematic methodological issues as the NCVS" (Engel and Calnon 2004:67-68). The overall validity and reliability of self-report data is problematic if responses are systematically biased (Engel and Calnon 2004:68). If one group's patterns in responses to certain questions of interest are different than another group's, survey validity may be notably hindered. Smith, Tomaskovic-Devey, Mason, Zingraff, Chambers, and Warren (2000) found that among drivers who had received traffic citations, black drivers were less likely to acknowledge the citation compared to white respondents in a follow-up, self-report survey. It is unknown if underreporting occurred in PPCS data similar to that found in Smith et al.'s study in North Carolina. However, if black
respondents systematically underreport citations, arrests, or searches, then disparities reported in this analysis are conservative estimates of the study's hypotheses. On the other hand, if black respondents underreport illicit activity (e.g. being found with illegal weapons or drugs), then the validity of analyses on hit rates becomes questionable (Engel and Calnon 2004).

**Summary**

The influence of citizen's race on police decision making in police-citizen encounters is one of the most controversial and long-standing debates in policing research. The racial profiling controversy of the 1990s reinvigorated this debate in a new context: the traffic stop. Research on traffic stops, race and police decision making has since grown rapidly. Empirical evidence stemming from this recent attention has been mixed with little theoretical direction, however.

The study of racial profiling has evolved over the last two decades. Early research sought to document and measure for racial disparity in the distribution of traffic stops. Research then moved from police decisions to initiate the stop to police decisions to investigate (e.g., search) and resolve the stop (e.g., warn, cite, arrest) after it is initiated. The most salient research questions in this body of work ask whether racial minorities, particularly black and Hispanic drivers, are more severely punished and subject to more suspicion of wrongdoing than whites in traffic stops. Most of this work has operationalized punishment and suspicion by the objective stop outcome/enforcement action taken by the police, including decisions to warn, cite, search, arrest and use force. As a whole, this body of work has produced mixed results. Much early work showed significant racial disparities in stops and certain stop outcomes, but more recent work has challenged these findings by criticizing the profiling literature for a number of shortcomings, including a lack of clear theoretical specification, limited sets of independent factors, and a lack of sophisticated multivariate analytical techniques (Delisi 2011).
My findings point to the importance of both race/ethnicity and key focal concerns of the police in understanding patterns in traffic stop outcomes. The strength of the effect of race/ethnicity on stop outcomes was weakened by accounting for measures of driver blameworthiness, dangerousness, and practical constraints relevant to policing vehicle stops. This weakening was not an erasure, however, as driver race/ethnicity remained significant, particularly for black men who are searched (but not arrested) versus warned.

Furthermore, the intersectionality of driver race/ethnicity and sex highlights the limits of examining the role of race independently from sex and gender in racial profiling analysis. My intersectional analysis shows that analyzing sex independently from race masks the true nature of racial differences in traffic stops and stop outcome. While women consistently experienced less serious outcomes than men, this was predominantly true for white women and not for black, Hispanic, and women of other races.

Routine traffic stops have important implications for race, class and gender inequality in society. The focal concern and control factors included in these analyses appear to mediate at least some of the race/ethnicity effects on stop outcomes. Gender and sex, too, shapes the landscape of racial disparities in traffic stops. Alone the distinctions in traffic stop experiences between men and women, as well as between whites and racial/ethnic minorities, obscure the gendering of racial profiling. Future work should continue to theorize the intersectionality of race and gender (and class) in routine traffic enforcement.

Future work should also continue to develop theoretical models and data collection instruments (quantitative and qualitative) that can account for more precise estimates of relevant variables and more explicitly address the debate between crime control and discrimination perspectives in policing. The disparate implications of the crime control and discriminatory
perspectives have caused sharp divides in the political, social and academic discourse surrounding racial profiling (Harcourt 2004). At the same time, the propositions stemming from these two perspectives have remained largely implicit in much of the empirical work. Focal concerns and symbolic assailant concepts show promise as theoretical frameworks that can produce useful analyses of police decision making and serve to help address the divide between crime control and discriminatory understandings of racial inequality in policing.

Routine police stops are a gateway to the criminal justice system and a tool of social control. The implication of widespread racial profiling is a system where enduring racial tensions, fears, panics, and stereotypes are both learned and perpetuated. This potential makes it imperative that future research works to better understand the interconnectedness of race, gender and policing practices.
Bibliography


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