

AUTOMOBILE SEARCHES:
THE GAP BETWEEN THE THEORY AND PRAXIS OF LAW

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University of Missouri – Kansas City, 2010

ABSTRACT

The overrepresentation of racial and ethnic minorities at every stage of the criminal justice process has brought about legislative, judicial, and voluntary data explorations of law enforcement practices. As the gatekeepers to the criminal justice process, police greatly influence who comes in contact with the criminal justice system. As a result, law enforcement practices have drawn distinct scrutiny. The primary purpose of this research is to gauge the effects of driver race and ethnicity on the likelihood of being the subject of an automobile search.

Automobile searches are dynamic encounters. Thus, a sophisticated layered methodological approach including descriptive statistics, crosstabulation, chi-square analyses, and multiple logistical regression is utilized to address the complexities of automobile encounters. Utilizing sampled data collected from the 2009 KCPD Stop Survey, these analyses disaggregate searches into typologies (nondiscretionary and discretionary) whose outcomes are evaluated against numerous legal and extralegal factors. This criminological approach is consistent with the totality of circumstances standard officers are held to during automobile stops, is most likely to be used in an Equal Protection challenge in court, and identifies systemic issues where officers systematically used race and/or ethnicity in their decision-making.

This methodology seeks to do four things: (1) address conceptual, methodological, and theoretical concerns in the racial profiling literature (2) add to the developing literature base on indicators of social control (3) better understand the influence of race and ethnicity as they relate to the discretionary choices officers make during automobile searches, and (4) inform theory, stakeholders (i.e., legislatures, the courts, and law enforcement), and future analyses on the implications of these results; in effect, shrinking the status quos gap between the theory and praxis of law.

The faculty listed below, appointed by the Dean of the College of Arts and Sciences have examined a thesis titled “Automobile Searches: The Gap Between the Theory and Praxis of Law,” presented by Seth Wyatt Fallik, candidate for the Master of Science degree, and certify that in their opinion it is worthy of acceptance.

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CONTENTS

ABSTRACT	iii
TABLES	v
ACKNOWLEDGEMENTS	viii
DEDICATION	ix
Chapter	
ONE – INTRODUCTION	1
TWO – LITERATURE REVIEW	9
THREE – METHODOLOGY	25
FOUR – RESULTS	47
FIVE – DISCUSSION	70
Appendix	
MISSOURI REVISED STATUE 590.650	87
REFERENCES	91
VITA	99

TABLES

3.01 Observed Dependent Variables.....	29
3.02 Observed Independent Legal Variables	34
3.03 Observed Environmental Extralegal Variable	35
3.04 Observed Situational Extralegal Variables	39
4.01 Frequency Distributions and Population Percentages for Dependent Variables	48
4.02 Frequency Distributions and Population Percentages for Legal Variables	49
4.03 Frequency Distributions and Population Percentages for Extralegal Environmental Variables	51
4.04 Frequency Distributions and Population Percentages for Extralegal Situational Variable	52
4.05 Crosstabulation and Chi-Square Analysis for Race and Searches (overall).....	55
4.06 Crosstabulation and Chi-Square Analysis for Race and Nondiscretionary Searches	56
4.07 Crosstabulation and Chi-Square Analysis for Race and Discretionary Searches	57
4.08 Crosstabulation and Chi-Square Analysis for Ethnicity and Searches (overall)	58
4.09 Crosstabulation and Chi-Square Analysis for Ethnicity and Nondiscretionary Searches	59
4.10 Crosstabulation and Chi-Square Analysis for Ethnicity and Discretionary Searches ...	60
4.11 Logistical Regression Model Predicting Searches (overall).....	65
4.12 Logistical Regression Model Predicting Nondiscretionary Searches	67
4.13 Logistical Regression Model Predicting Discretionary Searches	69

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DEDICATION

Often the attention to racial profiling research has negative connotation for police and police work. In reality, the research I do is in an effort to protect and maintain the honor and integrity of the men and women in blue. Society owes a great debt to the selfless service provided by the police and it has not gone unrecognized by me. I dedicate this work to the men and women in uniform. Thank you for your service.

CHAPTER ONE

INTRODUCTION

As the gatekeepers to the criminal justice system, police officers play a unique role. Their enforcement practices have a ripple effect throughout the criminal justice system; however, legislative, judicial, and voluntary data explorations of law enforcement practices have not yielded respectable results. In fact, the over representation of racial and ethnic minorities at every stage of the criminal justice process has given fear that America's copious history of racism and discrimination has had a lingering effect on policing. With the Supreme Courts 1996 Whren decision, a ruling that essentially allowed for the practice of racial profiling, police departments began experiencing accusations of and civil litigations for prejudicial search practices. With this in mind, this research seeks to frame racial profiling within automobile searches.

Contextualizing Racial Profiling

Defining 'racial profiling' has been a difficult task because it exists within many contexts. Profiling influences vary on a spectrum of hard and soft. Hard racial profiling refers to the use of race and/or ethnicity as the sole factor in an officer's decision-making. Conversely, soft racial profiling acknowledges that race and/or ethnicity may be one of many factors that contribute to an officer's decision-making (Withrow, 2004a; see also Higgins, Vito, & Walsh, 2008). Additionally, two sources of officer profiling are crucial to understanding race and/or ethnicity-based policing (Schafer, Carter, Katz-Bannister, & Wells, 2006). Formal profiling is based on organizational policies. Formal racial profiling has taken form within "organizational policies: such as, the use of race [and/or ethnicity] in drug interdiction profiles and out-of-place profiling" (Warren, Tomaskovic-Devey, Smith,

Zingraff, & Mason, 2006, p. 713). Alternatively, informal profiling or racial and/or ethnic animus is based on personal prejudices, cognitive biases, and/or stereotyping. Although highly discouraged or explicitly forbidden by police departments, the explicit use of race and/or ethnicity in an officer's decision-making may still be practiced (Alpert, Dunham, & Smith, 2007). The focus of this research contextualizes racial profiling as the non-neutral use of race and/or ethnicity within policing procedures.

Perceptions of Racial Profiling

The bulk of societal perceptions of the criminal justice system are not formulated directly; rather, they are experienced second hand. The mass media has been the main contributor in bringing racial profiling to the forefront of national consciousness. The “highly publicized cases of police misconduct – such as Rodney King, Abner Louima, and Amadou Diallo – illustrate the influence of police illegality (or the appearance of illegality) in generating criticism of police” (Gould & Mastrofski, 2004, p. 318). Through the media, members of society vicariously experience these events as they unfold from the comfort of their living rooms.

The impact the media has had on societal perceptions is best reflected in surveys, which have consistently demonstrated that the majority of citizens perceive there to be differential treatment practices for minorities who interact with the police. In a 1999 Gallup poll, 81 % of citizens reported disapproval for the practice of racial profiling and 59 % of adults (77 % of Blacks and 56 % of Whites) believed racial profiling was widespread (Engel & Calnon, 2004; see also Novak, 2004; Reitzel & Piquero, 2006). Surveys have also demonstrated that minorities are consistently more critical and less trusting of police behavior, reporting feelings of harassment and discrimination by the police. The phrase most

utilized to describe the differential treatment practices for minorities during automobile stops by police has gained parlance in American vernacular and is known as ‘driving while Black/Brown’ (Alpert, Dunham, & Smith, 2007). Also in the 1999 Gallup poll, 42 % of Blacks, as opposed to only 6 % of Whites, felt they had been targeted by police because of their race. The 1999 Gallup poll demonstrates a national consensus of concern for the use of racial profiling.

Automobile Searches

In the 2005 report *Contacts between Police and the Public* the Bureau of Justice Statistics estimated that 19 % of the population, 16 or older, will have some sort of interaction with police in a given year, the majority of which (56 %) will occur during automobile stops (p. 1). Of the 17.8 million drivers that were stopped by police in 2005 (8.8 % of the Nation’s 203 million drivers), nearly 890,000 or 5 % were searched (pp. 1-2). Furthermore, the Bureau of Justice Statistics reported that of the driving population stopped in 2005, Blacks (9.5 %) and Hispanics (8.8 %) were searched by police at much a higher rate than Whites (3.6 %) (p. 7). Although automobile stops account for the bulk of face-to-face police-citizen encounters, not all searches meet constitutional standards. Gould and Mastrofski (2004) found that nearly one-third of their “observed searches were unconstitutional, and almost none [...became] visible to the courts” (p. 316). As a result, “more than 400 agencies have collected traffic-stop data and 23 states have passed legislation that requires racial profiling studies” (Alpert, Dunham, & Smith, 2007, p. 27).

Automobile searches are unique because they operate as a mechanism of informal social control and have low visibility. Formal sanctions are only applied in search encounters where contraband is discovered and all other instances pass as though they never occurred.

To protect the private lives of individuals and prevent government from overextending itself, the Fourth Amendment to the Constitution grants individuals the right “to be secure in their persons, houses, papers, and effects, against unreasonable searches” and is enforced by the exclusionary rule; however, government officers may petition a detached and neutral magistrate with “oath or affirmation and particularity” to conduct a search (Bill of Rights, 2010). The standard for judging compliance with the Reasonableness Clause of the Fourth Amendment is probable cause (with or without a warrant). As a standard of proof, probable cause is less than clear and convincing evidence but more than reasonable suspicion. Furthermore, in exigent situations “police officers must mentally interpret the facts and circumstances surrounding the stop and determine if these facts and circumstances amount to probable cause” (Engel & Johnson, 2006, p. 608). The totality of circumstances, which is the standard set forth in *Illinois v. Gates* (1983), is the measurement tool for gauging the situational standard of proof before executing a search without a warrant; however, due to the fact that exigency is inherent in all automobile stops – due to a lesser expectation of privacy and the mobility of motor vehicles – nearly all automobile searches are performed without a warrant. When evaluating the totality of circumstances officers may consider such things as prior criminal record, suspects’ flight from the scene, admissions by the suspect, failure to answer questions satisfactorily, suspicious conduct, presence of incriminating evidence, and tips from an informant. While individually these circumstances may be logically explained as lawful behavior, the presence of multiple factors can breach the probable cause threshold – such as in the case of *Illinois v. Wardlow* (2000). Generally, the greater the discovered standard of proof the greater the scope of government intrusion allotted.

The Issue in the Status Quo

In support of the war on drugs and following the *United States v. Sokolow* (1989) precedent, the Supreme Court in *Whren v. United States* (1996) held that an officer's pretextual motives for engaging in a search are immaterial so "long as the initial stop was based on objective evidence that provides reasonable suspicion of probable cause of a violation or crime" (Zalman, 2006, p. 136). The Court, fearful of the unbridled use of informal profiling, attempted to identify situations in which race and/or ethnicity may be used as an inappropriate pretext for engaging in a stop. They considered the 'would have' and 'could have' tests (Harris, 1997; see also Birzer & Birzer, 2006). The 'would have' test considers if an automobile stop would have been made absent of a valid purpose; a distributive justice perspective (Engel, 2005). Alternatively, the 'could have' test considers whether an officer had the legal authority to stop a vehicle for suspicion of a traffic violation; a procedural justice perspective (Engel, 2005). The Whren Court sided with the 'could have' test, arguing that it is a more objective standard for evaluating automobile stops; unfortunately, this test still involves a considerable amount of subjectivity when evaluating an officer's decision-making and only provides procedural safeguards to citizens. What is most disturbing about the Whren decision is that officers may hide behind simple traffic infractions when inappropriately using race, ethnicity, or any other extralegal reasoning as a pretext for engaging in automobile stops. While *Knowles v. Iowa* (1998) curtailed the leap from stop and citation to search, the Whren decision essentially allowed for the practice of racial profiling.

In theory, there are two legal remedies citizens may seek against racial profiling (the Fourteenth Amendments' Equal Protection Clause and Title 42, United States Codes, Section

14141: Pattern and Practices); however, their successful use is nonexistent. When utilizing the Equal Protection Clause, plaintiffs must demonstrate that a police enforcement practice serves a discriminatory purpose and that the enforcement practice had a discriminatory effect. Attempts to satisfy these two prongs must “demonstrate that persons of another race [and/or ethnicity] violated the same law, but that the law was not enforced against them” (Smith & Alpert, 2002, p. 683). In essence, plaintiffs must demonstrate occurrences of police inaction. Since it is unlikely department policies will explicitly encourage discrimination or that officers will openly admit to discriminating, plaintiffs are left with no choice but to rely on circumstantial statistical evidence to prove their cases (Smith & Alpert, 2002; see also Withrow, 2006). “Plaintiffs often search in vain for this type of statistical data, which most law enforcement agencies do not collect” (Smith & Alpert, 2002, p. 684).

The second legal recourse for victims of racial profiling is Title 42, United States Codes, Section 14141: Pattern and Practices. It stipulates that it is “unlawful for any government authority [...] to engage in a pattern or practice of conduct [...] that deprives persons of rights, privileges, or immunities secured or protected by the Constitution or laws of the United States” (*Violent Crime Control and Law Enforcement Act*, 1994). Originally intended to provide protections to juveniles against administrators of juvenile justice, Section 14141 may be the most promising route to challenge the use of racial profiling because agencies that receive funding from the Department of Justice are subject to legal recourse under this law; unfortunately, the newness of the law presents several issues concerning the meaning of the Sections’ terms. For example, “the law specifically uses the plural term *officers*. It is not clear how many officers engaging in such acts would constitute a pattern or practice” (Withrow, 2006, p. 147). Additionally, it is not yet known how federal judges will

interpret the law because the most extensive application to date of Section 14141, in the *State of New Jersey v. Pedro Soto* (1996), was withdrawn (Withrow, 2006). Given that the Whren decision erodes the Fourth Amendment and citizens are not able to find certain justice in the Equal Protection Clause of the Fourteenth Amendment or Title 42, United States Codes, Section 14141: Pattern and Practices, there exists a gap between the theory and praxis of law.

The Present Study

With this gap in mind, the present study seeks to determine whether automobile searches are differentially used within Kansas City, Missouri and contributes to the racial profiling literature in several ways. First, this study addresses conceptual, methodological, and theoretical concerns in the racial profiling literature. In doing so, these analyses ask the following: what approach best captures occurrences of automobile searches and how can researchers minimize limitations in their findings? Second, this research seeks to better understand racial profiling and add to a developing literature base on automobile searches as an indicator of social control. In doing so, this research seeks to understand the frequency and particularity of conditions of automobile searches and asks the following: how often do automobile searches occur? Are automobile searches equally distributed across racial and ethnic groups? Is race and/or ethnicity a significant predictor for being searched after controlling for other variables? Lastly, do the discretionary choices of officers place minorities at greater disadvantages than their peers? Third, this study discusses potential influences upon officers to use race and/or ethnicity during automobile searches. While this study does not attempt to explain individual incidents of racial profiling, it does provide an aggregate look at automobile searches (including traffic stops, investigatory car stops, stops on surface streets, and stops on highways) over a one year period. The status quos gap

between the theory and praxis of law comes at a substantial cost. The erosion of public trust through the inappropriate use of race and/or ethnicity has a detrimental impact on society, individuals, and the legitimacy of law enforcement. With this in mind, this research will discuss and inform theory, stakeholders (i.e., legislatures, the courts, and law enforcement), and future analyses; in effect, shrinking the status quos gap between the theory and praxis of law.

CHAPTER TWO

LITERATURE REVIEW

Understanding how an issue has previously been conceptualized is fundamentally important to conducting research because a variety of conceptual, methodological, and theoretical topics have already been addressed by previous researchers. This assessment of previous racial profiling research has two goals: first, identify common successes and shortcomings of previous analyses for the purpose of informing this research endeavor, and second, contextualize the current state of the racial profiling literature in an effort to appropriately situate this research among similar pursuits.

Analytical and Interpretive Perspectives

In review of the racial profiling literature, Engel (2008) identified four perspectives for analyzing and interpreting automobile stops: legalistic, criminological, normative, and economic. Each perspective is accompanied by underlying assumptions of police-citizen behaviors: the basis of which influence a researcher's analytical and interpretive techniques. Recognizing the biases, limitations, and how each can influence researchers' conclusions is critical to understanding racial profiling research.

The legalistic perspective – also known as the constitutional-civil libertarian, procedural, and due process perspective – is “primarily concerned with ensuring procedural equality during police-citizen encounters” (Engel, 2008, p. 5). Racial profiling researchers utilizing this perspective are concerned with the equitable distribution of race and/or ethnicity during policing procedures. Legalistic racial profiling research contends that disparity in the racial and/or ethnic distributions of automobile stops and/or post-stop decisions are a

demonstration of discriminatory police behavior because racial and/or ethnic minorities should have an equal risk of being the subject of police intrusion.

Conversely, the primary concern for the criminological perspective is “understanding police decision-making, independent of its legal implications” (Engel, 2008, p. 8). Departing from the legalistic perspective, this perspective contends that differences in offending patterns may be due to legitimate causes. Furthermore, criminological racial profiling research insists that racial and/or ethnic-neutral variables can also impact the discretionary choices of officers and must be taken into consideration when evaluating officer decision-making. Finally, criminological research is aimed at understanding the totality of the circumstance in which discretion is used.

The normative perspective is a permutation of the legalistic perspective. In each, procedural equality is taken into account; however, these two perspectives are dissimilar in that in addition to procedural equality, the normative perspective also considers substantive equality (Engel, 2008). This perspective suggests that citizens are equally concerned with procedural justice (fairness of process) and distributive justice (fairness of outcomes) (Engel, 2008, 2005). Normative racial profiling research questions the legalistic perspective’s acceptance of statistical discrimination and argues that even if racial and/or ethnic groups vary in their criminality, the burden of law enforcement should fall equally across “morally equivalent’ groups; that is, there should be equal burdens across innocents of different racial [and/or ethnic] groups” (Engel, 2008, p. 13). When evaluating automobile stops, this research perspective attempts to assess multiple elements that may increase a citizen’s risk of being the subject of coercive police behaviors.

The final analytical and interpretive strategy in racial profiling research is the economic perspective, or efficient policing perspective, which considers outcome equality. The economic perspective's analytical techniques are similar to the analytical techniques employed by the normative perspective; however, the interpretative techniques of each differ. "Searches are one of the few forms of coercive police behavior where the 'success' of the decision can be readily measured through the seizure of contraband" (Engel, 2008, p. 14). Fundamental to the economic research perspective is that the burden of law enforcement should be proportioned based on each demographics involvement in crime. This research benchmarks search outcomes against the searched population when attempting to identify disparity. This process is known as the 'outcomes test.' The economic perspective attempts to make a distinction between police bias(es) and statistical discrimination.

While each analytical and interpretive strategy has its own strengths and weaknesses, of particular interest for this research agenda are criminological evaluations for two reasons. First, the criminological perspective is consistent with the totality of circumstances standard that officers are held to during automobile stops. Second, the criminological perspective offers the most probable analytical and interpretive strategies to be utilized an Equal Protection challenge in court because it identifies systemic issues were officers systematically used race and/or ethnicity in their decision-making. Therefore, for practical purposes the remaining review will focus on research that approaches racial profiling from the criminological perspective.

Sampling

Researchers typically obtain their data through mutually beneficial relationships with state and local police departments. The foundation of these relationships is based on an

exchange of information: departments provide data of each police-citizen encounter and researchers evaluate the totality of those encounters. The unit of analysis in each case is the individual automobile stop. Departments compel each of their officers to participate in the reporting of citizen encounters despite the disposition. In the racial profiling literature, data is procured through two methods: field reporting and departmental reporting. Field reporting is done in two ways: manually, through paper forms or over police radio, and electronically, through the use of mobile data computers, mobile data terminals, personal palm pilots, or personal digital assistants (Smith & Petrocelli, 2001; see also Smith & Alpert, 2002; Withrow, 2006). Reporting consists of officers completing paper or digital surveys immediately after each encounter has occurred. Alternatively, departmental reporting relies on officers to recount the details of each of their encounters at their departments' precincts at the conclusion of their shifts. The departmental method of data procurement can be done manually or electronically. Researchers then evaluate aggregate-level information based on computer generated data of those encounters. Finally with regards to the procurement of data, Engel, Calnon, and Bernard (2002) note that most racial profiling research is "retrospective, rather than prospective" (p. 253). This means that the data being utilized in racial profiling research is typically limited to what has previously been collected for other purposes.

When determining an appropriate timeframe for analysis, the racial profiling literature balances needs against utility. Most data sources have been collecting automobile stop information for years and the further back a researcher chooses to go, the larger his or her sample size will be; however, a multiyear study has decreased utility due to two threats to internal validity: history and maturation. Over time, police departments adopt new policies and bring in new personnel as older personnel retire. An additional influence on sampling is

the volume of stops that occur within the jurisdiction. Typically, larger more densely populated jurisdictions generate a larger number of stops which may allow for analyses within a shorter time frame. As a result, researchers must strike a balance between the need for a large sample size and the utility of their analyses. A twelve month timeframe balances the need for an adequate sample size for statistical purposes while minimizing threats to internal validity.

Measured Outcomes

For officers, there are three significant officer-initiated decision-making points during automobile stops (Schafer, Carter, Katz-Bannister, & Wells, 2006; see also Ridgeway, 2006). First, an officer must decide whether to initiate an automobile stop. This decision-making point comprises the bulk of empirical analyses; however, Alpert, Dunham, and Smith (2007) reported that “police officers could only determine the race of the driver prior to the stop approximately 30 % of the time” (p. 48). Additionally, Warren, Tomaskovic-Devey, Smith, Zingraff, and Mason (2006) charged that if racial profiling exists within an organization, it is likely to operate after the stop has been made. Finally, Engel, Calnon, and Bernard (2002) contended that more ambitious and important investigations have focused on what happens after the stop is made.

The second officer-initiated decision-making point occurs post-stop and is concerned with an officer’s decision to search the driver, vehicle, passenger(s), or a combination of some or all three entities. One of the measurable outcomes for this decision-making point is whether a search occurred (Batton & Kadleck, 2004; see also Withrow, 2006). Another measured outcome regarding automobile searches addresses specific types of searches. There are eight automobile search types permissible by Supreme Court precedent and law

enforcement policies. First, once a suspect has been arrested, officers may search that individual as an incident to the arrest. Second, if a vehicle is to be impounded, officers may search the vehicle to inventory its contents. Third, if a person(s) within the vehicle is discovered to have an existing search or arrest warrant(s), a search is permissible. Fourth, officers may conduct a search when they have probable cause to believe the vehicle or individual(s) within the vehicle possess contraband. Fifth, officers have the legal authority to search when contraband is discovered in plain view. Sixth, K9 units or drug-sniffing dog(s) can be dispatched to the scene upon the request of an officer in an external search of the vehicle for contraband. Seventh, when an officer believes a suspect to be dangerous, the officer may conduct a ‘Terry’ or pat down search of the individual for the officers’ safety. Finally, officers may search a vehicle if consent is given. Consent searches are of particular interest for many researchers. Withrow (2006) writes that “from a purely racial profiling research perspective it is important to determine what factors an officer considers when requesting a consensual search” (p. 188; see also Higgins, Vito, & Walsh, 2008; Pickerill, Mosher, & Pratt, 2009).

Several things should be noted about searches. First, the eight search types are ordered from least to most discretionary. In the racial profiling literature, a popular way of conceptualizing the varying degrees of discretion afforded to officers during automobile searches is to dichotomize them into discretionary and nondiscretionary typologies. Additionally, Smith and Alpert (2002) contended that the legal authority to engage in a search does not mean officers will perform individual searches with the same depth and veracity in every situation. To address this issue, researchers like Batton and Kadleck (2004) and Withrow (2006) have paid particular interest to what is searched and how long the

motorist is delayed when a search is preformed. Finally, engaging in a search does not necessarily amount to a “productive search” (Smith & Alpert, 2002; see also Withrow, 2006). A search and the discovery of contraband are not mutually exclusive activities.

The final officer-initiated decision-making point also occurs post-stop and is concerned with an officer’s assessment of a sanction. The bulk of this research evaluates warning(s), citation(s), and arrest outcomes. Citations are the most common occurrence at this decision-making point; however, other analyses have also considered officer use of force (deadly and non-deadly) and instances of physical and verbal resistance (Engel, Calnon, & Bernard, 2002; see also Batton & Kadleck, 2004; Smith & Alpert, 2002; Withrow, 2006). The subjectivity of these officer-initiated decision-making points provides measurable aspects to the “cognitive processes that underlie [officer] discretion” (Miller, 2008, p. 127). The following discussion will focus on the dynamics of the second decision-making point: searches.

Measured Predictors

The racial profiling literature has addressed many of the factors that influence an officer’s decision-making. Although the level of aggregation and the observed population may vary, the racial profiling literature has contextualized the influential factors of automobile searches into legal and extralegal variables. Lundman (2004) contended there are three reasons for conceptualizing the causal factors of a search by legal and extralegal influences. First, police are legal actors influenced by legal forces. Second, when considering extralegal factors, searches are especially important because of their low-visibility. “Third,[...] no single extralegal variable consistently affects police actions” (p. 313). For

those reasons, it is important to evaluate the totality of circumstances (i.e., all possible legal and extralegal influences on officer decision-making) when constructing a methodology.

Legal Variables

Legal variables are “influenced by legal factors associated with each situation” (National Research Council, 2004, p. 115). Smith and Alpert (2002), Engel and Calnon (2004), and Engel (2008) argued that the legal justification for an officer’s behavior may be the most important factor in understanding automobile stop outcomes. They insisted that the cause for engaging in a stop greatly influences the scope of discretionary powers afforded officers. Furthermore, Engel and Calnon (2004) and Withrow (2006) noted that as the severity of the offense(s) increases, officer discretion decreases and procedural departmental policies become more influential on an officer’s decision-making. Along those same lines, researchers should consider the presence and amount of evidence of wrongdoing during police-citizen encounters. Similar to the previous legal consideration, as the amount of evidence of wrongdoing increases, officer discretion decreases and procedural departmental policies become more influential on an officer’s decision-making.

Extralegal Variables

Three distinct types of extralegal factors (policing, environmental, and situational) have been identified in the racial profiling literature as having the potential to shape an officer’s decision-making during automobile stops.

Policing

Each encounter brings together two persons from unique backgrounds and policing variables suggest that these encounters may differ across officer and departmental characteristics (Batton & Kadleck, 2004; see also Engel, 2008; Withrow, 2006). Previous

examinations of officer variables have included the age, experience, gender, race, ethnicity, and assignment of the officer engaged in the encounter. The National Research Council (2004) reported that officer variables have yielded mixed, insufficient, or no influence on police-citizen decision-making. In addition to officer variables, researchers have identified departmental characteristics that may also influence police-citizen encounters. For example, departmental strategies that utilize tools, such as COMPSTAT, CSTAR, or other 'hot spot' policing, may differentially impact minority communities. Measurements of disparity in those instances are the result of more time spent in minority communities (Batton & Kadleck, 2004; see also Alpert, 2007; Alpert, Dunham, & Smith, 2007; Parker, MacDonald, Alpert, Smith, & Piquero, 2004; Warren, Tomaskovic-Devey, Smith, Zingraff, & Mason, 2006). Additionally, Batton and Kadleck (2004) contended that researchers should consider the purpose of the department as it impacts "the time, energy, and resources allotted to various aspects of law enforcement" (p. 50). The differential priorities of departments may influence the types of persons encountered by the police.

Environmental

Additionally, environmental variables may also influence an officer's decision-making. Withrow (2006) argued that the physical location of the stop is important to understanding police behavior, "particularly in a municipal policing context" because knowing the beat, sector, or division in which a stop occurs can clue a researcher into the development of other key variables (p. 189). For example, researchers that are able to identify the locations in which police-citizen encounters occur can use census tract information and create unique demographic profiles of the locations' residents. Smith and Alpert (2002) contended that the advantages of demographic profiles are that they enable a

researcher to take into consideration the social organization of a community (i.e., areas with high rates of poverty, residential instability, and high racial and ethnic heterogeneity) nonresidential communities, and communities with high crime rates.

Situational

The final type of extralegal variables identified in the racial profiling literature was situational variables. Of particular concern for situational variables are driver, passenger(s), and car characteristics. Nearly all research on racial profiling includes biographical information on the gender, age, race, and ethnicity of the driver. The independent variables of interest in racial profiling literature are race and ethnicity; however, more rigorous racial profiling analyses will include the residency status, height, weight, physical build, and demeanor of the driver. In addition to driver biographical variables, Withrow (2006) acknowledges that the number of occupants in the vehicle, their biographical information, and the time of day of the encounter may also influence an officer's decision-making. Finally, Smith and Alpert (2002) and Batton and Kadleck (2004) asserted that car characteristics, such as make, model, color, year, and modifications, may also influence an officer's decision-making. Situational and environmental variables are important to officer decision-making because officers may perceive some drivers, passengers, cars, and contexts as more suspicious than others. When an officer's suspicion is elevated, there is an increased likelihood for them to exert mechanisms of social control.

Additive Probabilities

Finally, Engel and Calnon (2004) demonstrated that individual variables may not yield significance but when circumstances present multiple risk factors, significance may be discovered as an interaction between variables (Engel & Calnon, 2004; see also Birzer &

Birzer, 2006). For example, it may be determined that citizen's race is a nonsignificant predictor of searches. Separately, it may be determined that being under the age of 21 is a nonsignificant predictor of searches; however, when a person possesses both qualities (being African American and under the age of 21) significance is possible. In this example, being African American is nonsignificant and being under the age of 21 is nonsignificant but being African American and under the age of 21 is significant. Interaction variables or "additive probabilities" as Engel and Calnon (2004) coined it, demonstrate the complexities of police-citizen encounters (p. 74). Although the racial profiling literature shows that the primary predictors of officer behavior are legal variables, extralegal variables also influence an officer's decision-making.

Estimations

While the majority of racial profiling research utilizes bivariate analyses, there are explanatory limitations to those analyses. Withrow (2006) insisted that bivariate "analyses cannot be used to infer or predict and generally cannot account for intervening causes of police behavior" (p. 193). For example, Higgins, Vito, and Walsh (2008) discovered a significant relationship in their bivariate analysis of race and searches, but race was nonsignificant when control variables were added in their multivariate analysis. In support of this point, Batton and Kadleck (2004) contended that multivariate and/or hierarchal modeling techniques should be utilized to understand police-citizen encounters. The multivariate statistical procedure most utilized by researchers to determine when, if, and to what extent race and/or ethnicity are significant predictors of searches is logistical regression, which requires the researcher to identify the dependant variable in binary terms.

Findings

Although automobile searches are a relatively new area of interest in the racial profiling literature, the number of studies in this area has grown rapidly in recent years; however, the racial profiling literature does not demonstrate consistency in the nature, strength, or in some cases, the association of race and/or ethnicity in predicting searches. Several studies have demonstrated that African American and Hispanics were searched at much higher rates than their community representation (Cordner, Williams, & Velasco, 2002; Knowles & Persico, 1999; Langan, Greenfield, Smith, Durose, & Levine, 2001; New York Attorney General's Office, 1999; Norris, Fielding, Kemp, & Fielding, 1992; Texas Department of Public Safety, 2000; Washington State Patrol, 2001; Withrow, 2002; Zingraff, Mason, Smith, Tomaskovic-Devey, Warren, & McMurray, 2000). Additionally, some researchers have concluded that race and/or ethnicity was one of numerous predictors of searches (Pickerill, Mosher, & Pratt, 2009; Williams & Stahl, 2008; Withrow, 2004b). For example, Withrow (2004b) concluded that African Americans were more likely to be searched, but the time of day (night) and the presence of an arrest violation were stronger predictors than race. Furthermore, some researchers have discovered an interaction effect with race and/or ethnicity and other variables (Engel & Calnon, 2004). Alternatively, while race remained a predictor for Smith and Petrocelli (2001), Whites were nearly two and half times more likely to be the subject of consent searches. Smith and Petrocelli (2001) also discovered that officer variables such as gender, age, years of service, and race of the officer were nonsignificant when predicting consent searches. Some researchers have discovered that the influence of race and/or ethnicity is neutralized once specific types or typologies of searches are identified. For example, Schafer, Carter, Katz-Bannister, and Wells (2006)

discovered that Blacks and Hispanics were nearly two and a half times more likely to be searched; however, race was nonsignificant when evaluating discretionary searches. Finally, some researchers have discovered that race and/or ethnicity was a nonsignificant predictor of searches (Gaines, 2006; Higgins, Vito, & Walsh, 2008).

Explanatory Theories

Bernard and Engel (2001) provided a conceptual framework for understanding the theoretical explanations of race and ethnicity-based decision-making. They contend that the theoretical explanations of racial profiling should be categorized “according to the type of dependent variable” under analysis (Engel, Calnon, & Bernard, 2002, p. 260). Specifically, Bernard and Engel (2001) enumerated three types of dependent variables: “the behavior of the individual criminal justice agent, [...] the behavior of criminal justice agencies, [...] and the aggregate-level characteristics of the entire criminal justice system or its component parts” (Engel, Calnon, & Bernard, 2002, pp. 260-261).

Theories addressing the behavior of the individual criminal justice agent charge that the overrepresentation of racial and ethnic minorities can be attributed to an individual officers’ prejudices. Engel, Calnon, and Bernard (2002) identified three theories within this area: theory of reasoned action, theory of coercive action, and expectancy theory. In their theory of reasoned action, Ajen and Fishbein (1977) contended that prejudicial attitudes and beliefs of officers are reflected in their behaviors. Alternatively, the theory of coercive action by Tedeshchi and Felson (1994) asserted that officers utilize their power to control individuals who threaten the status quo. The final theory addressing the behavior of the individual criminal justice agent is expectancy theory. Expectancy theory, which was developed through the work of Mitchell (1974) and Campell and Pritchard (1976), argued

that job indicators of productivity for officers are the driving force behind coercive police behavior. “This theory may explain officer aggression in drug interdiction enforcement [...] given the emphasis placed on drug interdiction by police administrators” (Withrow, 2006, p. 118).

Theories that address the behavior of the criminal justice agency contend that race and/or ethnicity-based decision-making are the result of institutionalized prejudice. Engel, Calnon, and Bernard (2002) identified two theories within this area: institutional expectations and bargaining and institutional perspectives. The theory of institutional expectations and bargaining developed by Wilson (1968) and Van Maanan (1983, 1984) is similar to expectancy theory but emphasizes the role bargaining plays between officers and department administrators. In this theory, officers bargain for favorable treatment based on productivity benchmarks. Alternatively, the theory of institutional perspectives, developed by Crank and Langworthy (1992), Mastrofski, Ritti, and Snipes (1994), and DeJong, Mastrofski, and Parks (2001), contended that policing organizational myths are perpetuated in order to “add legitimacy and stability to the police organization and encourage individual officer behaviors” (Withrow, 2006, p. 119). This theory contended that if officers believe racial profiling to be an effective crime fighting tool, then they will utilize it more frequently in their day-to-day activities.

The final theoretical explanation of racial profiling provided by Engel, Calnon, and Bernard (2002) evaluated aggregate-level characteristics of the entire criminal justice system or its parts. These theories are based on macro-level concepts, like conflict theory. Conflict theory contends that laws perpetuate the control of a subordinate group by a dominate group in society. The two identified theories within this area are the theory of norm resistance and

the theory of law. The theory of norm resistance developed by Turk (1969) and Lanza-Kaduce and Greenlead (1994) argued that racial profiling is the result of conflicting norms between competing groups. In this theory, police are a mechanism of social control that suppress the subordinate group's values to perpetuate a dominate group's control. The theory of law by Black (1976) insisted that the progressing complexities of society generate levels of social stratifications that increase the quantity of laws. Laws are used by the dominate group to suppress the subordinate group.

Finally, Withrow (2006) acknowledges three additional theories that Engel, Calnon, and Bernard (2002) omitted from their racial profiling theoretical debate. First, the theory of explanatory continuums, identified by Tomaskovic-Devey, Mason, and Zingraff (2004) and Carter and Katz-Banister (2004), demonstrated the difficulty in identifying specific instances of race and/or ethnicity-based decision-making. It contended that racial profiling is inconsistent in its priority, frequency, intensity, and duration within a department's operations, which makes it difficult to identify. Alternatively, the theory of differential offending rates by Lamberth (1994), Covington (2001) and MacDonald (2001) argued that differential outcomes in decision-making are due to differential offending patterns across racial and ethnic groups. Simply put, this theory asserted that crime varies in type and frequency across racial and ethnic groups. Finally, the theory of contextual attentiveness developed by Petrocelli, Piquero, and Smith (2003) insisted that the context and/or geographic area can also impact enforcement patterns.

Even though research has proliferated in the area of racial profiling in recent years, definitive theoretical support for racial profiling research is lagging. Withrow (2006) writes that a "lack of explicitly stated theories that could explain racial disparity in enforcement

programs results in confusion and hampers our ability to develop corrective policy” (pp. 112-113). As a result, the theoretical explanations presented provided an inconclusive theoretical base for understanding racial profiling.

Current State of the Racial Profiling Literature

Based on this review, several things can be concluded about the racial profiling literature. First, previous examinations of racial profiling demonstrate inconsistent conceptualizations, methodological approaches, procedures, findings, and theoretical understandings of automobile stops. Second, while research on officer decision-making has proliferated in recent years, automobile searches remain an underdeveloped area of importance. The low visibility of this mechanism of informal social control is of continued interest for societies that value privacy and individual liberties. By directing sustained attention to these issues, with particular interest in whether race and/or ethnicity are significantly correlated with automobile searches, these analyses extend the racial profiling literature and attempts to makes sense of officer decision-making during automobile searches.

CHAPTER THREE

METHODOLOGY

The research strategy employed to gather, manage, and analyze the explanatory factors that influence an officer's decision-making during automobile searches is in keeping with the quantitative research tradition. Furthermore, this nonexperimental research approach analyzes a large dataset on police-citizen encounters and attempts to identify systemic issues where officers systematically used race and/or ethnicity in their decision-making.

Instrumentation

Pursuant to Missouri Revised Statute (MRS) 590.650 – the statute requiring law enforcement agencies to annually report indicators of racial profiling to the Missouri Attorney's General Office – the Kansas City, Missouri Police Department (KCPD) has collected information on traffic, car, and pedestrian encounters. While the Attorney's General report compares enforcement patterns across cities in Missouri, it is not intended to capture the breadth or depth of policing patterns and practices within a larger, more diverse, and socially stratified urban metropolis, such as Kansas City, Missouri. In 2003, due to the limited utility offered by MRS 590.650 – also known as the KCPD Stop Survey – and in an effort to provide greater specificity, the KCPD arranged secondary analyses and current research relationship with the University of Missouri – Kansas City's Department of Criminal Justice and Criminology. The full MRS 590.650 – from which these analyses stem – may be found in the Appendix.

The KCPD Stop Survey is an empirical approach to data collection and is grounded exclusively in officer reports of police-citizen encounters. The more than 1,400 officers with the KCPD, whose mission is “to protect life and property while reducing fear and disorder,”

report information associated with their encounters through field – utilizing mobile data terminals and personal digital assistants – and precinct reporting (About Us, 2010; Kansas City, Missouri Police Department, 2008). The KCPD Stop Survey has several mechanisms that motivate officers to vigilantly, objectively, and truthfully report their encounters. For example, the KCPD conducts internal audits on officer activity logs and failure to be truthful on any government document could result in felony charges. Furthermore, computer programming utilized by the department prevents officers from skipping questions and/or incompletely documenting encounters before returning to service.

Finally, given the sensitive nature of the KCPD Stop Survey data, several procedural safeguards were administered throughout these analyses to protect the human subjects involved. The KCPD Stop Survey data does not contain any driver personal identifiers (such as, driver’s license number, social security number, or date of birth); however, the Survey does contain a personal identifier for the officer(s) engaged in the encounter – the officers’ badge number. An officer’s badge number alone is a meaningless string of numbers but since it serves an organizational purpose, it has the potential to draw scrutiny. Identifying individual officers who disparately engaged in automobile searches (i.e., the “bad apples”) in an early warning system is beyond the scope of this research and, therefore, has no purpose in these analyses. Additionally, officers were informed that their responses would not be used for individual disciplinary purposes but that they would be used to guide future training functions. Documents containing individual officer badge number(s) were destroyed and access to the data file was limited to the researcher, chair of the researcher’s thesis committee, and the Unit of Information Services at the KCPD. Once the data was analyzed,

only the KCPD Command Staff was privy to the result – which did not include individual officer badge number(s) – in order to further maintain officer confidentiality.

Variables

This research utilizes a deductive approach to understanding the nature and quality of automobile stops. The challenge presented by the KCPD Stop Survey is crafting its responses into relevant variables for analyses. In doing so, the operational definitions of the KCPD Stop Survey will be reconfigured into dummy variables for secondary analyses. While some of the operational definitions of the KCPD Stop Survey do not perfectly mesh with conceptual definitions previously provided, this section identifies the gap between definitions and minimizes the findings' exposure to error by simplifying categorical responses, filtering out irrelevant and biased cases, and shrinking the critical region of analysis to a more manageable state. The percentages and number of cases presented in this chapter reflect the state of the dataset before any cases were filtered out of the sample.

Dependent Variables

Three dependent variables, displayed in Table 3.01, are used to understand the extent to which race and/or ethnicity influence an officer's decision to engage in automobile searches. The first dependent variable measures whether a search occurred. The KCPD Stop Survey reports whether an automobile search did or did not occur in binary terms: "Yes" and "No." A "Yes" response indicates that an automobile search did occur while a "No" response indicates a search did not occur. These responses are operationalized as "Yes" = 1 and is referenced against "No" = 0 responses. The text will identify this outcome as searches (overall) to avoid confusion with the forthcoming dependent variables.

In addition to whether or not an automobile search occurred, the conditions of a search are also important. Due to the fact that searches vary in their degree of discretion, two additional dependent variables are utilized to distinguish instances where officers have greater and lesser ability to use their position of authority. The second dependent variable is dichotomous and contrasts stops that involved nondiscretionary search responses (i.e., “Incident to Arrest” and “Inventory”) against discretionary search responses (i.e., “Consent,” “Drug Dog Alert,” “Odor of Drugs/Alcohol,” “Other,” “Plain View Contraband,” and “Reasonable Suspicion”) and instances where a search did not occur. These responses are operationalized as “Incident to Arrest” and “Inventory” = 1 and “Consent,” “Drug Dog Alert,” “Odor of Drugs/Alcohol,” “Other,” “Plain View Contraband,” “Reasonable Suspicion,” and “System Missing” = 0. The final dependent variable is also dichotomous and contrasts stops that involved discretionary search responses against nondiscretionary search responses and instances where a search did not occur. These responses are operationalized as “Consent,” “Drug Dog Alert,” “Odor of Drugs/Alcohol,” “Other,” “Plain View Contraband,” and “Reasonable Suspicion” = 1 and “Incident to Arrest,” “Inventory,” and “System Missing” = 0.

The manner in which the KCPD Stop Survey operationalizes automobile search types may be problematic when situating this research among similar endeavors. Five of the categorical responses indicating the reason for conducting a search in the KCPD Stop Survey match directly with what the racial profiling literature has indicated as search types permissible by Supreme Court precedent and law enforcement policies (“Consent,” “Drug Dog Alert,” “Incident to Arrest,” “Inventory,” and “Plain View Contraband”); however, three fields are not explicitly identified in the racial profiling literature but utilized in the KCPD

Table 3.01
Observed Dependent Variables

<u>Variable Name</u>	<u>Level of Measurement</u>	<u>Variable Label</u>
Searches (overall)	Scale 0 -1	0 = No 1 = Yes
Nondiscretionary Search	Scale 0 -1	0 = Consent 0 = Drug Dog Alert 0 = Odor of Drugs / Alcohol 0 = Other 0 = Plain View Contraband 0 = Reasonable Suspicion 0 = System Missing 1 = Incident to Arrest 1 = Inventory
Discretionary Search	Scale 0 -1	0 = Incident to Arrest 0 = Inventory 0 = System Missing 1 = Consent 1 = Drug Dog Alert 1 = Odor of Drugs/Alcohol 1 = Other 1 = Plain View Contraband 1 = Reasonable Suspicion

Stop Survey (“Odor of Drugs / Alcohol,” “Other,” and “Reasonable Suspicion”) and therefore, require further probing. First, the categorical response “Odor of Drugs/Alcohol” is a more specific breach of the probable cause threshold but is less exhaustive. While the absence of an odor of drugs and/or alcohol may not deter a probable cause search, more often than not, automobile searches that breach the probable cause threshold are due to an odor of drugs and/or alcohol. The presence of an odor of drugs and/or alcohol and the probable cause threshold are not mutually exclusive categorical responses, but they are considered as such in the KCPD Stop Survey.

Additionally, the categorical response “Reasonable Suspicion” is most likely to be associated with what the racial profiling literature identifies as a ‘Terry’ search. The evidentiary threshold associated with a ‘Terry’ search is reasonable suspicion; however, due to the fact that the evidentiary threshold for a ‘Terry’ search is less than probable cause, the scope of the search is limited (i.e., an officer may only pat down the outside of the driver and/or passenger(s) for their own safety). Further probing requires additional evidence amounting to probable cause. This categorical response has the potential to be problematic if officers identify a lower than legally required evidentiary threshold (i.e., reasonable suspicion) when conducting an automobile search without limiting the scope of their search to a pat down.

Finally, the categorical response “Other” is problematic for several reasons. While an “Other” response may include the final outstanding search type identified in the racial profiling literature (i.e., the discovery of an existing search and/or arrest warrant(s)), it is not associated with any evidentiary threshold. Officers may utilize the “Other” response when no evidence is present or when a search occurs but the evidentiary threshold has not sufficiently

been breached. These instances are of extreme interest for this research because officers have an increased potential to misuse their authority. Though the “Other” response is a relatively rare categorical response (occurring in 0.1 % of all cases in the data set) and it is unclear exactly how officers are utilizing this categorical response, what is clear is that officers are not using it for nondiscretionary search purposes. As a result, it has been placed among discretionary searches.

Independent Variables

In an effort to determine the influence of race and/or ethnicity on each of the dependent variables, several explanatory control variables are included in these analyses. The independent variables in these analyses are nominal level variables that have been dichotomized into dummy variables. Variable classifications are consistent with the racial profiling literature and are based on legal and extralegal influences upon the dependent variables. While it is impossible to acknowledge all influences upon officer decision-making, the specified categorical responses are based on circumstances in which officers substantively and, in some cases, anecdotally place greater scrutiny.

Legal Variables

The two observed independent legal variables included in these analyses are displayed in Table 3.02. First, there are two stop types included in these analyses: “Traffic” and “Investigatory.” Traffic stops are encounters where a traffic regulation has been violated. Alternatively, investigatory stops function as part of a continuing investigation and are encounters where the driver, passenger(s), car, or combination of some or all entities is known by the police. These stops are qualitatively different in their presumed presence of racial and/or ethnic bias(es) during the initiation of an automobile stop; traffic stops are presumed

to be racially and/or ethnically neutral, while investigatory stops may legally have racial and/or ethnic bias(es). The predisposed racial and/or ethnic bias(es) of investigatory stops may call into question its explanatory utility. Specifically, why would known cases with legal racial and/or ethnic bias(es) be included in these analyses? Even though traffic and investigatory stops may be initiated under different pretenses of racial and/or ethnic bias(es), their post-stop dispositions should be racially and/or ethnically neutral. In addition to traffic and investigatory stops, officers on the KCPD Stop Survey may also identify pedestrian stops; however, pedestrian stops are excluded from these analyses. The result is a dichotomous variable that controls for the automobile stop type and references investigatory stops against traffic stops. Stop type is operationalized as “Investigatory” = 1 and “Traffic” = 0.

In addition to the stop type, several control variables identifying the reason for initiating the stop are utilized. The racial profiling literature has identified several highly discretionary violations that may be more indicative of officer pretextual motivations. The KCPD Stop Survey allows officers to indicate multiple responses when identifying the six types of violations: “CVE” or Commercial Vehicle Equipment violation, “Failure to Signal,” “Following too Close,” “Lane Violation,” “Other Moving Violation,” and “Speed.” A commercial vehicle equipment violation most commonly include things such as having a tail light out or having too much tint on the vehicles’ window(s). A failure to signal violation, as the name implies, is when the driver does not signal when they are changing lanes or turning. A following too close violation is when the driver tailgates another driver(s). A lane violation is when the driver is weaving within or between lane(s) or does a curb check while driving. Finally, a speed violation is generally related to the driver exceeding the posted speed limit

but can also include a failure to meet a minimal speed. The violations identified in the KCPD Stop Survey are ordered from most to least discretionary. Five dummy variables were constructed out of these responses indicating whether the violation was present during the stop (“Yes” = 1) or absent from the stop (“No” = 0). Similar to the “Other” categorical response for search type, the “Other Moving Violation” categorical response may be problematic because the degree of officer discretion could not be determined. As a result, the “Other Moving Violation” categorical response will serve as the reference category to the other five violations.

Extralegal Variables

Environmental Variable

In addition to the legal variables, environmental variables identify the uniqueness of the physical location the automobile stop took place. Typically, police-citizen encounters on highways are the result of a traffic violation. In addition to enforcing traffic codes, the context of city streets and county roads (also known as surface streets) provide an extra opportunity for community engagement. As a result, we would expect the application of social control to be different on highways than on surface streets. Officers, on the KCPD Stop Survey, may indicate only one of the six specified categorical responses: “City Street,” “County Road,” “Interstate Highway,” “Other,” “State Highway,” and “U.S. Highway.” A dummy variable was constructed out of these categorical responses to isolate surface street responses: “City Street,” “County Road,” and “Other” = 1, “Interstate Highway,” “State Highway,” and “U.S. Highway” = 0. The lone environmental extralegal variable included in these analyses is displayed in Table 3.03.

Table 3.02
Observed Independent Legal Variables

<u>Variable Name</u>	<u>Level of Measurement</u>	<u>Variable Label</u>
Stop Type	Scale 0-1	0 = Traffic 1 = Investigatory
CVE	Scale 0-1	0 = No 1 = Yes
Failure to Signal	Scale 0-1	0 = No 1 = Yes
Following too close	Scale 0-1	0 = No 1 = Yes
Lane Violation	Scale 0-1	0 = No 1 = Yes
Speed	Scale 0-1	0 = No 1 = Yes

Table 3.03
Observed Environmental Extralegal Variable

<u>Variable Name</u>	<u>Level of Measurement</u>	<u>Variable Labels</u>
Physical Location	Scale 0 - 1	0 = Interstate Highway 0 = State Highway 0 = U.S. Highway 1 = City Street 1 = County Road 1 = Other

Situational Variables

Among the situational variables are five driver demographic variables (race, ethnicity, gender, age, and residency status) and a variable that controls for the time of day the automobile stop took place. As noted, the primary purpose of this racial profiling research is to gauge the effects of driver race and/or ethnicity on the likelihood of being the subject of an automobile search. Race and ethnicity are not mutually exclusive concepts; however, the structure of the KCPD Stop Survey combines the concept into a single question that does not allow for multiple responses. The Survey identifies six categorical driver racial and ethnic responses: “American Indian/Alaska Native,” “Asian,” “Black/African American,” “Hispanic/Latino,” “White,” and “Other/Unknown.” The “Other/Unknown” response may be indicative of several racial and/or ethnic responses. The “Other” part of this response includes all other response not included, such as instances where a person may be of two or more racial and/or ethnic identities. Additionally, the “Unknown” aspect of this response allows for officers to indicate that they did not know the race and/or ethnicity of the driver or did not know which categorical response best fits a known racial and/or ethnic identity. It is important to note that responses indicate an officer’s perception of driver race and/or ethnicity. For our purpose, two dummy variables were constructed out of these categorical responses: (1) Race: Black (“Black/African American” = 1, “American Indian/Alaska Native,” “Asian,” “Hispanic/Latino,” “White,” and “Other/Unknown” = 0); and (2) Ethnicity: Hispanic (“Hispanic/Latino” = 1, “American Indian/Alaska Native,” “Asian,” “Black/African American,” “White,” and “Other/Unknown” = 0). The “White” categorical response accounts for the majority of the reference category responses in this data set.

Furthermore, the drivers' gender and age were distinguished from the impact of race and ethnicity. Similar to racial and ethnic minorities, males and younger citizens are over represented at every stage of the criminal justice process. As a result, it would be reasonable to deduce that the driver's gender and age may increase the likelihood of a search independent of the influence of race and/or ethnicity. The KCPD Stop Survey identifies the gender of the driver in binary terms: "Male" and "Female." The gender of the driver was operationalized as "Male" = 1, and is referenced against "Female" = 0 responses. Additionally, the KCPD Stop Survey reports the age of the driver in ranges: "Under 18," "18-29," "30-39," and "40 or Over." Two dummy variables were constructed out of these categorical responses: (1) Age: Under 18 (ages "Under 18" years = 1, "18-29," "30-39," and "40 or Over." = 0); and (2) Age: Between 18 and 29 (ages "18-29" years = 1, "Under 18," "30-39," and "40 or Over." = 0). The reference category for each of the age dummy variables is drivers that are 30 years old and older.

The final driver demographic variable included in these analyses is the residency status of the driver. Kansas City, Missouri shares a state boundary line with the state of Kansas, making cross-jurisdictional travel inherent to most people's driving. Furthermore, the residency status of an individual, in the form of a states license plate, is the most outwardly visible personal identifier with the potential for biases. Novak (2004) indicated that it is reasonable to assume that drivers who live outside the jurisdiction "may carry less political clout than do those who live within the city; thus, outsiders could represent to officers less risk of being criticized for disparate enforcement practices" (p. 84). The KCPD Stop Survey reports the residency status of the driver in binary terms: "Yes" and "No." A "Yes" response indicates that the driver is a resident of Kansas City, Missouri while a "No"

response indicates the driver lives outside the jurisdiction. The residency status of the driver is operationalized as “Yes” = 1, and is referenced against “No” = 0 responses.

Finally, among the situational variables is a control variable reflecting the time of day in which the stop took place. Officers approach night time encounters with citizens with increased suspicion, hence searches may be more prevalent during night time hours. The KCPD Stop Survey reports the time of day in military time. A single dummy variable was constructed to identify night time hours: Night Time (0:00-6:00 and 19:00-23:59 = 1, 6:01-18:59 = 0). The night time dummy variable indicates cases that occurred between 7:00pm and 6:00am and is referenced against day time hours between 6:01am and 6:59pm. The observed situational extralegal variables included in these analyses are displayed in Table 3.04.

Clearly, automobile searches are dynamic encounters influenced by a host of factors. These analyses contain fourteen legal and extralegal independent variables. Legal variables include the stop type and five variables controlling for the reason the stop was initiated. Extralegal variables include an environmental variable identifying the street type where the stop was made, six situational variables that include five driver demographic variables (race, ethnicity, gender, age, and residency status), and a variable identifying the time of day the stop took place. Each of the independent variables have substantive and anecdotal explanatory value for each of the dependent variables. The first dependent variable encompasses searches (overall). The second and third dependent variables (nondiscretionary and discretionary searches) specify the polar degrees of discretion afforded to officers during their encounters with citizens.

Table 3.04
Observed Situational Extralegal Variables

<u>Variable Name</u>	<u>Level of Measurement</u>	<u>Variable Labels</u>
Race	Scale 0 - 1	0 = American Indian/Alaska Native 0 = Asian 0 = Hispanic / Latino 0 = White 0 = Other / Unknown 1 = Black / African American
Ethnicity	Scale 0 - 1	0 = American Indian/Alaska Native 0 = Asian 0 = Black / African American 0 = White 0 = Other / Unknown 1 = Hispanic / Latino
Gender	Scale 0 - 1	0 = Female 1 = Male
Age: Under 18	Scale 0 - 1	0 = Between 18 and 29 0 = Between 30 and 39 0 = Over 40 1 = Under 18
Age: Between 18 and 29	Scale 0 - 1	0 = Under 18 0 = Between 30 and 39 0 = Over 40 1 = Between 18 and 29
Residency Status	Scale 0 - 1	0 = No 1 = Yes
Time of Day	Scale 0 - 1	0 = Day (6:01 am-6:59pm) 1 = Night (7pm-6am)

Sample

Between January 1, 2009 and December 31, 2009, the KCPD Stop Survey included 122,209 cases reported by the KCPD. In general, the larger a critical region to be analyzed, the more precise the results; however, the 122,209 case dataset utilized for this research includes numerous irrelevant, biased, and statistically unmanageable cases. As a result, several cases are in need of filtering out before proceeding. Upon refining the dataset to a more manageable state, the forthcoming method of data analyses will have greater statistical power, hone in on more critical cases, and minimize the results exposure to Type II error (i.e., accepting the null hypothesis when in fact it is false).

Cases where the driver was discovered to have an outstanding warrant (4,616 cases and 3.6 % of all encounters) are excluded from these analyses because they are highly correlated with searches. The relationship between the discovery of an outstanding warrant and an automobile search is expected. When an officer discovers an individual has an outstanding warrant, regardless of the individual's race and/or ethnicity, he or she has the legal obligation to take that individual into custody. When an individual is taken into custody, procedurally an officer must conduct a search of the individual. Since the discovery of an outstanding warrant is racially and ethnically neutral and procedurally pursuant to a search, it would be difficult to amass new knowledge regarding officer decision-making from a racial profiling research approach that includes cases where outstanding warrants were discovered.

Furthermore, pedestrian stops (8,863 cases and 7.3% of all encounters) are also omitted from these analyses. Car stops present several qualitative differences from pedestrian stops. First, each is accompanied with a different evidentiary threshold for engaging in a

search: car stops require the stiffer probable cause, while pedestrian stops only require reasonable suspicion. Second, the scope of a search is different for car and pedestrian stops. In car stops the person, passenger(s), and vehicle may be searched. Alternatively, only people may be searched during pedestrian stops. Finally, exigency is not inherent in pedestrian stops as it is in most car stops. As a result, car searches are often preformed without a warrant, whereas pedestrian stops often require a warrant. The totality of these differences put the scope of pedestrian stops beyond the focus of this research.

The third type of cases that were removed from the sample were non-patrol officer cases. The KCPD has a unique organizational structure that contains two types of officer assignments: "Patrol" and "Traffic." Patrol officers service the community's general needs and are the responders for calls for service (i.e., the 911 police responders). Alternatively, traffic officers are free from calls for service and primarily enforce traffic regulations. In addition to differing in their organizational duties, there are significantly fewer traffic officers in the field than patrol officers but they account for a relatively equitable number of stops: patrol officers engaged in 57,353 (46.9 %) stops and non-patrol officers engaged in 64,856 (53.1 %) stops. For our purposes, all non-patrol cases are excluded from these analyses. The primary advantage of excluding all non-patrol officer cases is added stability to the forthcoming method of data analyses. Searches by all officers are relatively rare events in the data set (10,823 or 8.9 % of all cases); however, patrol officer proportionately conduct a majority of searches (10,542 or 18.4 % of patrol officer cases) when compared to their peers (281 or 0.4 % of non-patrol officer cases). Since the majority of searches are conducted by patrol officers, excluding non-patrol officer cases increases the internal benchmarks ability to generalize the population encountered to the population searched.

Once cases with outstanding warrants, pedestrians, and non-patrol officers were filtered out of the dataset, 45,490 cases remained. Given the number of independent variables utilized and the forthcoming method of data analyses, an approximate 10 % simple random sample was utilized. A simple random sample is the least bias way of achieving a representative sample because every case in the dataset has an equal chance of being included. This nonbiased sampling procedure minimizes sampling error down to chance – the smallest magnitude of sampling error achievable. Furthermore, the approximate 10 % simple random sample provides greater statistical power to the forthcoming method of data analyses by making the dataset more manageable and, as a result, minimizes the findings exposure to Type II error.

Method of Data Analyses

Given the current state of the data and the fact that each of the three dependent variables are dichotomous, a sophisticated layered methodological approach is necessary to answer each of the research questions. First, descriptive statistics, including frequency distributions and population percentages, provide a framework for understanding the dataset and address how often automobile searches occur. Second, in order to evaluate the correlative relationship between race and ethnicity and each of the dependent variables, crosstabulation and chi-square analyses are utilized. The crosstabulation and chi-square analyses demonstrate whether the population of Blacks and Hispanics searched (overall), including nondiscretionary and discretionary searches, is significantly different than what is to be expected. Finally, the qualitative dynamics of automobile encounters require a more rigorous method of data analyses. The most rigorous method of data analyses utilized in this and other research is the inferential statistical procedure multivariate logistical regression.

Multivariate logistical regression predicts the probabilities of unordered response categories, compared to an excluded or reference category, by statistically elaborating and controlling for the effects of other variables and demonstrates the association, relationship, and strength between the dependent and each of the independent variables included in the model. More specifically, this statistical approach demonstrates the influence of race and ethnicity, net the influences of the other independent variables, at the various levels of discretion afforded to officers during automobile searches. For this reason, different dependent variables will be regressed upon the same set of independent measures.

Methodological Limitations

Although a lot of new knowledge may be extracted from these secondary analyses, the KCPD Stop Survey and this research endeavor have some methodological limitations.

Internal Benchmarking and Specification Error

Researchers are confronted with identifying benchmarks or expected outcomes because benchmarks gauge whether the observed outcomes are expected outcomes. Schafer, Carter, Katz-Bannister, and Wells (2006) articulated the issue as, “given a group of citizens stopped by the police (the numerator), what could be used as a denominator to conclusively determine whether certain drivers were stopped at a disproportionate rate?” (p. 187). The racial profiling literature identifies four types of benchmarks: modified census, field observations, accident records, and internal (Withrow, 2006). The internal benchmark has consistently been selected in the racial profiling literature on automobile searches and is utilized in these analyses. Internal benchmarking compares “individual officer performance against performances of similarly situated officers” (Withrow, Daily, & Jackson, 2008, p. 28). More specifically, these analyses utilize the pool of motorists stopped for the basis of

comparison. The limitation of internal benchmarking and this criminological approach is that a limitless number of factors contribute to an officer's decision-making. Accordingly, the multivariate regression analyses will suffer from specification error, which "is a term used to describe situations in which multivariate models are misspecified due to [... the] inclusion of erroneous variables and/or the exclusion of unobserved variables" (Engel, 2008, p. 11).

Specification error has the greatest impact on the precision of the benchmark. Therefore, as the causal elaboration increases so too does the analyses' precision in identifying similarly situated officers – which is gauged by the Nagelkerke r^2 score.

McMahon, Garner, Davis, and Kraus (2002) asserted that racial profiling researchers have an ethical responsibility to identify and communicate the explanatory limits of their findings. Keeping this in mind, the KCPD Stop Survey does not collect information regarding three critical influences on officers' decision-making: passenger-level, demeanor-level, and policing-level data. Although driver-level data is adequately surveyed, the KCPD Stop Survey does not collect passenger-level data. Passengers are equally susceptible to racial and/or ethnic profiling as drivers and require the same due diligence in racial profiling data collection and analyses. Additionally, demeanor-level data is omitted from the KCPD Stop Survey. In the racial profiling literature, the demeanor of the driver and/or passenger(s) has consistently been the most predictive indicator of an officer's use of discretion. Even though interpretations of demeanor-level data are subjective, it is logical to assume outcomes may be influenced by the behavior, attitude, and/or outward appearance of the individual(s) officers encounter. Finally, policing-level data was also omitted from the KCPD Stop Survey. Automobile stops bring together persons from unique backgrounds. Officers differ in their age, experience, gender, race, and ethnicity. While this research has no intention of

singling out “bad apple” officers, these analyses would benefit from additional policing-level controls. The omission of passenger-level, demeanor-level, and policing-level data is a weakness of the KCPD Stop Survey and subsequently this research endeavor.

Hawthorne Effect

Racial profiling researchers have raised concerns over the validity of self-reported data by officers. The KCPD has policies and procedures in place that minimize non-reporting or misrepresentative reporting; however, officers are certainly aware of how their reports are being used and may fear accurately reporting some or all of their encounters may reflect poorly on them or the department. Williams and Stahl (2008) indicated that this may result in officers “‘ghosting’ their data or recording race and ethnicity incorrectly to create the illusion of equitable stop and search procedures” (p. 231). Some research reports no officer reactivity with stops reports. Novak (2004) found very little evidence of a Hawthorne effect after the implementation of a new data collection strategy. Given the fact that the KCPD had been collecting these data for several years prior to these analyses, it appears as though the risk of a Hawthorn effect is minimal. Nevertheless, a Hawthorne effect cannot immediately be dismissed.

Disparity and Not Discrimination

Finally, racial profiling is a social construct that asks researchers to make “normative choices about what counts as equitable” (Thacher, 2001, p. 1). These analyses measure those choices statistically, but as Reitzel and Piquero (2006) acknowledge there is no “statistical designation of what constitutes an equitable distribution of stops and searches” (p. 168). Therefore, to assume normative descriptors in the place of statistical designations is

inappropriate. As a result, findings will be reported as a disparity of outcomes – a statistical designation – rather than discrimination – a normative designation.

In summation, the KCPD has collected data on police-citizen encounters pursuant to MRS 590.650. In an effort to provide greater specificity to the Attorney's General report, these secondary analyses takes a closer look at automobile searches. Automobile searches are dynamic encounters whose outcomes are directly influenced by numerous legal and extralegal factors. These analyses craft officer responses into fourteen independent variables and three dependent variables explicitly chosen to expose the gap between the theory and praxis of law through a sophisticated layered methodological approach. This method of data collection and analyses is consistent with the totality of circumstances standard officers are held to during automobile stops, contributes to the developing literature base on automobile searches as an indicator of social control, is most likely to be used in an Equal Protection challenge in court, and identifies systemic issues were officers systematically used race and/or ethnicity in their decision-making.

CHAPTER FOUR

RESULTS

The following is a presentation of descriptive statistics, crosstabulations, chi-square analyses, and multiple logistical regression results from the random sample. Descriptive statistics provide a framework for understanding the KCPD Stop Survey sample, while the crosstabulations, chi-square analyses, and logistical regression models address the research questions. In each case, the independent variables of interest (the extralegal situational demographic effects of race and ethnicity) are the primary focus, even though the influences of extraneous control variables are discussed.

Descriptive Statistics

Gauging when, if, and to what extent racial and ethnic minorities are more to be the subject of an automobile search begins with contextualizing automobile stops. Tables 4.01, 4.02, and 4.03 provide the frequency distribution and population percentages for the sample containing 4,569 automobile stops. More specifically, Table 4.01 tabulates the frequency distribution and population percentages for each of the dependent variables. In the sample, 525 (11.5 %) cases resulted in a search (overall). Searches (overall) were then disaggregated into two additional dependent variables: nondiscretionary and discretionary searches. In the sample, nondiscretionary searches occurred in 282 (6.2 %) cases and discretionary searches occurred in 243 (5.3 %) cases.

In addition to the dependent variables, the frequency distributions and population percentages for the legal and extralegal causal factors associated with the dependent variables are presented. The six variables that account for the legal variables associated with an automobile stop are displayed in Table 4.02. The legal variable identifying the stop type

Table 4.01
 Frequency Distributions and Population Percentages for Dependent Variables

<u>Variable Name</u>		<u>Frequency</u>	<u>Percent</u>
Searches (overall)	Yes	525	11.5 %
	No	4,044	88.5 %
Nondiscretionary Search	Yes	282	6.2 %
	No	4,287	93.8 %
Discretionary Search	Yes	243	5.3 %
	No	4,326	94.7 %
	Total	4,569	100 %

Table 4.02
 Frequency Distributions and Population Percentages for Legal Variables

<u>Variable Name</u>		<u>Frequency</u>	<u>Percent</u>
Stop Type	Investigatory	1,496	32.7 %
	Traffic	3,073	67.3 %
CVE	Yes	2	>0.1 %
	No	4,567	99.9 %
Failure to Signal	Yes	89	1.9 %
	No	4,480	98.1 %
Following too close	Yes	11	0.2 %
	No	4,558	99.8 %
Lane Violation	Yes	140	3.1 %
	No	4,429	96.9 %
Speed	Yes	548	12.0 %
	No	4,021	88.0 %
	Total	4,569	100 %

yielded 1,496 (32.7 %) investigatory stops and 3,073 (67.3 %) traffic stops. Additionally, the sample included 2 (>0.1 %) commercial vehicle equipment violations, 89 (1.9 %) violations for failing to signal, 11 (0.2 %) violations for following too close, 140 (3.1 %) lane violations, and 548 (12.0 %) speed violations.

Furthermore, several extralegal variables were included in these analyses. Table 4.03 presents the frequency distributions and population percentages for the environmental extralegal factor included in these analyses. The sample included 4,058 (88.8 %) surface street encounters and 511 (11.2 %) highway encounters.

Contained in Table 4.04 are the primary variables of concern; the driver demographic situational extralegal variables of race and ethnicity. In the sample, Blacks were involved in 2,273 and Hispanics involved in 258 (5.6 %) automobile stops. Blacks comprise nearly half of the population that was stopped in the KCPD Stop Survey sample (49.7 %). In addition to the drivers' race and ethnicity, the drivers' gender, age, and residency status are also displayed among the demographic situational extralegal variables. In the sample, male drivers accounted for 2,966 (64.9 %) and female drivers accounted for 1,603 (35.1 %) of the cases. Furthermore, drivers under the age of 18 accounted for 151 (3.3 %) of the cases in the sample, while drivers between the ages of 18 and 29 accounted for 1,992 (43.6 %) of the cases in the sample. Also displayed in Table 4.04 is the variable that identifies the residency status of the driver. Residents of Kansas City, Missouri represented 3,429 (75.0 %) of the drivers stopped. Finally, the remaining situational extralegal variable under analysis identifies the time of day in which the automobile stops took place. Night time stops accounted for 2,748 (60.1 %) and day time stops accounted for 1,821 (39.9 %) of the cases in the sample.

Table 4.03
 Frequency Distributions and Population Percentages for Extralegal Environmental Variable

<u>Variable Name</u>		<u>Frequency</u>	<u>Percent</u>
Physical Location: Surface Street	Yes	4,058	88.8 %
	No	511	11.2 %
	Total	4,569	100 %

Table 4.04
 Frequency Distributions and Population Percentages for Extralegal Situational Variables

<u>Variable Name</u>		<u>Frequency</u>	<u>Percent</u>
Race: Black	Yes	2,273	49.7 %
	No	2,296	50.3 %
Ethnicity: Hispanic	Yes	258	5.6 %
	No	4,311	94.4 %
Gender	Male	2,966	64.9 %
	Female	1,603	35.1 %
Age: Under 18	Yes	151	3.3 %
	No	4,418	96.7 %
Age: Between 18 and 29	Yes	1,992	43.6 %
	No	2,577	56.4 %
Residency Status	Yes	3,429	75.0 %
	No	1,140	25.0 %
Time of Day: Night (7pm-6am)	Yes	2,748	60.1 %
	No	1,821	39.9 %
	Total	4,569	100 %

Crosstabulation and Chi-Square Analyses

Although Blacks and Hispanics account for the majority of people stopped in the sample (2,531 cases, and 55.3 % of the population), descriptive statistics cannot address two of the central questions guiding this research: whether automobile searches are equally distributed across racial and ethnic groups and is race and/or ethnicity a significant predictor for being searched? To answer these questions, Tables 4.05-4.10 explore the bivariate relationships and Tables 4.11-4.13 explore the multivariate relationships of race and ethnicity on the dependent variables.

Utilizing a crosstabulation and chi-square analyses, this layer of statistical analysis examines the relationship between independent and dependent variables. In doing so, several explanatory statistics are presented in the crosstabulation. First, the ordered responses for race, ethnicity, and dependent variables are disaggregated against the associated reference categories and presented as frequency distributions and population percentages. The chi-square statistic determines the independence of the relationship between variables by calculating the cumulative divergence between observed and expected frequencies. The chi-square significance threshold, identified as “Asymp. Sig. (2-sided)” in the table, quantifies the predictive value of race and ethnicity on each of the dependent variables. The threshold in which correlates from these crosstabulations are considered significant was defined at the $p < 0.05$ and $p < 0.01$ level. Significant variables meeting or exceeding the $p < 0.05$ and $p < 0.01$ level are identified with a “*” and “**” in the tables, respectfully.

Table 4.05 provides the crosstabulation and chi-square analysis for searches (overall) and race. The proportion of Blacks searched (overall) (12.8 %) is greater than the proportion

of non-Blacks searched (overall) (10.2 %) and the mean population for all races and ethnicities (11.5 %). Furthermore, this difference is significant at the $p < 0.01$ threshold.

In Table 4.06 the crosstabulation and chi-square analysis for nondiscretionary searches and race are provided. Although the proportion of Blacks subjected to a nondiscretionary search (6.8 %) was greater than the proportion of non-Blacks subjected to a nondiscretionary search (5.6 %) and the mean population for all races and ethnicities subjected to a nondiscretionary search (6.2 %), the observed difference is nonsignificant.

Table 4.07 provides the crosstabulation and chi-square analysis for discretionary searches and race. The proportion of Blacks subjected to a discretionary search (6.0 %) was greater than the proportion of non-Blacks subjected to a discretionary search (4.6 %) and the mean population for all races and ethnicities subjected to a nondiscretionary search (5.3 %). Furthermore, this difference is significant at the $p < 0.05$ threshold.

Switching attention to ethnicity, Table 4.08 provides the crosstabulation and chi-square analysis for searches (overall) and ethnicity. Although the proportion of Hispanics searched (overall) (15.1 %) was greater than the proportion of non-Hispanics searched (overall) (11.3 %) and the mean population for all races and ethnicities searched (overall) (11.5 %), the observed difference is nonsignificant.

In Table 4.09 the crosstabulation and chi-square analysis for nondiscretionary searches and ethnicity are provided. Although the proportion of Hispanics subjected to a nondiscretionary search (7.8 %) was greater than the proportion of non-Hispanics subjected to a nondiscretionary search (6.1 %) and the mean population for all races and ethnicities subjected to a nondiscretionary search (6.2 %), the observed difference is nonsignificant.

Finally, Table 4.10 provides the crosstabulation and chi-square analysis for

Table 4.05

Crosstabulation and Chi-Square Analysis for Race and Searches (overall)

		All Searches				
		<u>Yes</u>		<u>No</u>		<u>Total</u>
		<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>
Race: Black	Yes	291	12.8 %	1,982	87.2 %	2,273
	No	234	10.2 %	2,062	89.8 %	2,296
	Total	525	11.5 %	4,044	88.5 %	4,569
Pearson Chi-Square		Value:	7.656	Asymp. Sig. (2-sided):	0.006**	
* Indicates a statistically significant relationship at the p<0.05						
** Indicates a statistically significant relationship at the p<0.01						

Table 4.06

Crosstabulation and Chi-Square Analysis for Race and Nondiscretionary Searches

		Nondiscretionary Search				<u>Total Frequency</u>
		<u>Yes</u>		<u>No</u>		
		<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>	<u>Percent</u>	
Race: Black	Yes	154	6.8 %	2,119	93.2 %	2,273
	No	128	5.6 %	2,168	94.4 %	2,296
	Total	282	6.2 %	4,287	93.8 %	4,569
Pearson Chi-Square		Value: 2.842		Asymp. Sig. (2-sided):		0.092
* Indicates a statistically significant relationship at the p<0.05						
** Indicates a statistically significant relationship at the p<0.01						

Table 4.07

Crosstabulation and Chi-Square Analysis for Race and Discretionary Searches

		Discretionary Search				<u>Total Frequency</u>
		<u>Yes</u>		<u>No</u>		
		<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>	<u>Percent</u>	
Race: Black	Yes	137	6.0 %	2,136	94.0 %	2,273
	No	106	4.6 %	2,190	95.4 %	2,296
	Total	243	5.3 %	4,326	94.7 %	4,569
Pearson Chi-Square		Value:	4.513	Asymp. Sig. (2-sided):	0.034*	
* Indicates a statistically significant relationship at the p<0.05						
** Indicates a statistically significant relationship at the p<0.01						

Table 4.08

Crosstabulation and Chi-Square Analysis for Ethnicity and Searches (overall)

		All Searches				
		<u>Yes</u>		<u>No</u>		<u>Total</u>
		<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>
Ethnicity: Hispanic	Yes	39	15.1 %	219	84.9 %	258
	No	486	11.3 %	3,825	88.7 %	4,311
	Total	525	11.5 %	4,044	88.5 %	4,569
Pearson Chi-Square		Value: 3.535		Asymp. Sig. (2-sided):		0.060
* Indicates a statistically significant relationship at the p<0.05						
** Indicates a statistically significant relationship at the p<0.01						

Table 4.09 Crosstabulation and Chi-Square Analysis for Ethnicity and Nondiscretionary Searches						
		Nondiscretionary Search				
		<u>Yes</u>		<u>No</u>		<u>Total</u>
		<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>
Ethnicity: Hispanic	Yes	20	7.8 %	238	92.2 %	258
	No	262	6.1 %	4,049	93.9 %	4,311
	Total	282	6.2 %	4,287	93.8 %	4,569
Pearson Chi-Square		Value:		1.179	Asymp. Sig. (2-sided):	
					0.278	
* Indicates a statistically significant relationship at the p<0.05						
** Indicates a statistically significant relationship at the p<0.01						

Table 4.10
 Crosstabulation and Chi-Square Analysis for Ethnicity and Discretionary Searches

		Discretionary Search				<u>Total Frequency</u>
		<u>Yes</u>		<u>No</u>		
		<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>	<u>Percent</u>	
Ethnicity: Hispanic	Yes	19	7.4 %	239	92.6 %	258
	No	224	5.2 %	4,087	94.8 %	4,311
	Total	243	5.3 %	4,326	94.7 %	4,569
Pearson Chi-Square		Value: 2.273		Asymp. Sig. (2-sided):		0.132
* Indicates a statistically significant relationship at the p<0.05						
** Indicates a statistically significant relationship at the p<0.01						

discretionary searches and ethnicity. Although the proportion of Hispanics subjected to a discretionary search (7.4 %) was greater than the proportion of non-Hispanics subjected to a discretionary search (5.2 %) and the mean population for all races and ethnicities subjected to a discretionary search (5.3 %), the observed difference is nonsignificant.

The crosstabulations and chi-square analyses demonstrate interesting results. Blacks and Hispanics were consistently searched (overall), including nondiscretionary and discretionary typologies of searches, more frequently than their reference categories; however, the observed proportion of Blacks searched (overall) and discretionary searches differed significantly than what is to be expected. The observed proportion of Hispanics did not differ significantly from the expected values across any of the dependent variables. These finding suggests that officer decision-making during searches (overall) and discretionary searches, may be influenced by race; however, this observation is more closely examined with multivariate modeling.

Multivariate Models

When determining when, if, and to what extent differential enforcement patterns exist across search outcomes for racial and/or ethnic minorities, several explanatory statistics are presented for each model and variables contained within those models. Two explanatory statistics are presented for each of the models: chi-square and Nagelkerke R Squared. Similar to the previous section, the chi-square statistic for logistical regression determines if the observed results from the model are expected. By calculating the cumulative divergence between observed and expected frequencies, the chi-square statistic demonstrates a relationship between the model and the dependent variables. Additionally, the Nagelkerke R Squared statistic demonstrates the proportion of explained variation in each of the models.

The Nagelkerke R Squared statistic measures how well the selected variables in the model predict the values of the dependent variable. For our purposes, the Nagelkerke R Squared score quantifies the models predictive value for each of the dependent variables. Finally, even though it is not presented, it should be noted that each of the models were statistically significant at the conservative $p < 0.001$ threshold.

In addition to model statistics, four explanatory statistics are presented for each of the models' variables: unstandardized beta coefficient, units of standard error, relative significance level, and the exponentiation of the beta coefficient. The unstandardized beta coefficient, identified as "b" in the tables, "predicts nodal involvement from a constant and the variables" in the model (Norusis, 2008, p. 321). This statistic demonstrates several things. First, it shows if there is a relationship between the independent and dependent variable; positive coefficients indicate a positive relationship with the dependent variable (i.e., as the dependent rises, the independent variable rises, and as the dependent falls, the independent variable falls) and negative coefficients indicate a negative relationship with the dependent variable (i.e., as the dependent rises, the independent variable falls, and as the dependent falls, the independent variable rises). Additionally, the unstandardized beta coefficient tells us the relative strength of the relationship between the independent variables and the dependent variable. If we were to hold all other independent variables constant, for every single unit increase in an independent variable, we would expect the unstandardized beta coefficient score to increase in the log-odds of the dependent variable. The interpretation of this statistic is heavily dependent upon the other variables included in the model and therefore, further interpretations of the independent variables' influence upon the dependent variable requires an exploration of the remaining statistics presented in the tables.

The second variable statistic presented is the coefficients' units of standard error and is identified in the tables as "S.E." The units of standard error determine whether the assumed parameter for a variable is significantly different from zero. This statistic is utilized to form a confidence interval for the assumed parameter. Furthermore, this statistic demonstrates the stability of the estimate, relative to the unstandardized coefficient. It should be noted that independent variables included in these analyses were examined for collinearity. This was done by estimating the bivariate correlations between each pair of variables and their resulting correlation matrices. No correlations exceeded 0.7, suggesting no harmful multicollinearity between any pair of independent measures in the models.

The third variable statistic presented is the relative significance level for the independent variable and is identified as "Sig." in the tables. The threshold in which correlates from this research are considered significant was conservatively defined at the $p < 0.01$ and $p < 0.001$ level due to the KCPD Stop Survey sample size. Significant variables meeting or exceeding the $p < 0.01$ and $p < 0.001$ level are identified with a "***" and "****" in the tables, respectfully.

The final variable statistic presented is the exponentiation of the beta coefficient and is identified as "Exp(B)" in the tables. Odds ratios, as they are also known as, determine the likelihood of experiencing a change in the dependent variable for every unit change in the independent variable. The interpretation of variables with a positive unstandardized beta coefficient is strait forward; however, in order to establish the odds ratio for the reference category – as is necessary for interpreting negative unstandardized beta coefficients – the Exp(B) is divided by one minus the Exp(B) . The odds ratios in the tables reflect the unstandardized beta coefficients positive or negative association with the dependent variable

but the text will identify the positively correlated reference category when the unstandardized beta coefficient demonstrates a negative correlation. The odds ratio statistic is of particular interest for this research because it demonstrates the likelihood of experiencing each of the dependent variables. Finally, it should be noted that each of the variable statistics reported are net the influence of the other variables included in these analyses. Results may vary with the inclusion and/or exclusion of additional variables.

Model Predicting Searches (overall)

Table 4.11 presents the results of the logistical regression model predicting searches (overall). The chi-square score for this model was 395.299 and the model explains 16.3 % of the variance in the dependent variable. Excluding instances where the stop was initiated for speed violations, the nodal movement for all significant variables was positive. When considering the risk factors for searches (overall) at the $p < 0.001$ threshold three variables demonstrated notable correlations: stop type, speed violations, and gender. Investigatory stops yielded nearly four times as many searches (overall) as traffic stops, divers that were stopped for speed violations were 21.1 % less likely to be searched (overall), and males were nearly two and half times more likely to be searched (overall) than their female counterparts. Additionally, there were three risk factors for searches (overall) at the $p < 0.01$ threshold. Drivers that were stopped for following too close were over eight times more likely to be searched (overall), drivers that were stopped for lane violations were over two times more likely to be searched (overall), and night time stops were 33.5 % more likely to result in a search (overall) than day time encounters. Finally, though race and ethnicity were nonsignificant predictors, they were both positively correlated with searches (overall).

Table 4.11
Logistical Regression Model Predicting Searches (overall)

<u>Variable Type</u>	<u>Variable Name</u>	<u>b</u>	<u>S.E</u>	<u>Sig.</u>	<u>Exp(B)</u>
Legal	Stop Type: Investigatory	1.382	0.106	0.000***	3.982
	CVE	-18.283	28264.586	0.999	0.000
	Failure to Signal	0.444	0.353	0.209	1.559
	Following too close	2.095	0.726	0.004**	8.122
	Lane Violation	0.798	0.273	0.003**	2.221
	Speed	-1.741	0.425	0.000***	0.175
Extralegal					
<i>Environmental</i>	Physical Location: Surface Street	0.379	0.220	0.085	1.461
<i>Situational</i>	Race: Black	0.093	0.108	0.391	1.097
	Ethnicity: Hispanic	0.102	0.200	0.609	1.108
	Gender: Male	0.880	0.120	0.000***	2.411
	Age: Under 18	-0.104	0.277	0.708	0.901
	Age: Between 18 and 29	0.227	0.099	0.022	1.255
	Residency Status: Yes	-0.090	0.121	0.457	0.914
	Time of Day: Night	0.289	0.107	0.007**	1.335
Constant		-3.917	0.260	0.000	0.020
Chi-Square:	395.299				
Nagelkerke R Squared:	0.163				
** Indicates a statistically significant relationship at the p<0.01					
*** Indicates a statistically significant relationship at the p<0.001					

Model Predicting Nondiscretionary Searches

Table 4.12 presents the results of the logistical regression model predicting nondiscretionary searches. The chi-square score for this model was 1939.491 and the model explains 10.3 % of the variance in the dependent variable. Excluding instances where the stop was initiated for speed violations, the nodal movement for all significant variables was positive. When considering the risk factors for nondiscretionary searches at the $p < 0.001$ threshold three variables demonstrated notable correlations: stop type, following too close violations, and gender. Investigatory stops yielded over three and half times as many nondiscretionary searches as traffic stops. Furthermore, divers that were stopped for following too close were over thirteen times more likely to be the subject of a nondiscretionary search and males were 70.9 % more likely to be the subject of a nondiscretionary search than their female counterparts. When considering the risk factors for nondiscretionary searches at the $p < 0.01$ threshold, two additional variables were significant. Drivers that were stopped for lane violations were over two and half times more likely to be the subject of a nondiscretionary search and drivers that were stopped for speed violations were 30.2 % less likely to be the subject of a nondiscretionary search. Finally, though race and ethnicity were nonsignificant predictors, they were both positively correlated with nondiscretionary searches.

Model Predicting Discretionary Searches

Table 4.13 presents the results of the logistical regression model predicting discretionary searches. The chi-square score for this model was 1671.117 and the model explains 14.3 % of the variance in the dependent variable. The nodal movement for all significant variables was positive. When considering the risk factors for discretionary

Table 4.12
Logistical Regression Model Predicting Nondiscretionary Searches

<u>Variable Type</u>	<u>Variable Name</u>	<u>b</u>	<u>S.E</u>	<u>Sig.</u>	<u>Exp(B)</u>
Legal	Stop Type: Investigatory	1.277	0.139	0.000***	3.5888
	CVE	-17.840	28324.038	0.999	0.000
	Failure to Signal	-0.792	0.751	0.292	0.453
	Following too close	2.609	0.734	0.000***	13.590
	Lane Violation	1.002	0.321	0.002**	2.725
	Speed	-1.459	0.475	0.002**	0.232
Extralegal					
<i>Environmental</i>	Physical Location: Surface Street	0.116	0.258	0.655	1.122
<i>Situational</i>	Race: Black	0.090	0.140	0.523	1.094
	Ethnicity: Hispanic	0.084	0.261	0.746	1.088
	Gender: Male	0536	0.148	0.000***	1.709
	Age: Under 18	-0.808	0.469	0.085	0.446
	Age: Between 18 and 29	0.053	0.128	0.680	1.054
	Residency Status: Yes	-0.164	0.154	0.287	0.849
	Time of Day: Night	0.143	0.136	0.294	1.153
Constant		-3.801	0.304	0.000	0.022
Chi-Square:	1939.491				
Nagelkerke R Squared:	0.103				
** Indicates a statistically significant relationship at the p<0.01					
*** Indicates a statistically significant relationship at the p<0.001					

searches at the $p < 0.001$ threshold, two variables demonstrated notable correlations: stop type and gender. Investigatory stops yielded over three and half times as many discretionary searches as traffic stops and males were over three times more likely to be the subject of a discretionary search than their female counterparts. Additionally, there were three risk factors for discretionary searches at the $p < 0.01$ threshold. Drivers that were stopped for failure to signal violations were over three times more likely to be the subject of a discretionary search. Additionally, drivers between the age of 18 and 29 were 61.1 % more likely to be the subject of a discretionary search than all other age ranges. The remaining control variable demonstrating significance was the time of day. Night time stops were 50.2 % more likely to result in a discretionary search than day time stops. Finally, though race and ethnicity were nonsignificant predictors, both positively correlated with discretionary searches.

In summation, assessing the difference among racial and ethnic groups with respect to automobile searches is a complex venture. Each statistic presented is necessary in the determining whether automobile searches were differentially used for racial and ethnic minorities. Descriptive statistics provide a context for understanding the results and the chi-square analyses and inferential statistics address the research questions. While the legal and extralegal factors included in these analyses are by no means exhaustive, the combination of these results exposes what is really occurring between the gap of the theory and praxis of law.

Table 4.13
Logistical Regression Model Predicting Discretionary Searches (overall)

<u>Variable Type</u>	<u>Variable Name</u>	<u>b</u>	<u>S.E</u>	<u>Sig.</u>	<u>Exp(B)</u>
Legal	Stop Type: Investigatory	1.272	0.150	0.000***	3.570
	CVE	-17.227	28236.796	1.000	0.000
	Failure to Signal	1.151	0.395	0.004**	3.161
	Following too close	-17064	11448.929	0.999	0.000
	Lane Violation	0.340	0.476	0.475	1.405
	Speed	-2.513	1.011	0.013	0.081
Extralegal					
<i>Environmental</i>	Physical Location: Surface Street	0.793	0.396	0.045	2.210
<i>Situational</i>	Race: Black	0.075	0.151	0.619	1.078
	Ethnicity: Hispanic	0.102	0.272	0.706	1.108
	Gender: Male	1.191	0.193	0.000***	3.289
	Age: Under 18	0.477	0.328	0.147	1.611
	Age: Between 18 and 29	0.389	0.140	0.006**	1.475
	Residency Status: Yes	0.022	0.173	0.899	1.022
	Time of Day: Night	0.407	0.155	0.009**	1.502
Constant		-5.661	0.456	0.000	0.003
Chi-Square:	1671.117				
Nagelkerke R Squared:	0.143				
** Indicates a statistically significant relationship at the p<0.01					
*** Indicates a statistically significant relationship at the p<0.001					

CHAPTER FIVE

DISCUSSION

The purpose of this discussion is to animate the results of this study. In doing so, this section begins by interpreting the influence and meaning behind the legal and extralegal control variables of the multiple logistical regression models. Though the same set of predictor variables were used in each of the regression models, the variation in the dependent variable provides reason to investigate the statistical behavior of the independent control variables across each of the models. Then, the layered methodological approach to the primary variables of interest, race and ethnicity, are discussed. Finally, the implications of these results are discussed as they inform theory, stakeholders (i.e., legislatures, the courts, and law enforcement), and future analyses; in effect, shrinking the status quos gap between the theory and praxis of law.

Interpretations

Legal Variables

Each of the legal control variables demonstrated unique effects on the dependent variables.

Stop Type

Stop type was a strong and relatively consistent predictor. More specifically, investigatory stops were between three and four times more likely to result in a search across each of the models. The relative strength, predictive power, and consistency of the variable identifying the stop type indicates that the pretextual presence of officer suspicion heavily influences an officer's decision to engage in a search (overall) and was the most predictive

variable for discretionary searches. This result is an expected outcome that is consistent with the racial profiling literature.

Commercial Vehicle Equipment Violations

Additionally, five dummy variables were constructed out of the stop initiation reasons. Commercial vehicle equipment violations, the most discretionary reason for initiating a stop, were consistently nonsignificant. These results suggest that officers are not utilizing commercial vehicle equipment violations as a pretext for engaging in searches (overall), including nondiscretionary and discretionary searches.

Failure to Signal Violations

Alternatively, the variable identifying stops that were initiated for failure to signal violations behaved inconsistent across each of the models. When considering searches (overall), failure to signal violations were a nonsignificant predictor. Upon further disaggregation of the dependent variable, failure to signal violations demonstrated inconsistent associations and significance among nondiscretionary and discretionary searches. When considering nondiscretionary searches, failure to signal violations were a nonsignificant predictor; however, when considering discretionary searches failure to signal violations were positively correlated and over three times as likely to result in a discretionary search. Accordingly, officers were significantly more likely to use failure to signal violations for discretionary searches. Although *Knowles v. Iowa* (1998) made searches incident to citations and stops unconstitutional, these results identify a systemic issues where officer's disparity used failure to signal violations as a pretextual motive for engaging in discretionary searches.

Following too close Violations

Stops that were initiated for following too close violations were positively correlated and over eight times as likely to result in a search (overall); however, upon further disaggregation, following too close violations demonstrated different associations and significance among nondiscretionary and discretionary searches. When considering nondiscretionary searches, following too close violations were positively correlated and over thirteen times as likely to result in a nondiscretionary search; however, when considering discretionary searches, following too close violations were a nonsignificant predictor of discretionary searches. Though the unstandardized beta coefficient for nondiscretionary and discretionary searches was positive, the primary reason searches (overall) were significant was due to nondiscretionary searches. This means that stops that were initiated for following too close violations were significantly more likely to result in a nondiscretionary search, but less likely to result in a discretionary search. These results suggest that officers engaged in stops for following too close violations may have pretextual knowledge of the driver, passenger(s), car, or combination of some or all three entities that subsequently affirms a nondiscretionary search. These data do not lend themselves to the nature of that officer knowledge nor would it be appropriate to speculate as to why inventories and searches incident to arrest are statistically more likely to result from following too close violations; however, these results do suggest that officers are less likely to exercise their discretionary search powers for stops that were initiated for following too close.

Lane Violations

Stops that were initiated for lane violations were positively correlated and over two times more likely to result in a search (overall). Though the unstandardized beta coefficient

for both nondiscretionary and discretionary searches was positive, searches (overall) were significant due to nondiscretionary searches. Stops that were initiated for lane violations were over two and half times as likely to result in a nondiscretionary search whereas discretionary searches were nonsignificant. This means that lane violations were more likely to result in a search (overall), including nondiscretionary and discretionary searches, but were a nonsignificant predictor variable for discretionary searches. Similar to stops that were initiated for following too close violations, these results suggest that officers engaged in stops for lane violations have pretextual knowledge of the driver, passenger(s), car, or combination of some or all three entities that subsequently affirms a nondiscretionary search. These data do not lend themselves to the nature of that officer knowledge, nor would it be appropriate to speculate as to why inventories and searches incident to arrest are statistically more likely to result from lane violations; however, these results differ from stops that were initiated for following too close violations in that they suggest that officers are more likely to exercise their discretionary search powers for stops that were initiated for lane violations.

Speed Violations

Finally, drivers that were stopped due to speed violations were 21.1 % less likely to be searched (overall) but further disaggregation of typologies revealed the driving force behind this result. Drivers that were stopped for speed violations had a 30.2 % decreased chance of being the subject of a nondiscretionary search, but when considering discretionary searches, the relationship between speed violations and discretionary searches was nonsignificant. This means that stops that were initiated for speed violations were consistently less likely to result in a search (overall), including nondiscretionary and discretionary searches, but that speed violations were not predictive of discretionary

searches. Non-speeding violations comprised the minority of stops, suggesting officers are more likely to use minor non-speeding violations as a pretext for a search. On the other hand, since citizens stopped for speeding are less likely to be searched, it appears these offenses are not being used as a mechanism to initiate a search of any kind.

Extralegal Variables

In addition to the six legal variables under analyses, eight additional control variables address the extralegal factors associated with automobile searches. Similar to the legal influences upon an officer, extralegal factors demonstrated unique effects on the dependent variables across each of the models.

Environmental Variables

Physical Location of the Stop

The loan environmental variable that identifies the physical location where the stop took place behaved relatively consistent. Surface street encounters were positively correlated but a nonsignificant predictor. This means that surface streets were more likely to result in a search (overall), including both nondiscretionary and discretionary searches, but could not be used to predict such occurrences in any of the models. These results suggest that officers were more likely to exploit the additional opportunity for community engagement when conducting searches, but could not be used to predict such occurrences. This result may be due to the sampling procedure that eliminated traffic officer data. Patrol and traffic officers do not proportionately engage in an equitable number of encounters on highways. As a result, eliminating traffic officers from the sample would directly impact the proportion of highway stops and these findings.

Situational Variables

Gender

Among the demographic situational variables, the drivers' gender was consistently positively correlated and a significant predictor in each of the models. Male drivers were 2.4 times more likely to be searched (overall) than female drivers. This finding remained consistent upon further disaggregation of typologies: males were 70.9 % more likely to be the subject of a nondiscretionary search and 3.2 times more likely to be the subject of a discretionary search. This means that males were disproportionately targeted by officers in their search (overall) decision-making, including nondiscretionary and discretionary searches. Given the overrepresentation of males at every stage of the criminal justice process, it is not surprising that males are more likely to be the subject of a search; however, from a normative and distributive justice perspective this behavior is inexcusable and tantamount to gender animus on behalf of officers of the KCPD.

Age

The drivers' age was also distinguished among the demographic factors into two variables. The influence of drivers under the age of 18 was nonsignificant in each of the models; however, the results for drivers between the age of 18 and 29 were different. In each of the models, drivers between the ages of 18 and 29 were positively correlated with the dependent variables. Although searches (overall) and nondiscretionary searches were nonsignificant, drivers between the age of 18 and 29 were 47.5 % more likely to be the subject of a discretionary search. This means that drivers between the ages of 18 and 29 were targeted by officers in their discretionary search decision-making. Together, these results are expected. Similar to gender, younger citizens are disproportionately overrepresented

throughout the criminal justice process; however, being a young person does not directly increase one's chance of being involved in the criminal justice process. Rather, involvement in the criminal justice process follows what the racial profiling literature identifies as the age-crime curve (Moffitt, 2006). On the age-crime curve, delinquency peaks in the life-course for the categorical response 18 to 29. It is logical to expect drivers between that age range to have an increased chance of being the subject of discretionary searches; however, from a normative and distributive justice perspective this behavior is inexcusable and tantamount to age animus on behalf of officers of the KCPD.

Residency Status

Although the residency status of the driver was consistently nonsignificant across each of the models, the directional correlation was different for nondiscretionary and discretionary searches. While searches (overall) and nondiscretionary searches were negatively correlated, discretionary searches were positively correlated with residency status. This means that officers were less likely to initiate a nondiscretionary search against nonresidents, but more likely to initiate a discretionary search against nonresidents. Though this variable was a nonsignificant predictor, the directional correlations support Novak (2004) in that nonresidents may be disproportionately targeted simply because outsiders carry less political clout and represent less of a risk to officers.

Time of Day

Finally, among the situational control variables is the variable reflecting the time of day in which the stop took place. The time of day the automobile stop took place was inconsistently significant across each of the models. Nighttime stops were 33.5 % more likely to result in search (overall) than daytime stops. Upon further disaggregation into

typologies, significance dissipates for nondiscretionary searches but remains for discretionary searches. Nighttime stops were 50.2 % more likely to result in a discretionary search. This means that nighttime stops had increased odds of resulting in a search (overall), particularly discretionary searches. This result is consistent with the anecdotal contention that drivers stopped at night are viewed more suspiciously by police than those stopped during the day.

In summation of the control variables, each had a sporadic effect in each of the models. Several of the control variables demonstrated an expected outcome (stop type, speed violations, and time of day). Additionally, some outcomes could not be explained (following too close violations and lane violations). Furthermore, several variables demonstrated troubling results (failure to signal violations, gender, and age). Alternatively, the variable identifying stops initiated for commercial vehicle equipment violations was a positive outcome in these results. Finally, although the variables identifying the physical location of the stop and the residency status of the driver were nonsignificant, these factors should be monitored closely in future analyses. The sporadic effect of these control variables is consistent with the racial profiling literature and supports the notion that the legal and extralegal circumstances in which an officer encounters a citizen greatly influences the likelihood of a search.

Race and Ethnicity

Turing now to race and ethnicity, it is clear from the initial layers of the methodological approach that Blacks and Hispanics were overrepresented in nearly every aspect of the automobile searches. First, Blacks and Hispanics comprise a majority (55.3 %) of drivers stopped by the police. Second, the crosstabulations revealed that the proportion of Blacks and Hispanics searched (overall), including nondiscretionary and discretionary

searches, were consistently more than their respected reference categories. Furthermore, the chi-square analyses of the crosstabulations revealed that the observed difference for Blacks and searches (overall) and discretionary searches was significantly different than what is to be expected.

However, the influence of race and ethnicity differs in the final layer of methodological analysis that controls for additional influential factors in automobile searches. The multivariate logistical regression analyses found that although Blacks and Hispanics were more likely to be the subject of search (overall), including nondiscretionary and discretionary searches, the influence of race and ethnicity was a nonsignificant predictor in each event. For Hispanics, the multivariate logistical regression analyses confirm the null findings from the chi-square analyses. Furthermore, these results do not provide any evidence to suggest that race and/or ethnicity could be used to predict a search (overall), including nondiscretionary and discretionary searches, nor do these results identify any systemic racial and/or ethnic animus among the officers of the KCPD. However, these results do appear to conclude that that the overall difference in the proportion of Blacks searched (overall) and discretionary searches was primarily a function of other contextual factors that surround the encounter. While Blacks were searched (overall) more often, including discretionary searches, it was not due to race but the differing circumstances under which they encounter officers. These results support Gaines (2006) and Higgins, Vito, and Walsh (2008) findings and are inconsistent with the ‘driving while Black/Brown’ phenomenon that appears throughout the racial profiling literature.

Implications

Although race and ethnicity were nonsignificant predictors in the multivariate logistical regression analyses, these results are not void of relevant implications. Rather, these results inform theory, stakeholders (i.e., legislatures, the courts, and law enforcement), and future analyses on the influence of race and ethnicity on officer decision-making; in effect, shrinking the status quos gap between the theory and praxis of law.

Theory

Theory testing is beyond the scope of this research and was not considered when constructing the methodology. As a result, several theories (theory of reasoned action, expectancy theory, theory of institutional expectations and bargaining, theory of institutional perspectives, and the theory of explanatory continuums) are not addressed by this research methodology and subsequent results; however, this study can contribute to the overall discussion by speaking to the validity of some of the aforementioned theories and calls for greater applications of sound racial profiling theoretical foundations (Bernard & Engel, 2001; Engel & Calnon, 2004; Novak & Chamlin, 2008; Withrow, 2006).

The theory of coercive behavior, conflict theories (theory of norm resistance and theory of law), and the theory of differential offending are based on the overrepresentation of certain populations throughout the criminal justice process. Relative to the variables included in this study, to support these theories, males, younger adults (between 18 and 29), Blacks, and Hispanics would need to be significantly correlated in each of the models to remain consistent with each groups current overrepresentation in the criminal justice process. Although each of these variables (gender, age, race, and ethnicity) was consistently positively correlated with each of the models, only gender and age were significant predictors

in the models. As a result, gender and age support while race and ethnicity reject the theory of coercive behavior, conflict theories, and the theory of differential offending.

Furthermore, these results suggest that the theory of contextual attentiveness by Withrow (2006) may be rejected because the environmental variable identifying the physical location of the stop was consistently nonsignificant; however, this conclusion is cautioned for two reasons. First, though the physical location of the stop was consistently nonsignificant it did remain consistently positively correlated with each of the models. Furthermore, this conclusion is based on the performance of a single variable. A more stable conclusion about the theory of contextual attentiveness may be appropriate when judging a group of environmental variables rather than just one.

Although the theory of reasoned action and theory of explanatory continuums were not among the theories considered in this study, each contributes a unique element to the theoretical racial profiling debate if we assume each valid. First, if theory of reasoned action is valid, then the beliefs of officers are reflected in their actions. The actions of officers in this study demonstrate biases toward driver gender and age (the two extralegal demographic variables that were significant in the discretionary search model). Thus, males and drivers between the age of 18 and 29 represent the contemporary systemic prejudices of officers. Second, if theory of explanatory continuums is valid, then racial and ethnic profiling is inconsistent in priority, frequency, intensity, and duration, making it hard to identify in research. As a result, the nonsignificance of race and ethnicity across each of the models supports the theory of explanatory continuums contention that it is difficult to identify instances of racial and ethnic animus in research. Ostensibly, these results provide a mixed bag of theoretical rejection and support.

Legislatures

To date, measuring social phenomenon is still an imperfect science. This sentiment lead Batton and Kadleck (2004) to conclude that “very little is known about the etiology of [...the racial profiling] phenomenon” (p. 55). A common complaint among racial profiling researchers is that data sources are non-exhaustive and, therefore, cannot possibly explain the totality of police-citizen encounters (Batton & Kadleck, 2004; Engel & Calnon, 2004; Tillyer & Wooldredge, 2008). Although most racial profiling ventures are retrospective, better methodologically conceived and executed research studies should be pursued. While perfection may be beyond the reach for measuring any social phenomenon, at a minimum instruments should be able to evolve. Just as police-citizen encounters are dynamic, so too need to be the instruments that measure them. For instance, this research has identified several methodological limitations (i.e., non-exhaustive and/or nonspecific categorical responses and uncollected data) within the KCPD Stop Survey. Although a limitless number of factors may contribute to an officer’s decision-making, the methodological limitations of the KCPD Stop Survey should not fall on deaf ears. There is a tendency to blame police administrators for these limitations; however, they do not have the means or incentive to go beyond what the law requires. Rather, the true disconnect exists between researchers and legislatures that craft compulsory police-citizen reporting laws. While it is commendable that legislatures be proactive, racial profiling surveys should be easily amendable and crafted in consultation with researchers. Researchers and police administrators can only work with the legislative tools they are provided.

The Courts

Although the Whren decision removed all supervisory responsibilities of the courts to monitor the pretextual motives of officers, the door to judicial redress has not yet closed. Plaintiffs need to explore the two remaining legal options for racial profiling challenges. Although the Supreme Court is typically unwilling to hear statistical evidence for equal-protection claims, Smith and Alpert (2002) contend that “the law is not uniformly allied against complainants in cases of racial profiling” (p. 700). This means that the Court appears to be making an exception to the rule that excludes statistical evidence from being presented in racial profiling cases. This judicial discretion provides promise to plaintiffs who continue to seek legal remedies through the Equal Protection Clause of the Fourteenth Amendment. Additionally, Title 42, United States Codes, Section 14141: Pattern and Practices remains uncharted territory in the racial profiling legal debate. Plaintiffs need to pursue Section 14141 challenges throughout judicial scrutiny so that its’ terms and judicial interpretations may be known. Birzer and Birzer (2006) contend that “what is needed is for the court to establish a universally applied objective test pertaining to racial profiling” (p. 650). Currently, Section 14141 is the best means for doing so and, as a result, policies could be established and tailored to fit the court’s interpretations. While this particular research bodes well for defendants, plaintiffs, in any case, should be able to challenge the legalities of police behavior, especially when that behavior may be based on biases.

Law Enforcement

The improper use of race and/or ethnicity places the legitimacy of any law enforcement agency in jeopardy. It is important for administrators of those agencies to be mindful of the impact of racial profiling without compromising law and order in the

community. This study is a testament to the proactive nature of the KCPD and its command staff. Law enforcement administrators need to be in touch with the systemic issues that have a potential to plague departments and perhaps the best way for that to be accomplished is through data collection efforts. No longer should ignorance be an acceptable answer to complaints of racial and/or ethnic biases. Agencies that invest in these kinds of data collections and analyses send a message to the community that officers are being monitored in the interest of fairness to all.

Additionally, since law enforcement agents are the only persons who know when, if, and to what extent race and/or ethnicity was used lawfully, they should be properly trained to “understand which specific verbal, behavioral, and contextual clues are more successful than others in determining reasonable suspicion or probable cause” (Engel & Johnson, 2006, p. 615). Although Engel and Johnson (2006) caution that many of the currently understood clues of criminal activity are inaccurate and not racially and/or ethnically neutral, more can be done across the board to better equip law enforcement agents with the tools needed to determine if a search threshold has been breached. Furthermore, law enforcement agents need to be trained to articulate why a stop was initiated and why the officer made the decisions they did. Even if officers are not actively engaged in racial profiling, minorities may still perceive police to be acting with bias. Although these results do not support those perceptions, Alpert, Dunham, and Smith (2007) contend that law enforcement agents need “training in proper communication [that] can help officers alleviate some potentially negative situations and turn others from a bad to a neutral or positive experience” (p. 52). Opening up a dialog with citizens stopped by the police is the first step toward breaking down inaccurate perceptions and increasing the legitimacy of law enforcement.

Future Analyses

In addition to procuring more accurate data, future analyses would benefit from considerations of organizational structures, neighborhood contexts, and a triangulation of sources. When considering organizational structures, future analyses should evaluate differences across divisions, sectors, and beats. Though the level of aggregation becomes increasingly more difficult the further down a researcher drills into the data, there is some indications that departmental organizational structures create workload and occupational norms that may impact individual officer behavior (Klinger, 1997). From a practical aspect, department administrators would benefit from analyses that address these issues.

Additionally, future analyses should take into consideration the neighborhood context in which police-citizen encounters occur. Although this study includes a variable that identifies the physical location that the stop took place, further explorations into the influence of differing neighborhood contexts may be beneficial to understanding officer behavior. Through the development of unique neighborhood contextual profiles, researchers can isolate and evaluate the influence of differing neighborhood contexts on officer behavior. Differing contextual profiles may consider socially disorganized communities (i.e., areas with high rates of poverty, residential instability, and high racial and ethnic heterogeneity), nonresidential communities, and communities with high crime rates against their reference categories.

Finally, future analyses would benefit from data procured from more than just officer self reports. Ideally, researchers would be able to triangulate their results among “police-reported, citizen-reported, and observer-reported data” (Lundman, 2004, p. 343). Single source data explorations are often riddled with invalidity, inconclusiveness, and worst of all,

biases. A triangulation of data sources would best inform theory, stakeholders (i.e., legislatures, the courts, and law enforcement), and future analyses about the etiology of the racial profiling phenomenon.

Summation

As the gatekeepers to the criminal justice process, police greatly influence who comes in contact with the criminal justice system. The overrepresentation of racial and ethnic minorities at every stage of the criminal justice process has brought about legislative, judicial, and voluntary data explorations of law enforcement practices. Furthermore, the Supreme Court's 1996 Whren decision has directed sustained concerns toward officer decision-making during automobile searches; more specifically, the law enforcement practice of racial profiling. Citizens, seeking legal remedies from the non-neutral use of race and/or ethnicity within automobile searches, have discovered that the Equal Protection Clause of the Fourteenth Amendment and Title 42, United States Codes, Section 14141: Pattern and Practices would not protect them from racial and/or ethnic injustices in their current form. Thus, there is a gap between the theory and praxis of law in the status quo.

The primary purpose of this racial profiling research is to gauge the effects of driver race and/or ethnicity on one's likelihood to be the subject of an automobile search. Utilizing sampled data collected from the 2009 KCPD Stop Survey, this research sought to do four things: (1) address conceptual, methodological, and theoretical concerns in the racial profiling literature (2) add to the developing literature base on indicators of social control (3) better understand the influence of race and ethnicity as they relate to the discretionary choices officers make during automobile searches, and (4) inform theory, stakeholders (i.e.,

legislatures, the courts, and law enforcement), and future analyses on the implications of these results.

An explorative evaluation of the automobile racial profiling literature base fostered a sophisticated layered methodological approach to broach these complex issues. Although this research discovered that the overrepresentation of Blacks in searches (overall) and discretionary searches was due to the differing circumstances in which Blacks encounter officers and not race in it of itself, several things may be gleaned from these results. First, it is clear that many factors influence and officer's decision to engage in a search. Additionally, none of the racial profiling theories or theoretical classifications from Engel, Calnon, and Bernard (2002) and Withrow (2006) were distinguished as most apt to explain instances of racial profiling in this study. Furthermore, legislatures that make compulsory reporting laws need to craft non-static laws in conjunction with researchers. Also, plaintiffs should persistently pursue the two remaining legal options for racial profiling redress. In addition to those actions taken in the courts, law enforcement agencies ought to collect data for the purpose of monitoring results, be afforded proper training to identify verbal, behavioral, and contextual clues, and articulate the decisions they made. Finally, future analyses would benefit from considerations to departmental organizational structures and neighborhood contexts while triangulating data sources.

APPENDIX

MISSOURI REVISED STATUE 590.650

Racial profiling--minority group defined--reporting requirements--annual report--review of findings--failure to comply--funds for audio-visual equipment--sobriety check points exempt.

1. As used in this section "minority group" means individuals of African, Hispanic, Native American or Asian descent.

2. Each time a peace officer stops a driver of a motor vehicle, that officer shall report the following information to the law enforcement agency that employs the officer:

- (1) The age, gender and race or minority group of the individual stopped;
- (2) The reasons for the stop;
- (3) Whether a search was conducted as a result of the stop;
- (4) If a search was conducted, whether the individual consented to the search, the probable cause for the search, whether the person was searched, whether the person's property was searched, and the duration of the search;
- (5) Whether any contraband was discovered in the course of the search and the type of any contraband discovered;
- (6) Whether any warning or citation was issued as a result of the stop;
- (7) If a warning or citation was issued, the violation charged or warning provided;
- (8) Whether an arrest was made as a result of either the stop or the search;
- (9) If an arrest was made, the crime charged; and
- (10) The location of the stop.

Such information may be reported using a format determined by the department of public safety which uses existing citation and report forms.

3. (1) Each law enforcement agency shall compile the data described in subsection 2 of this section for the calendar year into a report to the attorney general.

(2) Each law enforcement agency shall submit the report to the attorney general no later than March first of the following calendar year.

(3) The attorney general shall determine the format that all law enforcement agencies shall use to submit the report.

4. (1) The attorney general shall analyze the annual reports of law enforcement agencies required by this section and submit a report of the findings to the governor, the general assembly and each law enforcement agency no later than June first of each year.

(2) The report of the attorney general shall include at least the following information for each agency:

(a) The total number of vehicles stopped by peace officers during the previous calendar year;

(b) The number and percentage of stopped motor vehicles that were driven by members of each particular minority group;

(c) A comparison of the percentage of stopped motor vehicles driven by each minority group and the percentage of the state's population that each minority group comprises; and

(d) A compilation of the information reported by law enforcement agencies pursuant to subsection 2 of this section.

5. Each law enforcement agency shall adopt a policy on race-based traffic stops that:

(1) Prohibits the practice of routinely stopping members of minority groups for violations of vehicle laws as a pretext for investigating other violations of criminal law;

(2) Provides for periodic reviews by the law enforcement agency of the annual report of the attorney general required by subsection 4 of this section that:

(a) Determine whether any peace officers of the law enforcement agency have a pattern of stopping members of minority groups for violations of vehicle laws in a number disproportionate to the population of minority groups residing or traveling within the jurisdiction of the law enforcement agency; and

(b) If the review reveals a pattern, require an investigation to determine whether any peace officers of the law enforcement agency routinely stop members of minority groups for violations of vehicle laws as a pretext for investigating other violations of criminal law; and

(3) Provides for appropriate counseling and training of any peace officer found to have engaged in race-based traffic stops within ninety days of the review.

The course or courses of instruction and the guidelines shall stress understanding and respect for racial and cultural differences, and development of effective, noncombative methods of carrying out law enforcement duties in a racially and culturally diverse environment.

6. If a law enforcement agency fails to comply with the provisions of this section, the governor may withhold any state funds appropriated to the noncompliant law enforcement agency.

7. Each law enforcement agency in this state may utilize federal funds from community-oriented policing services grants or any other federal sources to equip each vehicle used for traffic stops with a video camera and voice-activated microphone.

8. A peace officer who stops a driver of a motor vehicle pursuant to a lawfully conducted sobriety check point or road block shall be exempt from the reporting requirements of subsection 2 of this section.

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VITA

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