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Police Perceptions, Knowledge, and Performance: Traffic Stops and the Use of K-9 Units

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Cover Page Footnote

Christopher D. Totten is Professor of Criminal Justice (Law) and Director of the Master of Science in Criminal Justice (“MSCJ”) program in the Department of Sociology and Criminal Justice at Kennesaw State University. He is a graduate of Princeton University (A.B. 1997) and Georgetown University Law Center (J.D. 2000, LL.M. 2002). Professor Totten is also the criminal law commentator of the Criminal Law Bulletin (2010-present). His research interests span criminal law and procedure, international crime, and criminal law and society with foci on courts/jurisprudence and police attitudes using social science methodologies. Gang Lee is Professor of Criminal Justice at Kennesaw State University. He received his Ph.D. in Sociology/Criminology from the University of Florida. His current research involves a comparative study of cybercrime and deviant behaviors in cyberspace. His research projects also include empirical investigations of police officers’ experiences and perceptions of jurisprudence. Mr. Daniel Ozment is a December 2018 graduate of the MSCJ program. This publication involves work he completed during his master’s thesis.

POLICE PERCEPTIONS, KNOWLEDGE, AND
PERFORMANCE:
TRAFFIC STOPS AND THE USE OF K-9 UNITS

Christopher D. Totten; Gang Lee; Daniel Ozment⁺

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This empirical (survey) study of law enforcement officers aims to shed light on police perceptions, conduct and knowledge concerning individual Fourth Amendment search and seizure rights, in particular in the context of police traffic stops, vehicle searches and the use of canine (K-9) units. This context is particularly relevant in light of a recent United States Supreme Court case in this area, *Rodriguez v. United States*, which clarified the law related to police vehicle stops involving searches by K-9 units.¹ In particular, *Rodriguez* held that when the mission of a routine traffic stop has been or reasonably should have been completed (i.e., the officer has issued a traffic ticket or a warning after having checked license, registration, insurance, and/ or warrants), the officer may not in

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1. *Rodriguez v. United States*, 575 U.S. 348, 350–51 (2015).

general detain the vehicle occupant(s) while waiting for a police K-9 unit to arrive to perform a search, or “sniff,” for drugs or other contraband around the vehicle perimeter.² No other known empirical study of police “line” officers’ performance and knowledge with regard to vehicle searches and K-9 units exists, and therefore this study fills a significant gap in the literature.

The specific research questions this study aims to address are: (1) Whether officers with (a) exposure to training on vehicle stops and searches and/or (b) more years of experience in law enforcement, will have greater levels of proper knowledge concerning the holding, or ruling of *Rodriguez*?; and (2) Whether officers with (a) exposure to training on vehicle stops and searches and/or (b) more years of experience in law enforcement, will exhibit higher levels of proper performance, or conduct, regarding the ruling of *Rodriguez*? Using a logistic regression analysis, the study found, in part, that police officers with more than five years of experience in law enforcement show a lower percentage of proper performance related to *Rodriguez* compared to officers with five years or less of experience. Accordingly, police officers’ years of experience have a negative, but statistically significant effect on proper performance related to the *Rodriguez* decision. Overall, the majority of police officers surveyed showed both proper knowledge of the principal holding of *Rodriguez* and proper performance that aligns with that holding, or rule. Nonetheless, sizeable minorities of officers failed to show proper knowledge or performance related to *Rodriguez*.

Part I (“Background”) of this Article includes a detailed description of the *Rodriguez* case as well as the relevant empirical literature in the Fourth Amendment, search and seizure area. Part II addresses the study’s methodology, including the hypotheses, sample and procedures, and variable measures. Part III explains the study’s findings, or results, in detail. Part V includes a discussion as well as the conclusions of the study, including various policy implications arising from the study; potential areas for future research; and limitations.

I. BACKGROUND

Part A of this section first addresses the relevant legal case for the study, *Rodriguez*. Next, Part B encompasses the literature review, including other, related empirical legal studies in the Fourth Amendment search and seizure area.

A. *Rodriguez v. United States*³

At 12:06 A.M. on March 27, 2012, police officer Morgan Struble stopped a vehicle for veering off into the shoulder on a Nebraska State Highway in

2. See generally *id.* See also *infra* notes 27–28. Note that if the officer developed further reasonable suspicion of criminal activity by the occupant(s) of the stopped vehicle (i.e., apart from the initial traffic violation), the officer would then be justified in continuing the stop to conduct further investigation, including possibly a canine sniff. See *infra* notes 32–32. See generally *Rodriguez*, 575 U.S. at 354–55.

3. *Rodriguez v. United States*, 575 U.S. 348 (2015). This sub-section was taken in its entirety from Totten, C.D. & Purdon, J., *Criminal Law Commentary Rodriguez v. United States*:

violation of state law.⁴ Officer Struble is a K-9 officer and had his dog, Floyd, in his patrol car during the stop.⁵ Defendant Rodriguez was driving the vehicle and explained to Officer Struble, who had approached the vehicle on its passenger side, that he had “swerved to avoid a pothole” in the road.⁶ Officer Struble collected Rodriguez’s license, registration, and proof of insurance and subsequently ran a records checks on him through his patrol car database.⁷ Next, Officer Struble returned to the defendant’s vehicle and began to question the passenger, Pollman, about their trip. Struble also requested Pollman’s identification⁸. Once again, Officer Struble returned to his vehicle to run a check on Pollman.⁹ At this point, Officer Struble called for a second officer to appear on the scene.¹⁰ He then began to write the warning ticket for Rodriguez’s traffic violation.¹¹

At 12:27 or 12:28 A.M., Officer Struble had given back all the documentation he had requested from Rodriguez and his passenger and provided a warning citation to Rodriguez.¹² Nonetheless, Rodriguez was not able to leave.¹³ At this point, Officer Struble asked Rodriguez for permission to have his dog, Floyd, inspect the area around the perimeter of the vehicle.¹⁴ Rodriguez denied the request. Struble then asked Rodriguez to turn off his vehicle, step out, and wait in front of the patrol car until the backup officer arrived.¹⁵ Rodriguez did so.¹⁶ At 12:33 A.M., the second officer arrived on the scene.¹⁷ Officer Struble then proceeded to take Floyd around the vehicle twice and on the second pass, Floyd signaled the presence of drugs.¹⁸ A total of seven or eight minutes passed from the time Officer Struble distributed the written warning until the K-9 alerted to the presence of narcotics.¹⁹ During a subsequent search of the vehicle, officers found a large quantity of methamphetamines.²⁰

“*Bringing the Dogs in*” for *Police Traffic Stops or Simply Keeping Them in Check?*, 51 CRIM. L. BULL. 1531, 1531–60 (2015). Minor edits were made to text and footnote cross references for clarity. One of the authors is a contributing editor for this journal.

4. *Rodriguez*, 575 U.S. at 350.

5. *Id.* at 351.

6. *Id.*

7. *Id.*

8. *Id.*

9. *Id.*

10. *Id.*

11. *Id.*

12. *Rodriguez*, 575 U.S. at 352.

13. *Id.*

14. *Id.*

15. *Id.*

16. *Id.*

17. *Id.*

18. *Id.*

19. *Id.*

20. *Id.*

Rodriguez was indicted on drug charges. He moved to exclude the evidence of the drugs found in his vehicle because Officer Struble extended the traffic stop without reasonable suspicion in order to conduct the K-9 sniff. The magistrate judge determined that there was no probable cause to search the vehicle apart from the K-9 having alerted the officers to the drugs.²¹ The magistrate judge also found that there was no reasonable suspicion to extend the traffic stop beyond the point of Officer Struble issuing the traffic warning; however, under Eighth Circuit precedent, the slight extension of the stop for a K-9 sniff was only “. . . a de minimis intrusion on Rodriguez’s Fourth Amendment rights and was for that reason permissible.”²² The District Court agreed with the magistrate judge’s findings and denied Rodriguez’s motion to exclude the drug evidence uncovered in his vehicle.²³ The Court of Appeals for the Eighth Circuit affirmed the district court’s judgment, finding that a “seven- or eight-minute delay” to conduct the dog sniff was permissible under its existing circuit precedent.²⁴ The delay was permissible, according to the court of appeals, because it constituted a minimal privacy invasion.²⁵ In light of its holding, the court declined to decide the issue of whether there was sufficient reasonable suspicion to justify detaining Rodriguez beyond the completion of the stop (i.e., the issuance of the traffic warning).²⁶

The United States Supreme Court granted certiorari to resolve a lower court conflict “on the question whether police routinely may extend an otherwise-completed traffic stop, absent reasonable suspicion, in order to conduct a dog sniff.”²⁷ In a similar vein, the Court framed the issue as “whether the Fourth Amendment tolerates a dog sniff conducted after completion of a traffic stop.”²⁸ Essentially answering both issue questions in the negative, the Court held that:

[A] police stop exceeding the time needed to handle the matter for which the stop was made violates the Constitution’s shield against unreasonable seizures. A seizure justified only by a police-observed traffic violation, therefore, “become[s] unlawful if it is prolonged beyond the time reasonably required to complete th[e] mission” of issuing a ticket for the violation. The Court so recognized in *Caballes*, and we adhere to the line drawn in that decision.²⁹

The Court reasoned that a traffic stop for a traffic violation, which justifies an investigation concerning the violation, should last no longer than is needed to

21. *Id.* at 352.

22. *Id.* at 353.

23. *Id.*

24. *Id.*

25. *Id.*

26. *Id.*

27. *Id.*

28. *Id.* at 350.

29. *Id.* (citing *Illinois v. Caballes*, 543 U.S. 405, 407 (2005)). See also *infra* note 42 and accompanying text.

complete the stop's purpose, or mission (i.e., to investigate and address the violation and deal with certain related safety concerns).³⁰ In particular, the Court said that "[l]ike a *Terry* stop, the tolerable duration of police inquiries in the traffic-stop context is determined by the seizure's 'mission'—to address the traffic violation that warranted the stop, and attend to related [roadway and officer] safety concerns."³¹ In addition, according to the Court in *Rodriguez*, police authority for the traffic stop "ends when tasks tied to the traffic infraction are—or reasonably should have been—completed."³² Relying on its earlier precedents, the Court did note that "[a]n officer . . . may conduct certain unrelated checks [including a K-9 sniff and investigative questioning] during an otherwise lawful traffic stop. But . . . he may not do so in a way that prolongs the stop [and its mission], absent the reasonable suspicion ordinarily demanded to justify detaining an individual."³³

Because the Court in *Rodriguez* found that a traffic stop's duration is tied directly to its mission, or goals, the Court explained these goals in some detail.³⁴ In addition to issuing a traffic ticket, officers may check the driver's license, discover if there are any outstanding warrants, and examine the automobile's registration and insurance status.³⁵ According to the Court, "these [related, routine] checks serve the same objective as enforcement of the traffic code [i.e., issuing a ticket]: ensuring that vehicles on the road are operated safely and responsibly."³⁶

30. *Rodriguez*, 575 U.S. at 354. The Court said: "Because addressing the infraction is the purpose of the stop, it may 'last no longer than is necessary to effectuate th[at] purpose.' Authority for the seizure thus ends when tasks tied to the traffic infraction are—or reasonably should have been—completed." *Id.* (quoting *Florida v. Royer*, 460 U.S. 491, 500 (1983) (plurality opinion) and citing *United States v. Sharpe*, 470 U.S. 675, 685–86 (1985); *Caballes*, 543 U.S. at 407).

31. *Rodriguez*, 575 U.S. at 354 (citing *Caballes*, 543 U.S. at 356–57, 407). For a description of permissible officer tasks tied to roadway safety concerns, see *infra* notes 34–35 and accompanying text. For a description of permissible tasks tied to officer safety, see *infra* note 36.

32. *Rodriguez*, 575 U.S. at 354 (citing *Sharpe*, 470 U.S. at 686). See also *supra* note 30.

33. *Rodriguez*, 575 U.S. at 355 (citing *Arizona v. Johnson*, 555 U.S. 323, 327–28 (2009); *Caballes*, 543 U.S. at 406–08; *Muehler v. Mena*, 544 U.S. 93, 101 (2005)).

34. *Id.* at 354–55.

35. *Id.* at 355. "Beyond determining whether to issue a traffic ticket, an officer's mission includes 'ordinary inquiries incident to [the traffic] stop.' Typically, such inquiries involve checking the driver's license, determining whether there are outstanding warrants against the driver, and inspecting the automobile's registration and proof of insurance." *Id.* (quoting *Caballes*, 543 U.S. at 408) (internal citations omitted).

36. *Id.* (citing *Delaware v. Prouse*, 440 U.S. 648, 658–59 (1979); 4 W. LAFAVE, SEARCH AND SEIZURE § 9.3(c), at 516 (5th ed. 2012)). (A "warrant check makes it possible to determine whether the apparent traffic violator is wanted for one or more previous traffic offenses."). Also, the Court in *Rodriguez* recognized that certain, limited tasks that contribute to officer safety may be completed during the traffic stop: "[u]nlike a general interest in criminal enforcement, however, the government's officer safety interest stems from the mission of the stop itself. Traffic stops are 'especially fraught with danger to police officers,' so an officer may need to take certain negligibly burdensome precautions in order to complete his mission safely." *Id.* at 356 (citing *Johnson*, 555 U.S. at 330) (internal citations omitted). Thus, for example, officers may order drivers outside the

However, a dog sniff falls outside the scope of the stop's mission because it is aimed at "detect[ing] evidence of ordinary criminal wrongdoing."³⁷ According to the Court, "a dog sniff is not fairly characterized as part of the traffic stop's mission [because it] lack[s] the same close connection to roadway safety as the ordinary [traffic-related] inquiries."³⁸ Finally, the Court noted that the intrusion consisting of detaining defendant beyond the completion of the traffic stop could not be justified in terms of officer safety.³⁹ Instead of serving any goals related to officer safety, the purpose of the dog sniff was crime (i.e., drug) detection.⁴⁰

In response to the government's contention that an officer can receive additional time during which to investigate unrelated crimes such as drug crimes, if the officer acts efficiently in completing the tasks related to the traffic stop, the Court said:

The reasonableness of a seizure, however, depends on what the police in fact do . . . How could [the required officer] diligence be gauged other than by noting what the officer actually did and how he did it? If an officer can complete traffic-based inquiries expeditiously, then that is the amount of "time reasonably required to complete [the stop's] mission." . . . [A] traffic stop "prolonged beyond" that point [of completion] is "unlawful." The critical question, then, is not whether the dog sniff occurs before or after the officer issues a ticket, . . . but whether conducting the sniff "prolongs"—i.e., adds time to—"the stop[.]"⁴¹

Because the Court of Appeals for the Eighth Circuit did not decide whether defendant's additional detention for the K-9 sniff was supported by reasonable suspicion, the Supreme Court in *Rodriguez* remanded that question back to the Eighth Circuit for its determination. The Supreme Court also vacated the judgment of the Eighth Circuit determining that the additional delay to conduct the K-9 sniff constituted a minimal intrusion on defendant's privacy and was therefore permissible.⁴²

vehicle during a stop. See *Rodriguez*, 575 U.S. at 356 (citing *Pennsylvania v. Mimms*, 434 U.S. 106, 110–11 (1977); *Maryland v. Wilson*, 519 U.S. 408, 413–15 (1997)). Presumably, determining reasonableness of stop duration can, under the Court's decision in *Rodriguez*, include the time it takes to complete this limited category of tasks related to officer safety.

37. *Id.* at 355–56 (quoting *Indianapolis v. Edmond*, 531 U.S. 32, 40–41 (2000); citing *Florida v. Jardines*, 569 U.S. 1, 9–10 (2013)).

38. *Id.* at 356.

39. *Id.* at 356.

40. *Id.* at 357.

41. *Id.* (citing *Knowles v. Iowa*, 525 U.S. 113, 115, 117 (1998); *Caballes*, 543 U.S. at 407; *Rodriguez*, 575 U.S. at 370–72 (Alito, J., dissenting)) (internal citations omitted).

42. *Id.* at 358 ("The question whether reasonable suspicion of criminal activity justified detaining Rodriguez beyond completion of the traffic infraction investigation, therefore, remains open for Eighth Circuit consideration on remand."). See *id.* at 353 (for a description of the Court of Appeals for the Eighth Circuit's judgment).

B. Literature Review

Though there is no other known study regarding police officer knowledge and performance with regard to *Rodriguez* in particular or police K-9 searches during traffic stops in general, there are a limited number of previous empirical studies addressing the related topic of police knowledge and performance concerning Fourth Amendment search and seizure norms.

For example, Perrin, Caldwell, Chase, and Fagan conducted a survey study on police knowledge of search and seizure laws.⁴³ This study involved mostly officers and detectives from a single county in California. The successful response rate regarding these laws was rather low (i.e., approximately 50%).⁴⁴ In another study, Eugene Hyman concluded that “the average officer did not know or understand proper search and seizure rules,”⁴⁵ and that “supervisors and senior officers only achieved slightly improved scores.”⁴⁶ Similarly, research undertaken by Stephen Wasby found “[r]ecruit training is sadly lacking in criminal procedure content”⁴⁷ and “[t]he spirit and tone of communication about the law, particularly when the law is favorable to defendants’ rights, is often negative, with the need for compliance stressed only infrequently.”⁴⁸ Moreover, Totten and Cobkit surveyed law enforcement chiefs regarding their understanding of search and seizure law (i.e., the knock-and-announce rule). The authors concluded that chiefs understood the rule in factual situations

43. This paragraph was taken from an earlier study and paper by one of the co-authors that appeared in the *Manitoba Law Journal*. Christopher D. Totten & Sutham Cobkit, *Police Vehicle Searches under the Fourth Amendment: Evaluating Chiefs’ Perceptions of Search Policies and Practices after Arizona v. Gant*, 41 MAN. L.J. 49, 62–64 (2018). Minor edits to text and cross-references in the footnotes were made for clarity. The above-referenced study concluded that:

In general, [its] findings align with current Fourth Amendment norms in the police vehicle search context; that is, chief perception of officer policies and practices related to vehicle searches aligns with Fourth Amendment requirements in this area, including search incident to arrest law under *Gant*. In addition, almost half of the chiefs surveyed indicated that officers have searched vehicles less often incident to arrest because of *Gant*. This latter finding is noteworthy, and appears to align with the limitations imposed by *Gant* on vehicle searches incident to arrest.

Id. at 49.

44. See L. Timothy Perrin et al, *If It’s Broken, Fix It: Moving Beyond the Exclusionary Rule A New and Extensive Empirical Study of the Exclusionary Rule and a Call for a Civil Administrative Remedy to Partially Replace the Rule*, 83 IOWA L. REV. 669, 712–13, 724–25, 735 (1998). The study found that, “[c]lose to half of those participating in the study held the rank of officer at the time they responded to the questionnaire, about one-fifth held the rank of detective, and the remainder, about one-third, held a rank above detectives.” *Id.* at 719.

45. Eugene Michael Hyman, *In Pursuit of a More Workable Exclusionary Rule: A Police Officer’s Perspective*, 10 PAC. L.J. 33, 47 (1979).

46. *Id.*

47. Stephen L. Wasby, *Police Training About Criminal Procedure: Infrequent and Inadequate*, 7 POL’Y STUD. J. 461, 464 (1978).

48. *Id.* at 466.

involving both searches⁴⁹ and arrests.⁵⁰ However, these same authors also found that police chief knowledge of search incident to arrest law in general and *Gant* in particular was “rather uneven.”⁵¹ In addition, Heffernan and Lovely found that approximately 50% of law enforcement officers in their study, committed intentional errors in applying search and seizure laws.⁵² Finally, Orfield undertook two studies on the exclusionary rule, a remedy for police violations of search and seizure laws.⁵³ Orfield concluded that officers generally know the reasons for evidence exclusion in the cases they work⁵⁴ and approach subsequent searches with more caution when evidence has been excluded in their cases.⁵⁵

II. METHODS

Overall, this study was conducted to investigate police perceptions, experiences, and knowledge with regard to individuals’ Fourth Amendment rights, in particular the United States Supreme Court case *Rodriguez v. United States*. In general, this case addresses police vehicle stops and searches involving canine units.⁵⁶ The nature of police officer knowledge and performance concerning *Rodriguez* may be affected by length of experience as

49. See Christopher Totten & Sutham Cobkit, *The Knock and Announce Rule and Police Searches after Hudson v. Michigan: Can Alternative Deterrents Effectively Replace Exclusion for Rule Violations?* 15 NEW CRIM. L. REV. 414, 446 (2012).

50. See Christopher Totten & Sutham Cobkit, *The Knock-and-Announce Rule and Police Arrests: Evaluating Alternative Deterrents to Exclusion for Rule Violations* 48 U. S.F. L. REV. 71, 99–100 (2014).

51. See Christopher Totten & Sutham Cobkit, *Police Vehicle Searches Incident to Arrest: Evaluating Chiefs’ Knowledge of Arizona v. Gant*, 11 N.Y.U. J. L. & LIBERTY 258, 273–277 (2017).

52. William C. Heffernan & Richard W. Lovely, *Evaluating the Fourth Amendment Exclusionary Rule: The Problem of Police Compliance with the Law*, 24 U. MICH. J.L. REFORM 311, 349 (1991). See also Ronald L. Akers & Lonan Lanza-Kaduce, *Exclusionary Rule: Legal Doctrine and Social Research on Constitutional Norms*, 2 SAM HOUSTON STATE U. CRIM. JUST. CTR. RES. BULL. at 1–6 (surveying over 200 officers across two cities with 19% of respondents conceding that they performed searches of “questionable authenticity” at least once each month and 4% acknowledging that they knowingly committed invalid searches at least once a month).

53. *Id.*

54. *Id.*

55. *Id.* Orfield also determined that the exclusionary rule assists officers in mastering search rules and noted exclusion of evidence promotes the implementation of certain training programs to assist officers in complying with search and seizure laws. *Id.* at 1027–29. See also Myron W. Orfield, Jr., *Deterrence, Perjury, and the Heater Factor: An Exclusionary Rule in the Chicago Criminal Courts*, 63 U. COLO. L. REV. 75, 80, 82 (1992) [hereinafter *Courts Study*] (noting that evidence suppression helpful in teaching police about search and seizure laws). Orfield’s police study involved patrol or “line” officers as well as detectives trained in drug detection and investigation. Orfield, *Police Study*, *supra* note 55, at 1024–25. Orfield’s courts study included judges, public defenders, and prosecutors from an Illinois county. See Orfield, *Courts Study* *supra* note 55 at 81–83.

56. *Rodriguez*, 575 U.S. at 350. See *supra* Part II, Section A for a detailed description of *Rodriguez*.

an officer as well as the degree to which the officer is educated and trained on vehicle stops and searches with canine units.

The first hypothesis is that 1) police officers with exposure to training on vehicle stops and searches including use of K-9 units, and 2) officers with more years of experience in law enforcement will have greater levels of PROPER KNOWLEDGE of the legal case of *Rodriguez*, including its underlying principles related to vehicle stops and canine searches, compared to officers with no training on vehicle stops and searches and officers with less years of experience in law enforcement, respectively. The second hypothesis of this study is that 1) police officers with exposure to training on vehicle stops and searches and 2) with more years of experience in law enforcement will exhibit higher levels of PROPER PERFORMANCE with regard to *Rodriguez* than officers with no training on vehicle stops and searches and with less year of experience in law enforcement, respectively.

A. Sample and Procedures

The survey data were collected with a self-administered questionnaire given in-person to the different shifts of police officers across police precincts in a large, populated suburban county in the southeastern United States. The officers consisted of line or beat officers from all the day's shifts whose ranks include patrol officer to sergeant. The researchers visited the precincts of the police department and attended the three different shifts of day watch, evening watch, and morning watch to distribute the self-administered questionnaires. Officers were able to answer the survey questions in approximately 10 minutes on average. The officers took part in the study after the study was approved by the police department's command staff and their shift officers encouraged the officers to participate; however, participation was voluntary and not mandated. No incentive was given to the officers that participated. This survey was reviewed and approved by the Institutional Review Boards (IRB) of the University.

Of the 168 police officers who received the questionnaires, a total of 137 officers returned the questionnaire. The response rate of this survey was 82 percent.

One hundred twenty-one officers (92.4 %) were male and ten (7.6 %) were female among the 131 officers who reported the gender identity. Six officers refused to answer this question. The majority of respondents in the study were white (100, 79%). About ten percent (14, 10.2%) of respondents were African Americans and eight officers (5.8%) identified as Hispanic. The respondents' age range was from twenty-three to sixty with a mean of 32.5. More than half of the respondents were younger than thirty years old. About eleven percent (10.9%) had a high school diploma, and more than forty percent of respondents (40.1%) had some college or associate degree. Nearly half (46.7%) reported having a bachelor's degree or above.

B. Variable Measures

Dependent Variables: The present study utilized two dependent measures. First, the police officers' proper knowledge of the *Rodriguez* decision was measured by a brief, scenario- base, Likert-type question: "When a police officer has completed the mission of a standard or routine traffic stop (i.e. issued a traffic ticket or a warning after having checked license, registration, insurance, and/ or warrants), the officer can detain the vehicle occupant(s) while waiting for a police K-9 unit to arrive to perform a sniff for drugs or other contraband around the vehicle perimeter." The respondents' choices ranged from Strongly Agree (1) to Strongly Disagree (4). If the respondents' answers were "Agree" or "Strongly Agree," the respondents did not have proper knowledge of the *Rodriguez* decision, and if the answers were "Disagree" or "Strongly Disagree," the respondents did have proper knowledge on the *Rodriguez* decision. The proper knowledge measure on *Rodriguez* is, therefore, a dichotomous measure where having proper knowledge on *Rodriguez* is coded as 1, and not having proper knowledge on *Rodriguez* is coded as 0.

Table 1. The Proper Knowledge Measure on *Rodriguez* vs. *United States*

	No Proper Knowledge		Proper Knowledge	
	Strongly Agree	Agree	Disagree	Strongly Disagree
When a police officer has completed the mission of a standard or routine traffic stop (i.e., issued a traffic ticket or a warning after having checked license, registration, insurance, and/ or warrants), the officer can detain the vehicle occupant(s) while waiting for a police K-9 unit to arrive to perform a sniff for drugs or other contraband around the vehicle perimeter.	33 (26.2%)		93 (73.8%)	
	3 (2.4%)	30 (23.8%)	58 (46.0%)	35 (27.8%)

Table 1 shows thirty-three respondents (26.2%) did not have proper knowledge of the *Rodriguez* decision; in particular, three (2.4%) strongly agreed and thirty (23.8%) agreed. Ninety-three (93) respondents (73.8%) had proper knowledge of the *Rodriguez* decision; in particular, fifty-eight (46.0%) disagreed and 35 (27.8%) strongly disagreed.

The police officers' proper performance based on the *Rodriguez* decision, the second dependent measure, was measured by asking "[w]hen you do a K-9 sniff for drugs or other contraband around the perimeter of a vehicle during a standard or routine traffic stop, when do you do it?" If the police officer responded to the answer choice of "after writing up the traffic ticket and/or providing a warning to the driver," this performance was considered to violate the ruling from *Rodriguez*. The proper performance measure on *Rodriguez* is, therefore, also a

dichotomous measure where proper performance on the *Rodriguez* decision is coded as 1, and not proper performance on *Rodriguez* is coded as 0.

Table 2. The Proper Performance Measure on *Rodriguez* vs. *United States*

	After writing up the traffic ticket/providing a warning to the driver	
	Yes	No
	<u>No proper performance</u>	<u>(Proper performance)</u>
When you do a K-9 sniff for drugs or other contraband around the perimeter of a vehicle during a standard or routine traffic stop, when do you do it?	21 (17.2%)	101 (82.8%)

As seen in Table 2, twenty-one (17.2%) officers reported they conduct a K-9 sniff during a routine traffic stop after writing up the traffic ticket and/or providing a warning to the driver, which violates the *Rodriguez* decision. 101 officers (82.8%) reported they conducted a K-9 sniff during a routine traffic stop 1) before or while writing up the traffic ticket and/or providing a warning to the driver, which appears to agree with Fourth Amendment procedures established by *Rodriguez*; (2) before or while checking the suspect's vehicle registration which appears to be permissible under the ruling set forth in *Rodriguez*; or 3) after checking vehicle registration and license which may or not agree with Fourth Amendment procedures under *Rodriguez*.⁵⁷

Independent Variables: The independent variables of this study included the police officers' training on the legality of vehicle stops and searches and the police officers' years of experience in law enforcement. To measure the police officers' training on vehicle stops and searches, respondents were asked whether their department provided a training program or workshop on the legality of vehicle stops and searches in the past twelve months. Ninety-eight respondents (71.5%) reported they had a training program or workshop on the legality of vehicle stops and searches in the past twelve months, and twenty-nine respondents (21.2%) did not have a training program or workshop on vehicle stops and searches within this timeframe (see Table 3).

57. A police officer who conducts a K-9 search around the perimeter of a vehicle during a routine traffic stop after checking vehicle registration and license but *before* completing all traffic-related tasks such as writing up the final ticket or warning to the driver, would not appear to be in violation of *Rodriguez*. But if the K-9 search is completed *both* after checking vehicle registration/license and all other traffic-related tasks, including writing up the ticket or warning, then this would appear to be in violation of *Rodriguez*. See generally *supra* note 2.

Table 3. Frequency and Percentage of the Independent Variables

	N	%
Training on Vehicle Stop and Searches	127	
No Training	29	21.2%
Training	98	71.5%
Experience in Law Enforcement	137	
5 years or less	77	56.2%
More than 5 years	60	43.8%

The police officers' years of experience in the law enforcement field was measured by asking "How long have you been in law enforcement?" The majority (56.2%, n=77) of the police officers in the survey reported they have five years or less of experience in law enforcement, and less than half (43.8%, n=60) of the police officers had more than five years of law enforcement experience.

III. FINDINGS

A. *Proper Knowledge of Rodriguez and Officers' Training and Years of Experience*

The associations of police officers' training on the legality of vehicle stops and searches with the officers' proper knowledge of *Rodriguez* is shown in Table 4. Among the police officers who had vehicle stop and search training in the past twelve months, sixty-six officers (71.7%) demonstrate proper knowledge of *Rodriguez* (Disagreed or Strongly Disagreed on the statement of "you could detain suspect to wait for K-9 unit to arrive after a routine traffic stop was completed"). Still, twenty-six officers (28.3%) who had training on vehicle stops and searches lack proper knowledge of *Rodriguez*. Among the police officers who did not have vehicle stop and search training in the past twelve months, twenty-three officers (82.1%) show they have proper knowledge of *Rodriguez*, and five officers (17.9%) indicate the absence of proper knowledge of *Rodriguez*. However, this relationship between knowledge of *Rodriguez* and training on vehicle stop and search procedures is not statistically significant (Chi-square with 1 df = 1.213, N/S).

Table 4. Knowledge of *Rodriguez* vs. *United States* and Training on Vehicle Stop and Searches

	Training on Vehicle Stop and Searches			
	No Training		Training	
Knowledge of <i>Rodriguez</i>	N	%	N	%
No Proper Knowledge	5	17.9	26	28.3
Proper Knowledge	23	82.1	66	71.7
Total	28	100.0	89	100.0

Chi-Square (1) = 1.213, (p=.271, N/S)

Table 5 shows the relationship between proper knowledge of *Rodriguez* and the police officers' experience in law enforcement. Police officers with five years or less of experience in law enforcement show a lower percentage (65.3%) of proper knowledge regarding *Rodriguez* compared to officers with more than five years of experience (85.2%). Police officers with five years or less of experience also show a higher percentage (34.7%) of no proper knowledge of *Rodriguez* than police officers with more than five years of experience (14.3%). In other words, the officers with five years or less of experience are less likely to have proper knowledge of the *Rodriguez* decision than police officers who have been in law enforcement more than five years. This relationship between officer knowledge of *Rodriguez* and officer experience in law enforcement is statistically significant at alpha=0.05 level (Chi-square with 1 df 6.326, p=0.012).

Table 5. Knowledge of *Rodriguez* vs. *United States* and Experience in Law Enforcement

	Experience in Law Enforcement			
	5 Year or Less		More than 5 years	
Knowledge of <i>Rodriguez</i>	N	%	N	%
No Proper Knowledge	25	34.7	8	14.3
Proper Knowledge	47	65.3	46	85.2
Total	72	100.0	54	100.0

Chi-Square (1) = 6.326, P=0.012

Next, after controlling for the other demographic variables of gender, education level, and race of the police officers, the effects of both (1) the officers' training on the legality of vehicle stops and searches and (2) officers' experience in law enforcement, on the officers' knowledge of the *Rodriguez* decision was examined using a logistic regression analysis.

Table 6. Logistic Regression Analysis of Knowledge of the *Rodriguez* Decision on Officer's Vehicle Stop and Search Training, and Experience

	B	S.E.	Wald	OR
Training on vehicle stops and searches	-0.59	0.61	0.94	0.55
Years of Experience (0=<5, 1=>5)	0.91	0.48	3.52	2.48
Education Level	0.28	0.32	0.78	1.33
Gender (Male=1)	-0.39	0.81	0.23	0.68
Race (White=1)	0.74	0.54	1.87	2.11
Constant	-0.59	1.35	0.19	0.56
-2 Log Likelihood	124.203			

* p < 0.05; **p < 0.01; *** p<0.001

Results in Table 6 show that police officers' training on the legality of vehicle stops and searches does not have a significant effect on the police officers' proper knowledge on the *Rodriguez* decision (b=-0.59, OR=.55, N/S). In Table 5, the crosstab analysis reflects that officers with more than five years of law enforcement experience show a key difference in having proper knowledge on the *Rodriguez* decision; moreover, in the multivariate analysis, the odds of having proper knowledge on *Rodriguez* are about 2.48 times higher for police officers with more than five years of experience compared to officers with 5 years or less of experience. Nonetheless, this impact of officers' experience is not statistically significant (b=.91, OR=2.48, N/S). That is, the relationship between the police officers' years of experience and knowledge on the *Rodriguez* decision may be spurious. In addition, as reflected in Table 6, the level of education has a positive effect on proper knowledge (b=0.28, OR=1.33, N/S); male officers are about 0.68 times less likely to have proper knowledge than female officers (b=-0.39, OR=0.68, N/S); and White officers are 2.11 times more likely to have proper knowledge on the *Rodriguez* decision, but the non-significant nature of the results associated with these demographic variables indicates that education level, gender, and, race are not genuine or real factors contributing to officers' proper knowledge.

B. Proper Performance on the *Rodriguez* Decision and Officers' Training and Experience

In general, police performances are evaluated, in part, by the extant precedent legal cases and, in particular, for this study, proper performance is determined by the *Rodriguez* case. (See Table 2 for the proper performance variable based on *Rodriguez*). In order to investigate the research hypothesis of the study, two bivariate relationships were explored between police officers' proper performance on the *Rodriguez* decision and (1) the officers' training on the legality of vehicle stops/searches and (2) the officers' years of experience in law enforcement.

As can be seen in Table 7, among the police officers who had a stop or search training workshop in the past twelve months, seventy-one officers (81.6%) indicate their performance or conduct adhered to the *Rodriguez* decision when they do a K-9 sniff for drugs or other contraband around the perimeter of a vehicle during a routine traffic stop, but sixteen officers (18.4%) violate the *Rodriguez* decision. Among the police officers who did not have training in the past twelve months, twenty-four officers (82.8%) show they performed properly on the *Rodriguez* decision, and five officers (17.2%) indicate they did not follow the *Rodriguez* decision. However, this relationship between police officers' performance on the *Rodriguez* decision and officers' training on vehicle stop and search procedures is not statistically significant (Chi-square with 1 df =.019, N/S).

Table 7. Police Practice of *Rodriguez vs. United States* and Training on Vehicle Stop and Searches

	Training on Vehicle Stop and Searches			
	No Training		Training	
Police Performance of <i>Rodriguez</i>	N	%	N	%
No Proper Performance	5	17.2	16	18.4
Proper Performance	24	82.8	71	81.6
Total	29	100.0	87	100.0

Chi-Square (1) = .019, p=.889, (N/S)

Table 8 shows the relationship between proper performance on the *Rodriguez* decision and the police officers' years of experience in law enforcement. Police officers with more than five years of experience in law enforcement show a lower percentage (69.1%, n=38) of proper performance related to *Rodriguez* compared to officers with five years or less of experience (94.0%, n=63). Police officers with five years or less of experience also show a lower percentage (6.0%, n=4) of no proper performance on *Rodriguez* compared to police officers with more than five years of experience (30.9%, n=17). This is an interesting finding because in contrast to the results in Table 5 regarding officer knowledge, the officers with five years or less of experience are more likely to perform properly on the *Rodriguez* decision than police officers who have been in law enforcement more than five years. This relationship between officer proper performance on *Rodriguez* and officer experience in law enforcement is statistically significant at alpha=0.001 level (Chi-square with 1 df 13.183, p=0.000).

Table 8. Police Performance of *Rodriguez vs. United States* and Experience in Law Enforcement

Police Performance of <i>Rodriguez</i>	Experience in Law Enforcement			
	5 Year or Less		More than 5 years	
	N	%	N	%
No Proper Performance	4	6.0	17	30.9
Proper Performance	63	94.0	38	69.1
Total	67	100.0	55	100.0

Chi-Square (1) = 13.183, P=0.000

Using a logistic regression analysis, Table 9 illustrates the effects of police officer training on vehicle stops/searches and officers' years of experience in law enforcement, with other demographic variables (i.e., education level, gender, and race/ethnicity). Consistent with the results in Table 8, police officers' years of experience have a negative, but statistically significant effect on proper performance on the *Rodriguez* decision ($b=-1.98$, $OR=0.14$, $p<0.001$). In particular, police officers with more than five years of law enforcement experience are less likely ($OR=0.14$) to adhere to the *Rodriguez* decision than officers with five years or less experience when they do a K-9 sniff for drugs or other contraband around the perimeter of a vehicle during a routine traffic stop. Police officers' training on vehicle stops/searches does not produce a significant effect on police officers' proper performance on the *Rodriguez* decision ($b=0.35$, $OR=0.71$, N/S). The three demographic variables (i.e., education, gender, and race) all have negative effects (education level: $b=-0.02$, $OR=0.98$, N/S; gender: $b=-0.27$, $OR=0.76$, N/S; race: $b=-0.29$, $OR=0.75$, N/S), but are statistically non-significant.

Table 9. Logistic Regression Analysis of Police Performance of the *Rodriguez* Decision on Officer's Vehicle Stop and Search Training, and Experience

	B	S.E.	Wald	OR
Training on vehicle stops and searches	-0.35	0.61	0.33	0.71
Years of Experience (0=<5, 1=>5)	-1.98	0.61	10.57 ***	0.14
Education Level	-0.02	1.19	0.00	0.98
Gender (Male=1)	-0.27	0.87	0.10	0.76
Race (White=1)	-0.29	0.73	0.16	0.75
Constant	5.68	2.19	6.76	293.50
-2 Log Likelihood	124.203			

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

IV. DISCUSSION/CONCLUSIONS

This study investigated law enforcement officers' knowledge and performance on a recent United States Supreme Court case, *Rodriguez v. United States*, which clarified the law related to police vehicle stops involving searches

by K-9 units. Nearly three-quarters of police officers (73.8%) have proper knowledge of the legal issue related to detaining suspects at routine traffic stops to wait for K-9 assistance once the mission of the stop is completed (i.e., the officer issues a traffic ticket or warning after having checked license, registration, insurance, and/ or warrants), a measure of the ruling of *Rodriguez*. However, more than a quarter (26.2%) of officers reported that it was acceptable to detain suspects to wait for K-9s to arrive even though the mission of a routine traffic stop had been completed. The latter finding reflects improper knowledge regarding *Rodriguez*.

Moreover, a majority of the police officers (82.8%) appear to engage in proper job performance that aligns with *Rodriguez* when the officers indicated that they conduct canine sniffs during a routine traffic stop before or while writing up a traffic ticket (among other tasks).⁵⁸ However, a sizeable (17.2%) portion of officers did report that they conduct canine sniffs after writing up the traffic ticket, which appears to violate *Rodriguez* because the response suggests officers may be engaging in canine searches after the mission of the traffic stop has ceased.

The results of the analysis on the relationship between the police officers' training on vehicle stop/searches and the officers' knowledge and performance related to *Rodriguez*, reveal that the police officers' training does not lead to improvement of either their knowledge or performance on *Rodriguez*. Indeed, most of the officers who indicated they had no formal training or workshop over the preceding twelve months on vehicle stops and searches, still exhibited proper knowledge (82.1%) and proper performance (82.8%) regarding *Rodriguez*.⁵⁹ This may be due to the officers obtaining proper knowledge of *Rodriguez* through other avenues, such as from talking to other officers, including supervising officers, or reading available information such as handouts or leaflets distributed to them by supervisors.

The statistical analyses regarding the impact of police officers' experience in law enforcement on proper knowledge of *Rodriguez* suggest that the more experienced officers exhibit the higher levels of proper knowledge of *Rodriguez*, but that this effect is spurious.⁶⁰ It may stem from the fact that in the police academy, nascent officers undergo training on other topics or issues apart from the specific issue of *Rodriguez* while more experienced officers have heard of *Rodriguez* during "on-the-job" interactions with fellow officers, including supervisors. The most salient finding of the study, however, is that the veteran police officers are more likely to violate the *Rodriguez* decision than less experienced officers when they perform a K-9 sniff for drugs or other contraband around the perimeter of a vehicle during a routine traffic stop.⁶¹ This latter result

58. See also *supra* note 2 and accompanying text for a full description of the listed traffic tasks.

59. See also Tables 4, 7 and accompanying text.

60. See Tables 5 & 6.

61. See Tables 8-9 and accompanying text. See also Table 2.

suggests that when the new officers initially arrive in their precincts after the academy, they may undergo more rigorous training or education since they are new, which may include legal training. Thus, for those officers with five years or less of experience, they may have had more recent and more frequent opportunities to be trained on the law, including recent changes or updates to the law such as *Rodriguez* (2015), compared to the veteran officers. In contrast, veteran officers with more practical, on-the-job experience may be more inclined to place greater weight on everyday, real-world knowledge. In turn, they may become less receptive to applying new rules or knowledge related to recent court decisions (i.e., if they become aware of them).

However, in general, the officers surveyed appear to have moderate to higher levels of knowledge of *Rodriguez* and its embedded legal principles on canine searches during vehicle stops. Overall, the majority of officers in the study are conducting K-9 searches during traffic stops properly under Fourth Amendment principles as established in *Rodriguez*. However, there remains a sizeable minority of officers who may be violating these Fourth Amendment principles. As a result, police departments need to also provide additional incentives and greater flexibility in scheduling arrangements so that officers can take higher education classes and obtain higher education degrees. In addition, departments should be encouraged by their community constituents to hire candidates with higher education degrees. Police supervisors should promote and implement continuous training and education on vehicle stops and searches throughout officers' careers, including updates to the law such as those involving vehicle K-9 searches under *Rodriguez*. This continuous training can help to ensure that veteran officers receive exposure to the latest legal developments in vehicle stops and searches.

Some limitations of the study included human error. For example, officers may have answered questions they might not have understood and rather answered to the best of their ability. Another limitation was that only one police department was selected in the sample, which reduces the generalizability of the study to the entirety of law enforcement officers and departments in the region.

Future research suggestions include expanding the number of police departments surveyed to include similarly-sized police forces in different areas of the country. This would allow comparisons to be drawn between departments in disparate geographical and other settings. Finally, in a future study, the types of respondents could be broadened to include more ranking officers, such as lieutenants, captains, and chiefs.