

Research Article

Latino Officers and Their Involvement in Police Shootings

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With an emphasis to examine Latino officers who have been involved in police shootings, this study analyzed twenty-one years (1990–2010) of data from one of the largest law enforcement departments in the United States. The study compared Latino population trends in the United States, the State of California, a southern California County, and focused on the representativeness of Latinos in one southern California law enforcement department. The analysis further investigated police shootings by the race of the officer, narrowing the focus to determine whether an increasing representativeness of Latino officers had any effect on police shootings. Results revealed that while the percentage of White officers in the department decreased and Latino officers increased, so too did their involvement in police shootings. Most surprisingly, Latino officer-involved shootings outpaced their growth in the department by a factor of 3.3 and in the county by a factor of more than 4.

1. Introduction

Policing continues to be one of the most visible and highly scrutinized occupations in the United States. With rare exception, no other profession generates the same level of public and media examination as the activity of police officers. By the very nature of the business, police officers possess tremendous authority to maintain peace and order in each of the communities they serve. Under certain circumstances, police officers, based on their discretion, are authorized to stop, detain, search, and arrest persons suspected of breaking the law. When faced with resistance, these same officers are empowered to use force to overcome the resistance as long as the force used was objectively reasonable under the circumstances [1]. Additionally, when officers, or other members of the public, are threatened with serious physical harm by another, officers are justified in using lethal force [2]. It is this discretionary authority, the power to use force, which draws the attention of members of the community to examine, judge, and at times criticize the actions of officers. As an essential facet of policing and by its very nature, police use of force will remain controversial [3].

According to Klinger and Brunson [4, page 118], "...nothing places the police under more scrutiny than when officers exercise the ultimate power to take the lives of citizens through the use of firearms." This is especially the case when members of the public perceive the shooting to be unjustified or racially motivated. In line with conflict theory, and bolstered by the belief that the police represent the dominant class, some minority groups maintain that the police concentrate enforcement activity, and, in turn, inordinately use force on them [5, 6]. The resulting perception is that the police exist for the benefit and interest of those in power. As a result, ethnic minorities tend to possess an adverse opinion about the police [5, 7, 8]. At its worst, when the underclass (i.e., ethnic minorities and the unconventional or marginalized) believe that the police have gone too far with their abuse of force, typically surrounding a very controversial shooting incident involving a person of color and a White officer, rioting and civil disturbance tend to be the result [9–20].

Although the profession of law enforcement continues to be primarily dominated by White males, a changing trend can be seen. Based in large part on the negative perceptions of

the police maintained by minority citizens and their belief that a more diverse police force would more closely relate to them, the trend in law enforcement since the 1970s has been to hire a more representative workforce of the community served. Today, the makeup of police agencies is more ethnically/racially diverse than ever before. The question that arises is whether this new, more racially representative, police force changes the way in which incidents of use of force, particularly deadly force, occur. In other words, will a more racially and ethnically diverse police force that is more representative of its community change (i.e., reduce) officer-involved shooting trends?

In this paper, we analyze 21 years of data from one of the largest law enforcement departments in the United States to examine police shootings that involve Latino officers. Specifically, this study seeks to answer whether minority officers, particularly Latino officers, use lethal force to the same degree as White officers. In other words, is lethal force simply a zero-sum game? As Latino officer representation in the studied law enforcement agency increases and White officer presence decreases, does their involvement in shooting incidents follow suit?

Before we address the specific study of Latino officers' use of deadly force, we will review prior research and discussion regarding an officer's decision to use deadly force (i.e., discretion, authority, and reasonableness) and the public's perception of the police and their use of force, particularly from the point of view of minority citizens.

2. Past Research

2.1. Public Perception of Police Use of Deadly Force. How the police are perceived by the communities they serve is important because it impacts their ability to be effective. Moreover, public perception is a chief concern for police administrators especially if a lack of trust and confidence exists in the eye of those being served [5]. As previously mentioned, at its worst, when certain segments of the public (i.e., racial minorities) view the police as illegitimate or failing to serve in their best interest, resistance and rioting have occurred. The literature covering the public's perception of the police indicates that minorities and members from the lower classes tend to be the most critical [5, 7, 8, 11, 21–24].

Although most citizens have a good outlook and support for the police, negative interactions whether direct or vicarious (i.e., media, friends, and family) can adversely shape their perception [8]. In her study regarding perceptions of the police, Vogel [7] asserts that, despite racial makeup, those who are more prone to possess a negative attitude of the police are younger, male, and economically disadvantaged. Binder and Scharf [24] support this position by contending that youths living in poor communities view police officers as a symbol to be hated and despised. While minorities are inclined to have a more pessimistic opinion of the police, this tendency begins to diminish as their socioeconomic status improves. Weitzer [22] declares that, although Blacks tend to perceive harsher treatment by the police than imposed on Whites, middle-class Blacks, based on living in more

prosperous neighborhoods, hold higher opinions of the police.

Addressing the basis for the minority or lower social-class observation that police are more punitive toward people of color than Whites or privileged classes, several researchers have referred to conflict theory for an explanation [5, 12, 20, 25, 26]. Conflict theory contends the need for "greater levels of state coercion in areas where inequality is most pronounced because inequality is an unnatural condition that must be maintained by force" [20, page 403]. Clarifying Jacobs and Britt's statement, Smith [12, page 147] writes "Proponents of the conflict theory of law suggest that police actions are a response to threats from minority subgroups. They argue that police violence is used to control racial and economic classes deemed threatening to the existing social order." Further drawing a connection to race, Weitzer [22, page 136] maintains that the racially disparate treatment of citizens by the police is related to the perception of participation in criminal activity by Blacks—"that is, the notion that blacks' disproportionate involvement in street crime explains differential police treatment of blacks and whites." Additionally, where crime rates are greater and a sense of quality of life is diminished (e.g., graffiti, youth hanging out, prostitution, and homelessness), which can be found in neighborhoods comprised of concentrated poverty and inhabited by racial minorities, proactive policing strategies of stopping, questioning, and searching people are more common [22].

When communities have felt police actions were merely done as a mechanism for controlling their behavior as opposed to representing their best interests, tension and mistrust rose to the point of civil unrest and rioting [12]. In fact, police use of force, particularly incidents in which deadly force was debatably used against a person of color, has caused minority groups to question the legitimacy of the police [21]. In part, because the profession of policing has been dominated by White males [27], this sense of distrust and animosity toward the police became rooted in an absence of racial representation of the communities served. Quite simply, the belief was that the police could not relate to the people they worked for, which created the demand for greater diversification in police departments across the country [12].

In order to mitigate the feelings of hostility in more heterogeneous and urban communities, police departments sought opportunities to improve their image by creating community services units to develop partnerships with community leaders, activists, and clergy members and offering training through citizens academies to educate the public about police work [21]. Klinger and Brunson [4] also advise that sharing research findings regarding officers' perceptions during deadly force encounters may prove informing to the public. Additionally, since the 1970s and more so through the 1990s, police departments, specifically the larger ones, have become more diverse and representative of the minority populations they serve [5, 28]. In their study predicting the employment of minority officers, Zhao et al. [28] found that the presence of a minority police chief and city mayor was correlated with the increased representation of minority officers in the police department. The authors further indicate

that the increased representation may be related to an enhanced pool of applicants from the community. That is, as the overall population of a particular minority group increases, the likelihood of persons from the group to apply for employment as police officers will increase as well. In an effort to identify what motivates a person to become a police officer, White et al. [27, page 528] stated, “regardless of race/ethnicity or gender, unanimously (officers) cited practical and altruistic motivations.” Essentially, the idea of helping others, good pay, and benefits were the incentives that drew officers to the profession. Despite efforts to hire minority officers, the profession of policing may not appeal to everyone, especially those segments of society that may have felt historically disenfranchised by the police.

3. Methods

Due to its close proximity to Mexico, a historical source of Latino immigrants to the Southwest portion of the United States, Southern California is a rich environment for conducting research on Latino populations. If the trend for law enforcement agencies to hire a representative workforce of the community they serve holds true, then the examination of one of Southern California’s largest law enforcement agencies would prove to be a valuable resource for studying police shootings by Latino officers.

For the purpose of our study, data were collected from one of Southern California’s largest sheriff’s departments, a law enforcement agency that serves a very diverse population. Of particular interest, we believe that the agency in this study serves as a good reference point. Not only does the sheriff’s department serve an unincorporated county population of approximately 500,000 people, but also it serves as the primary law enforcement agency, through contracted police services, for 16 cities. These cities have populations ranging from as small as 8,000 people to as large as nearly 200,000 people. By providing police services to each of these communities, this sheriff’s department is essentially 17 separate police departments that ultimately fall under the command of the sheriff.

To further support the argument that this sheriff’s department is representative of other police agencies, we find that, in addition to the varying sizes of population of each of the cities, many of their other demographic aspects (e.g., median age, race/ethnicity, median income, etc.) are equally diverse. Although our examination is made at the department level versus an individual city level, we are compelled to bring forth our point of representation because most other law enforcement agencies throughout the United States provide police services to one city or community as a whole. In the present case, the analysis of this one department is an analysis of 17 separate cities and communities at the same time. Each has its own governing body (i.e., city council or board of supervisors), and many are served by separate patrol stations commanded by a captain, who serves as the chief of police for the contracted city (the sheriff’s department has ten patrol stations. Some of the stations are located in such a manner so as to serve more than one city and

a portion of the unincorporated area of the county at the same time; other stations solely serve one city and/or a portion of the unincorporated county). Certainly this study has its limitations, which will be discussed later in the chapter; however, the unique circumstance provided by this diverse law enforcement department proves to be a valuable opportunity to expand the knowledge about police use of deadly force, more specifically that which involves Latino police officers.

4. Findings

4.1. Gender and Racial Characteristics of the Sheriff’s Department Sworn Officers. Between 1990 and 2010, the years examined, the sheriff’s department sworn officer staff nearly doubled in size from 1,052 officers in 1990 to 2,091 in 2010. Of particular interest, we find that the overall percentage of male officers increased from representing 83 percent of the sworn officers in 1993 to 90 percent by 2000 and has remained at this level ever since (due to inconsistency or no record-keeping regarding department employee demographics, 1993 was the first year for available data. These data were obtained from the Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics (LEMAS), which periodically collects data from law enforcement agencies throughout the United States [29–31]). It is not known why female officers, representing nearly one-fifth of the department in 1993, dramatically declined to 10 percent in subsequent years. While fascinating and worth mentioning, it falls outside the focus of our current emphasis on Latino officers involvement in shootings.

During the 21-year time frame measured, while the department’s total sworn staffing increased, so too did its total number of officers assigned to patrol functions (as with many sheriff departments throughout the United States, this department, as well, maintains several responsibilities beyond the basic law enforcement service of patrol operations (i.e., officers tasked with responding to calls for service, conducting criminal investigations, and other assignments typically associated with the common depiction of a police officer). Sworn officers within the department are also assigned to jail, court, coroner, training, and administrative operations. With rare exception, the risk of an officer becoming involved in a shooting incident while in one of these assignments is unlikely. Of the 270 officer-involved shootings examined, all occurred in a patrol setting with the exception of 10. Five of those occurred while the officer was off-duty, three involved personnel assigned to the courts, and two occurred with officers assigned to the jail). In 1990, 689 or roughly 65 percent of the department’s sworn officers were assigned to patrol operations, whereas in 2010 the number increased to 1,432 officers (68 percent of the total sworn staff). At no time during the 21 years did the patrol deployment of sworn officer ever exceed 73 percent of the total department’s sworn officer contingent; the average was 69 percent.

Although prior demographic information for employees of the sheriff’s department was not available before 1993 and not consistently maintained until 2000, some remarkable

changes were discovered within the racial makeup of the department over the period of time examined. We observed a few interesting trends taking place over the time period in the study. First, in 1993, we find that White, Latino, and African American officers, respectively, represent 71, 19, and 8 percent of the sworn staff, whereas Asian and other races encompass the remaining 2 percent. By the year 2000, the year in which the department's record-keeping practices became more reliable, we inexplicably discovered that the overall representation of White officers increased by an additional 7 percent while that of Latino and African American officers collectively dropped by 7 percent. Whether the decrease in minority officer representation, similar to that which was seen with the reduction in female officers, is reflective of the department's hiring practices or simply an anomaly, we have no way of knowing from the available data.

Working with data from 2000 forward and focusing only on White and Latino officers, we find the second unique trend. While the number of officers in both categories increased over the 11-year period (nearly 300 more White and a little less than 400 more Latino officers), their overall respective representation in the department is quite different. Almost year for year, as the percentage of White officers decreases, there is a direct and respective increase in the percentage of Latino officers. During this 11-year period, the representation of White officers fell 15 percent (from 78 percent in 2000 to 63 percent in 2010), whereas Latino officer representation increased by 12 percent (from 17 percent in 2000 to 29 percent in 2010).

The final distinctive trend observed was with the African American classification of officers within the department. If we only consider the bookend years of 1993 and 2010, we observe that the sheer number of African American officers did not change; however, there was a dramatic drop from 81 officers in 1993, when they represented 8 percent of the department, to 40 in 2000, comprising merely 3 percent of the department. By 2010, the number of African American officers more than doubled to 85 but remained no more than 4 percent of the organization's sworn officer staff.

Over the 18-year period for which we have data, the most unchanged population is that of Asian and all other races classifications of officers. In 1993, combined, both categories consisted of 24 officers, or about 1 percent of the department. By 2010, their numbers grew to 79 officers, which collectively was 4 percent of the total sworn employee population.

Figure 1 graphically depicts the racial trend of sworn officers within the sheriff's department from 1993 to 2010. Due to their smaller overall representation in the department, African American, Asian, and officers of other races were combined in the graph. Again, Figure 1 shows that, from 2000 forward to 2010, the White population of officers within the department steadily declined while that of the Latino representation had risen, and the combination of officers of all other races remained relatively consistent.

4.2. Comparing Racial Representation. When comparing the racial demographic makeup found within any law enforcement department to the greater community it serves, the

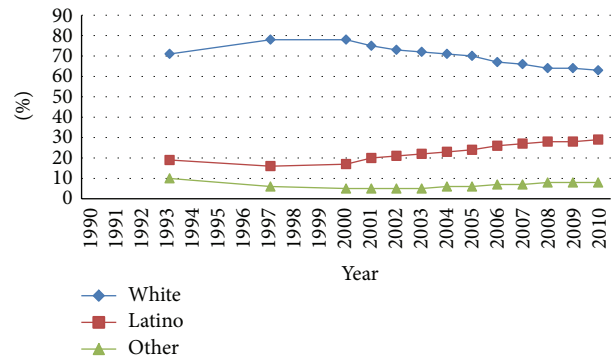


FIGURE 1: Department racial demographics by year.

closer the two come to matching each other is an indication as to how the department reflects or represents the community. The more a police department directly reflects the public it serves, the more likely it will be perceived as legitimate and receive greater support [12, 27].

In order to place the sheriff's department into context with the greater population it served, we made a comparison with the race of sworn officers within the department to that of the county and then with the state. Although data are inconsistent for the department prior to 2000 and the data for the county and state was not available for 2009 and 2010, we are able to develop an understanding of the trend over the 21-year period examined (in our attempt to rely upon consistent sources for the county and state data collected, we looked at the California Department of Finance website at <http://www.dof.ca.gov/research/demographic/>. Data for 2009 and 2010 were not available at the time of this writing).

Since we have previously explored the racial changes within the department earlier, here we will concentrate on the trends within the county and at the state level, assessing the differences relative to the representation of each race or lack thereof. As we discover in Table 1, similar to the stable representation within the department, the population of African Americans, Asians, and other races each remained relatively stable within the county and state as well. While the department's representation of each of these races trails that of the county and state, the greatest difference was with the Asian population. While the state was consistently made up of 11 to 12 percent Asian population, the county lagged behind as much as half (4 to 6 percent), and the department fell even further behind (1 to 2 percent), comprising no more than one-sixth of the state's share and one-third of the county's Asian inhabitants.

Centering on White and Latino populations revealed interesting trends at the county and state levels. First, while both the county and state experienced a consistent up-tick of Latino inhabitants over the 21 years, concurrently the represented White population receded. Second, the overall population of Whites was greatest at the county level in 1990 but began to nearly match that of the state by the early 2000s and was passed by the state in 2007. A contrasting development is seen with respect to the Latino population. In conjunction with the declining White population, the Latino

TABLE 1: Comparison of racial population within the sheriff’s department, county, and state by percentage 1990–2010.

Year	White			Latino			Black			Asian			Other		
	Dept.	County	State	Dept.	County	State	Dept.	County	State	Dept.	County	State	Dept.	County	State
1990	—	65	57	—	26	26	—	5	7	—	3	9	—	1	1
1991	—	63	56	—	28	27	—	5	7	—	3	10	—	1	0
1992	—	61	55	—	29	27	—	5	7	—	4	10	—	1	1
1993	71	60	54	19	30	28	8	6	7	1	4	10	1	0	1
1994	—	58	53	—	31	29	—	6	7	—	4	10	—	1	1
1995	—	57	52	—	32	29	—	6	7	—	4	11	—	1	1
1996	—	56	51	—	33	30	—	6	7	—	4	11	—	1	1
1997	78	54	50	16	34	31	4	6	7	1	4	11	1	2	1
1998	—	53	49	—	35	31	—	6	7	—	4	12	—	2	1
1999	—	52	48	—	36	32	—	6	7	—	5	12	—	1	1
2000	78	51	47	17	37	33	3	6	7	1	4	11	1	2	2
2001	75	50	47	20	38	33	3	6	6	1	4	11	1	2	3
2002	73	48	46	21	39	34	3	6	6	1	4	11	1	3	3
2003	72	47	45	22	40	34	3	6	6	1	5	12	1	2	3
2004	71	45	44	23	41	35	4	6	6	1	5	12	1	3	3
2005	70	44	43	24	42	36	4	6	6	1	5	12	1	3	3
2006	67	43	42	26	43	36	4	6	6	1	6	12	2	2	4
2007	66	41	42	27	44	37	4	6	6	1	6	12	2	3	3
2008	64	40	41	28	45	37	4	6	6	2	6	12	2	3	4
2009	64	—	—	28	—	—	4	—	—	2	—	—	2	—	—
2010	63	—	42	29	—	—	4	—	—	2	—	—	2	—	—

Sources:

The studied sheriff’s department provided the department data.

The county and state data were obtained from the following.

1990–2000 data was collected from the State of California, Department of Finance, Race/Ethnic Population Estimates: Components of Change for California Counties, April 1990 to April 2000. Sacramento, California, August 2005.

2000–2008 data were collected from the State of California, Department of Finance, California County Race/Ethnic Population Estimates and Components of Change by Year, July 1, 2000–2008. Sacramento, California, June 2010.

population increased, albeit at a greater rate at the county level. In 1990, Latino residents equally comprised the county and state, representing 26 percent at each level. Although the Latino presence rose steadily in each jurisdiction, it did so at a greater rate at the county level. By 2008, the existence of Latinos at the county level outpaced the state by as much as 8 percent (45 percent for the county and 37 percent for the state). At the county and state levels, more so for the county, we observed a clear trend in which the Latino presence was becoming the majority while the White population had become marginalized. In part, this may be obvious due to the proximity of Mexico to Southern California and the migration trends from Mexico into the United States.

In Figures 2 and 3, we can visualize the declining White presence in each of the department, county, and state whereas the existence of Latinos has continued to increase. Of particular interest is the convergence of the representation of White residents at the county and state level. When considering the pattern of Latino population at the same time, the status of Latinos as the majority race becomes more prominent.

4.3. Frequency of Police Shootings and Occurrence by Race and Gender. Of all the functions performed by police officers, incidents in which they are moved to use force, specifically

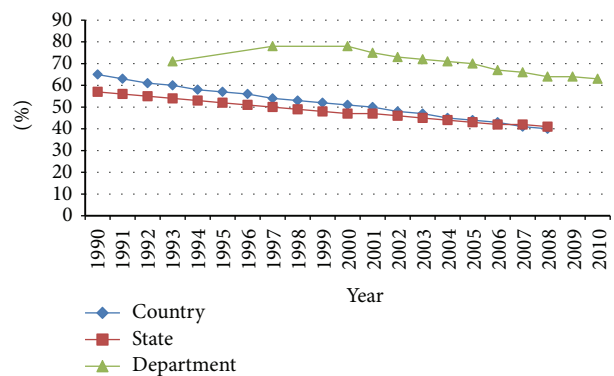


FIGURE 2: Comparison of White population by year.

deadly force, are extremely rare [9, 15, 32, 33]. In fact, most will work long careers, handle thousands of calls for service, and engage in equally, if not more, interactions with the public yet never become involved in an incident in which they fire their sidearm. Earlier in this paper, we mentioned that only 6.6 police officers per 10,000 would be involved in a fatal shooting each year (approximately 400 such events occur each year). In this section, we attempt to put some of this into context

TABLE 2: Number of police shootings and gender and race of officer by year.

Year	Number of shootings	Officer gender		Officer race		
		Male	Female	White	Latino	Other
1990	17	34	0	27	5	2
1991	9	24	2	21	2	3
1992	15	18	0	16	2	0
1993	21	31	0	26	3	2
1994	12	22	2	21	3	0
1995	17	27	0	24	2	1
1996	14	27	1	18	6	4
1997	6	7	0	6	1	0
1998	10	13	1	9	3	2
1999	11	21	0	16	3	2
2000	12	16	1	15	2	0
2001	8	10	0	8	2	0
2002	9	16	0	10	6	0
2003	9	10	0	4	3	3
2004	16	31	0	21	8	2
2005	17	27	0	19	8	0
2006	17	36	1	25	11	1
2007	17	22	0	13	6	3
2008	14	44	0	32	11	1
2009	8	11	0	6	5	0
2010	11	28	0	17	10	1
Total	270	475	8	354	102	27
Average/year	13		23	17	5	1

Source: the studied sheriff's department.

Note: the average/year was rounded to nearest whole number; gender was combined.

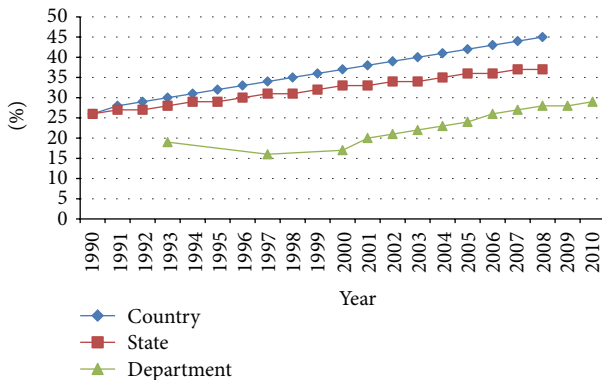


FIGURE 3: Comparison of Latino population by year.

by examining the number of shooting incidents compared to the number of officers assigned to patrol, as well as the gender and race of the officer.

Over the 21-year period, officers in the sheriff's department experienced a total of 270 shooting incidents (roughly 13 events each year), involving a total of 483 officers (about 23 officers each year) (Table 2) (shooting incidents examined included the purposeful discharge of a firearm at a person. The shooting events did not include accidental or negligent discharges of a firearm or shooting at animals). If we were

to take the average number of officers divided by the average number of police shootings, we find that approximately 1.8 officers are involved in each officer-involved shooting incident. From our experience and familiarity with the data, this figure may be slightly skewed by certain events involving the SWAT team when it engaged in extensive gun battles with multiple suspects. For example, in 2008, officers were involved in 14 events (close to the average), yet it involved the highest number of officers (44) for any of the studied years. This means that, on average, more than three officers were involved in the shooting incidents. In contrast, in 1993, the department experienced its highest number of events (21), but it involved only 31 officers, which equates to nearly 1.5 officers per event, less than the average per event for the 21-year time frame mentioned above. In fact, six of the 14 events in 2008 involved four or more officers and two SWAT-involved events involved 11 and 9 officers, respectively. In certain respects, 2008 was an anomaly for the number of officers involved in shootings for the sheriff's department.

When considering the gender of the officer, the vast majority of police shootings involved male officers (475). Only eight female officers engaged in a police shooting event over the 21 years studied. Although female officers comprise 10 percent of the department's sworn staff, they were involved in less than 3 percent of the shooting incidents. On the other hand, male officers, 90 percent of the department's employees,

were involved in more than 97 percent of the shootings, which overrepresented their population in the department.

When examining the race of the officers who had engaged in police shootings over the 21-year period, we discover that 73.3 percent of the shootings were by White officers, 21.2 percent Latino officers, and 5.6 percent officers of another race. On average, White officers were slightly overrepresented in the shooting events when compared to their presence in the department (73.3 percent of the shootings versus 70.2 of the department's population). Consequently, Latino and other race officers were slightly underrepresented in officer-involved shooting with respect to their overall representation in the department. Individually, whereas 21.2 percent of officers involved in shootings were Latino, their presence in the department was on average 23.1 percent. And officers of other races made up 6.6 percent of the department population but represented 5.6 percent of the shootings.

Based on the information above, we can draw the following conclusions regarding the police shooting incidents over the 21 years examined. On average, in any given year, the department can expect to experience 13 police shooting events, 23 of their officers will be involved, each event will include slightly less than two officers, the officers will be predominately male, and the race of the officer will be predominately White.

4.4. Change in Officer Involvement in Shootings by Race. In this section, we examine trends in population as well as changes in population and shootings for the 21-year period under review. To accomplish this, we computed average county population size, average departmental size, average shootings per decade, and then change scores (δ) in population size and shooting incidents between decades. The change score formula used is indicated as follows:

$$\delta = \frac{t_2 - t_1}{t_1} * 100, \quad (1)$$

where t_1 is average population or shootings at an earlier period, t_2 is average population or shootings at a later period (last data point), and δ is average change in population or shootings incidents for the two decades.

Before proceeding into whether or not Latino officers shot at a higher rate than White officers, we performed a number of t -tests. First, we tested the null hypotheses that there was no difference in mean shootings by Latino officers from 1990 through 1999 and from 2000 through 2010. In the earlier decade, the mean number of shootings by Latino officers was just 3 (time points = 10). In the 2000–2010 period, the average number of shootings was 6.54 (time points = 11). Under the equal variance assumption and on the basis of a two-sided test, the calculated t -statistic was 2.925 ($df = 19$, $P < .05$). A t -value this size was above the reference value needed for rejecting the null hypothesis, so we concluded that there was a statistically significant difference in mean shootings by Latino officers. Although we refrained from specifying the direction of the relationship prior to the test, it is evident from the results that Latino officer average shootings in the 2000–2010 period were higher than in the 1990–1999 time frame.

We next did a t -test on mean shootings by non-Latino White officers in the two decades. The mean shootings by White officers in 1990–1999 were 18.4 (time points = 10). During 2000–2010, average White officer shootings were 15.45 (time points = 11). We performed a two-sided test under the equal variances assumption, and the calculated t -score was -0.823 ($df = 19$, $P < .05$). During the two decades, there was a no statistically significant difference in shootings by White officers. Comparing the two results, it was found that, although mean differences were observed in the two racial groups in both decades, based on the sign of the test, while mean shootings by Latino officers increased, the decline in shootings by White officers may be due to chance.

Following results of the t -test, the next task was to determine changes in shootings and ascertain via rate ratios how racial groups shot relative to their population growth in the department and in the county. Relevant results are shown in Table 3. As may be seen in the table, the average White population of the county was 57.9 percent in 1990–1999. The mean population was 45.4 percent in 2000–2010. This represented a decline of 21 percent in the two decades. Shooting incidents involving White officers averaged 140.3 percent (numbers provided exceed 100, which may lead the reader to question why. It is important to point out that shootings are based on incidents, and each incident may involve multiple officers. The reader will recall that there were a total of 270 incidents involving 483 officers over the 21-year period examined) in 1990–1999. In 2000–2010, the average was 118.7 percent, showing a decline of 15.4 percent for the two decades in question.

As for the county Latino population, it averaged 31.4 percent in 1990–1999, increasing to 41.0 percent in 2000–2010. In the sheriff's department, the mean of Latino officers was 17.5 percent in the 1990–1999 decade, a figure that then grew to a mean of 24.1 percent in the following decade (2000–2010). Latino officer shootings in 1990–1999 were 23.3 percent on average and 51.9 percent in the 2000–2010 period. The change in Latino officer shootings was 122.9% between the two decades.

Relative to their departmental representation and between the two decades, White officer shootings increased at a rate of 2.23; however, the rate declined by nearly 0.72 relative to their representation in the county. On the other hand, relative to their population in the county, Latino officer shootings were elevated by a factor of 4, which followed a similar increase of nearly 3.3 comparative to their departmental representation.

The above rate ratios (and those shown in Table 3) present evidence to suggest that, over time, Latino officer involvement in shootings increased at a much higher rate than their county population size or their representation in the department. In other words, not only did Latino officers increase in size in the department over the decades, but also they were involved in shooting incidents at a much higher rate than their corresponding increase of representation in the department. In comparison, not only was the representation of the population of White officers decreasing between the two decades, but also their rate of shootings was dropping.

TABLE 3: Changes in racial composition and shooting incidents by decade.

Change in characteristics	1990–1999	2000–2010 ^a	δ	RR ^b
White population, county	57.9 ^c	45.4 ^c	-21.5	0.716
White population, department	74.5	69.4	-6.9	2.231
White officer shootings	140.3 ^d	118.7 ^d	-15.4	
Latino population, county	31.4	41.0	30.6	4.016
Latino population, department	17.5	24.1	37.7	3.260
Latino officer shootings	23.3 ^d	51.9 ^d	122.9	
Other race population, county	10.7	13.6	26.7	0.686
Other race population, department	8.0	6.4	-20.5	1.898
Other race officer shootings	12.7 ^d	7.8 ^d	-38.9	

Notes: ^aCounty population is based on 2000 through 2008.

^bRate ratios were calculated based on change in shootings relative to change in population.

^cNumbers are population sizes summed and averaged for the decade.

^dNumbers are the percentage of officers involved in shooting incidents and averaged for the decade. As a reminder, there were more officers than shooting incidents. This accounts for the elevated percentage.

5. Discussion and Conclusions

Following turbulent times of the 1960s wherein the public's trust, particularly that of the lower classes and minority population of the police, was possibly at its lowest point, police departments made a concerted effort to employ a more representative police force. The thought was that officers who come from a particular segment of society would hold a greater understanding and have the minority community's best interests in mind while enforcing the law. Who better to serve members of a minority group than one of their own? In light of the concerns and controversy expressed by the community surrounding incidents of police use of force and police shooting incidents involving a White officer and a minority citizen, a more diverse police department may defuse this apprehension and develop an environment conducive for trust and confidence.

It is as though the public's desire for a more representative police department would equate to fewer incidents of use of force. Despite the infrequency of police shootings, certainly officers of other races than White are involved as well. Moreover, these same officers are also involved in incidents in which citizens of all races are shot and killed; however, it seems that the greater attention by the public and media is drawn to those events involving a White officer and a person of color.

Of particular interest in this research, we found that, despite the increased number of sworn officers in the sheriff's department from 1990 to 2010, the sheer number of police shooting events remained relatively stable over time and in some respects decreased. While in 1990, the department had 689 patrol officers and experienced 17 events, only 11 events occurred in 2010 when the department's patrol officer contingent increased to 1,432. As a reminder, the average number of shooting incidents for the 21-year period was 13 per year, and the average number of patrol officers was 991.

Another interesting dynamic that developed over the two decades was related to the risk of an officer's involvement in a shooting event irrespective of race. Although an ethnically varied community may desire a more representative police

force to match their demographic makeup, the belief that this would result in less use of force may not be reasonable. As we found in the study, the increase in Latino officers in the department also led to an increase in their representation in police shooting events. In fact, as the number of Latino officers increased in the department, their involvement in shootings actually outpaced their rising population in the department while that of White officers remained relatively stable or decreased. Latino officers were involved in shootings at a much higher rate than their population growth in both the county and the department.

On the one hand, it could be argued that, with respect to the increased number of officers in patrol, population served, and more police/citizen interactions, the diversification of the department led to fewer police shooting events over the 21-year period (i.e., the stable number of events over time); however, the fact that Latino officers' involvement remarkably rose relative to their representation in the department makes this point uncertain. There remains many dynamics that were not examined that could be informative.

Concerning the question posed at the beginning of the paper regarding whether police shooting incidents are a zero-sum game as to the race of the officer, the evidence demonstrated that this appears to be the case; while Latino officer involvement increased, White officer involvement decreased. This would confirm the perspective of "risk" based on an increase versus decreasing overall representation of each classification of officers in the department.

As with many studies of this nature, there are several limitations to the analysis that hinder our explanation as to why Latino officer shootings grew as rapidly as we found in the results, which call for further research. Based on the available data, we were not able to determine whether Latino officers were assigned to patrol operations at a greater number than their representation in the department as compared to White and other race officers, which would increase their exposure to situations leading to shooting incidents. Further, the current study did not explore whether calls for service, volume of crimes, or types of situations changed

over time. One can only speculate that the increase in the number of officers coincided with a rising population and calls for service over the 21-year period. This, in and of itself, deserves further analysis because it stands to reason that as more incidents of crime and calls for service increase so too would the chance for an officer-involved shooting; however, the trend for officer-involved shooting incidents remained consistent throughout the two decades. Perhaps the relative decline in police shootings is a result of officers being better trained and equipped with less-lethal force options to deescalate disorderly, uncooperative, and rebellious citizens that otherwise would end in a shooting.

Along the same line as the assignment of officers to patrol, it would be telling if we knew whether Latino officers were assigned to beats that would place them in greater proximity to higher-risk types of calls or citizens more likely to resist, which would lead to more use of force and police shooting events. Future analysis would also benefit from examining the citizen involved in the shooting and their actions prior to the event, as well as their race. As police departments become more diversified, does a relationship between the race of the officer and the race of the citizen develop beyond the perception that White officers shoot minority citizens?

In light of the results in this study, combined with findings in other research, it makes more sense that factors contributing to a shooting event are more complex than the race of an officer. Studying multishooter, multishot officer-involved shooting events, White and Klinger [9] found that, while race did not matter, situational factors (i.e., citizen shot first, high-risk call type, or the officer was assaulted) proved to be better predictors. The behaviors of the citizen must be taken into consideration as well because their actions appear to provoke police shootings. Evidence supports the fact that citizens with mental health problems or who are substance abusers (i.e., under the influence of alcohol and/or drugs) are more likely the target in a police shooting [10, 34].

One of the enduring explanations for use of force by White officers in predominantly non-White neighborhoods is the "minority threat hypothesis" [35, 36]. Due to officer backgrounds, it is often argued that, in a multiracial society, Whites are socialized to view non-Whites as threats on the basis of sheer physical appearance and perceived stereotypes. White officers may, therefore, not view visible minorities on par with comparable members of their own (White) race but are tempted to shoot first at the slightest provocation and ask questions later. In short, the life of a minority person is viewed as less valuable than that of a comparable White individual. Findings from this research raise questions about the generalizability of the minority threat hypothesis. Perhaps a modification is in order, for how else could we explain the fact that Latino officers shoot at much higher rates than their White counterparts and their shootings have outpaced their growth in the population? Given current trends in population growth in the United States, wherein the White population is likely to become a minority by 2050 [37], confronting the thorny issue of minority shootings, especially by Latinos, may be a wake-up call that needs to be addressed not ignored.

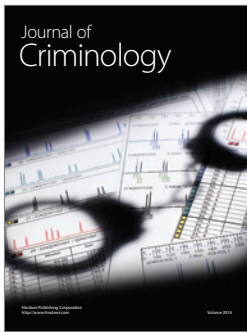
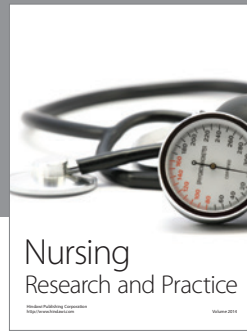
Conflict of Interests

The authors declare that there is no conflict of interests regarding the publication of this paper.

References

- [1] *Graham v. Connor*, 490 U.S. 386, 1989.
- [2] *Tennessee v. Garner*, 471 U.S. 1, 1985.
- [3] G. P. Alpert, "Interpreting the police use of force in the construction of reality," *Criminology & Public Policy*, vol. 8, no. 1, pp. 111–115, 2009.
- [4] D. A. Klinger and R. K. Brunson, "Police officer's perceptual distortions during lethal force situations: informing the reasonableness standard," *Criminology & Public Policy*, vol. 8, no. 1, pp. 117–140, 2009.
- [5] M. J. Hickman and A. R. Piquero, "Organizational, administrative, and environmental correlates of complaints about police use of force: does minority representation matter?" *Crime & Delinquency*, vol. 55, no. 1, pp. 3–27, 2009.
- [6] M. D. White, "Examining the impact of external influences on police use of deadly force over time," *Evaluation Review*, vol. 27, no. 1, pp. 50–78, 2003.
- [7] B. L. Vogel, "Perceptions of the police: the influence of individual and contextual factors in a racially diverse urban sample," *Journal of Ethnicity in Criminal Justice*, vol. 9, no. 4, pp. 267–290, 2011.
- [8] A. M. Schuck, D. P. Rosenbaum, and D. F. Hawkins, "The influence of race/ethnicity, social class, and neighborhood context on residents' attitudes toward the police," *Police Quarterly*, vol. 11, no. 4, pp. 496–519, 2008.
- [9] M. D. White and D. Klinger, "Contagious fire? an empirical assessment of the problem of multi-shooter, multi-shot deadly force incidents in police work," *Crime & Delinquency*, vol. 58, no. 2, pp. 196–221, 2012.
- [10] J. P. McElvain, *Police Shootings and Citizen Behavior*, LFB Scholarly, El Paso, Tex, USA, 2009.
- [11] K. J. Novak, "Policy essay: reasonable officers, public perceptions, and policy challenges," *Criminology & Public Policy*, vol. 8, no. 1, pp. 153–162, 2009.
- [12] B. W. Smith, "The impact of police officer diversity on police-caused homicides," *Policy Studies Journal*, vol. 31, no. 2, pp. 147–162, 2003.
- [13] R. D. G. Kelley, "Slangin' rocks...palestinian style," in *Police Brutality: An Anthology*, J. Nelson, Ed., pp. 21–59, W. W. Norton & Company, New York, NY, USA, 2000.
- [14] A. N. Tennenbaum, "The influence of the 'Garner' decision on police use of deadly force," *The Journal of Criminal Law and Criminology*, vol. 85, no. 1, pp. 241–260, 1994.
- [15] W. A. Geller, "Deadly force: what we know," *Journal of Police Science and Administration*, vol. 10, no. 2, pp. 151–177, 1982.
- [16] J. J. Fyfe, "Introduction," in *Readings on Police Use of Deadly Force*, J. J. Fyfe, Ed., pp. 3–11, Police Foundation, Washington, DC, USA, 1982.
- [17] W. A. Geller and K. J. Karales, "Shootings of and by Chicago police: uncommon crises. Part I: shootings by Chicago police," *Journal of Criminal Law and Criminology*, vol. 72, no. 4, pp. 1813–1866, 1981.
- [18] L. W. Sherman, "Execution without trial: police homicide and the constitution," in *Readings on Police Use of Deadly Force*, J. J.

- Fyfe, Ed., pp. 88–127, Police Foundation, Washington, DC, USA, 1980.
- [19] L. W. Sherman and R. H. Langworthy, “Measuring homicide by police officers,” in *Readings on Police Use of Deadly Force*, J. J. Fyfe, Ed., pp. 12–41, Police Foundation, Washington, DC, USA, 1979.
- [20] D. Jacobs and D. Britt, “Inequality and police use of deadly force: an empirical assessment of a conflict hypothesis,” *Social Problems*, vol. 26, pp. 403–412, 1979.
- [21] R. S. Engel and M. R. Smith, “Perceptual distortion and reasonableness during police shootings: law, legitimacy, and future research,” *Criminology & Public Policy*, vol. 8, no. 1, pp. 141–152, 2009.
- [22] R. Weitzer, “Racialized policing: residents’ perceptions in three neighborhoods,” *Law & Society Review*, vol. 34, no. 1, pp. 129–155, 2000.
- [23] F. T. Cullen, L. Cao, J. Frank et al., “‘Stop or I’ll shoot’: racial differences in support for police use of deadly force,” *American Behavioral Scientist*, vol. 39, no. 4, pp. 449–460, 1996.
- [24] A. Binder and P. Scharf, “The violent police-citizen encounters,” *Annals of the American Academy of Political and Social Science*, vol. 452, pp. 111–121, 1980.
- [25] D. Jacobs and R. M. O’Brien, “The determinants of deadly force: a structural analysis of police violence,” *American Journal of Sociology*, vol. 103, no. 4, pp. 837–862, 1998.
- [26] A. Mirande, “The Chicano and the law: an analysis of community-police conflict in an urban barrio,” *The Pacific Sociological Review*, vol. 24, no. 1, pp. 65–86, 1981.
- [27] M. D. White, J. A. Cooper, J. Saunders, and A. J. Raganella, “Motivations for becoming a police officer: re-assessing officer attitudes and job satisfaction after six years on the street,” *Journal of Criminal Justice*, vol. 38, no. 4, pp. 520–530, 2010.
- [28] J. Zhao, N. He, and N. Lovrich, “Predicting the employment of minority officers in U.S. cities: OLS fixed-effect panel model results for African American and Latino officers for 1993, 1996, and 2000,” *Journal of Criminal Justice*, vol. 33, no. 4, pp. 377–386, 2005.
- [29] M. J. Hickman and B. A. Reaves, *Law Enforcement Management and Administrative Statistics, Sheriff’s Officers 2000*, U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Washington, DC, USA, 2003.
- [30] B. A. Reaves and P. Z. Smith, *Law Enforcement Management and Administrative Statistics, 1993: Data for Individual State and Local Agencies with 100 or More Officers*, Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Washington, DC, USA, 1995.
- [31] B. A. Reaves and A. L. Goldberg, *Law Enforcement Management and Administrative Statistics, 1997: Data for Individual State and Local Agencies with 100 or More Officers*, Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Washington, DC, USA, 1999.
- [32] J. P. Blair, J. Pollock, D. Montague, T. Nichols, J. Curnutt, and D. Burns, “Reasonableness and reaction time,” *Police Quarterly*, vol. 14, no. 4, pp. 323–343, 2011.
- [33] G. D. Robin, “Justifiable homicide by police officers,” *The Journal of Criminal Law, Criminology, and Police Science*, vol. 54, no. 2, pp. 225–231, 1963.
- [34] I. K. McKenzie, “Forcing the police to open fire: a cross-cultural/international examination of police-involved, victim-provoked shootings,” *Journal of Police Crisis Negotiations*, vol. 6, no. 1, pp. 5–25, 2006.
- [35] A. Hacker, *Two Nations Black and White, Separate, Hostile, and Unequal*, Ballantine Books, New York, NY, USA, 1995.
- [36] A. Pinkney, *Black Americans*, Prentice Hall, Upper Saddle River, NJ, USA, 2000.
- [37] D. L. Poston and L. F. Bouvier, *Population and Society: An Introduction to Demography*, Cambridge University Press, New York, NY, USA, 2010.



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