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DOCTOR OF PHILOSOPHY degree in SOCIAL SCIENCE

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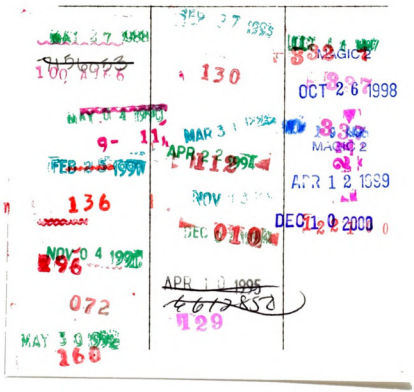

2583-1141

HALT...POLICE! AN ANALYSIS OF THE POLICE USE OF DEADLY FORCE IN A LARGE MIDWESTERN CITY

By

Michael Eugene Donahue

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

School of Criminal Justice

1983

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ABSTRACT

HALT...POLICE! AN ANALYSIS OF
THE POLICE USE OF DEADLY FORCE
IN A LARGE MIDWESTERN CITY

By

Michael Eugene Donahue

The purposes of this study were to describe the salient features of police shooting incidents and their participants, to ascertain if there were differences between fatal, injury, and missed shot incidents, and to examine relationships between selected variables believed to account for the racially disproportionate effects on the police use of deadly force. Data were collected on several incident, officer, and suspect characteristics from the entire population of incidents resulting in civilian fatalities and injuries and from a systematic sampling of 15% of all missed shot incidents in a large Midwestern city for the period of September, 1976 through August, 1981. With the exception of suspect criminal history information, data were taken from departmental records and documents; univariate and crosstabulational analyses were used to examine these data.

Some of the major findings were that fatal incidents more frequently involved suspects who were older, in possession of a firearm, threatening the use of deadly force, and in possession of more extensive criminal histories than suspects in injury and missed shot incidents. However, no essential differences were found between white and black suspects with respect to several key incident characteristics including weapon possession, felony involvement, assaultive behavior toward police or third parties, resistance to arrest, possession of a criminal record, or the departmental disposition of the shooting incidents. Though blacks were overrepresented as targets of police shootings in terms of their proportion in the general population, this disproportion was not evident relative to their participation in arrest rates for index crimes.

Black officers were proportionately overrepresented in shooting incidents, both on-duty and off-duty; in addition, black officers were more likely than white officers to shoot at black suspects. Last, little support was found for the belief that police officers systematically act in deadly force incidents out of racial motivation. Rather, it seems likely that police shootings are the result of officers' perceptions of the high risks of danger posed by suspects to them and those they are obliged to protect.

Dedicated to Kathryn and August

ACKNOWLEDGMENTS

I am indebted to all of those members of the police department in which this research was conducted. Without their willing and generous time and assistance, a study of this magnitude would not have been possible. With particular regard to data access, their co-operation exceeded my most optimistic expectations. It goes without saying that the honest and open concern about deadly force shown by these individuals gives us all cause for optimism that the issue of deadly force, perhaps the most controversial and important measure of police authority and discretion, can be openly and honestly resolved in the arena of informed public discussion.

During the term of my research efforts through the completion of this study, I had agreed at the outset to hold in confidence the name of the agency from which most of my data were obtained. Upon its completion, however, I requested and was granted the opportunity to disclose the identity of this department. This, of course, was done at some risk to the department in view of the fact that their

permission of disclosure preceded their review of the findings and discussion herein. Thus it is with genuine sincerity that I pay particular thanks to Mr. William Hart, Chief, Detroit Police Department, and his staff members, Attorney Mary Rose Prost, Commander Charles Henry, and Sergeants Michael Falvo and Iris Worthington. A very special note of thanks goes to Sergeant Stephen White, the one assigned to assist me in my data collection efforts. His assistance in this and other activities related to the research endeavor were of immeasurable value. More than this, however, he became a lifelong friend in the truest sense of the word. To you, Steve, my immense gratitude.

I would like also to take this opportunity to express my thanks to Colonel Gerald Hough, Director, Michigan State Police, and Captain John Sura, Lieutenant Daniel Ostrom, and Sergeants William McFall and David Storer of that agency for their prompt responses to my numerous requests for criminal history and other information. To them, and other personnel in that agency, I am grateful.

In addition to those I have already mentioned, I also thank the following persons for their efforts in my behalf: Dr. Robert Trojanowicz, Director, School of Criminal Justice, Michigan State University; Mr. Gil Skinner and Ms.

Deborah Cheesebro, President and Vice-President respectively, and SCH management and training consultants; Mr. Dale Davis, Deputy Director, Michigan Sheriffs Association; Mr. Charles Davoli, Director, Office of Criminal Justice; and Mr. Robert Schultheiss. I would also like to acknowledge the excellent assistance I received in the typing and proofreading of this manuscript from Ms. Carol Hunsberger, Ms. Betsy McGuire, Ms. Kathy Reil, and Ms. Kathy Kimbrough. In addition, I would like to thank Mr. Rick Lovell for both his encouragement and his articulation of some of the less obvious issues pertaining to the use of deadly force by the police; many of his thoughts became part and parcel of this dissertation.

A tremendous debt of gratitude is owed to those faculty members who comprised my dissertation committee. Dr. Bruce Miller, Professor of Philosophy and fellow traveler in a dicipline, which is in fact my first love, provided extensive assistance in the several drafts of Chapter 2. In as far as it is coherently and cogently written, it is as much his as mine. Thanks are also extended to Dr. David Kalinch, whose prodding to complete the task is presently and infinitely more appreciated than during those brief periods when I languished in procrastination. Dr. Gary Miller of Political

Science guided much of my analytical efforts, suggesting those techniques that seemed most appropriate to the data collected; if my analyses are less rigorous than they ought to be, I alone am culpable. Finally it is, perhaps, to my Chairman, Dr. Frank Horvath of the School of Criminal Justice, that the greater debt is owed. As teacher, mentor, colleague, and ultimately, friend, he encouraged, supported, criticized, and advocated my efforts from beginning to end. His assistance and guidance were truly indispensable.

In a final note, I would like, first, to express my appreciation to my parents, Clarence and Virginia Donahue, for their guidance over the years. To the extent that this study exemplifies diligence, patience, discipline, tenacity, and an honest effort is a tribute owed to them. Last, but by no means least, I would like to thank my wife, Kathryn, and my son August; their patience with and understanding of my need to be involved in this enterprise, without a doubt, made it possible. It was these two, more than anyone else, who were to bear the real costs of this project.

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TABLE OF CONTENTS

LIST OF TABLES xiii

CHAPTER 1 - REVIEW OF THE LITERATURE

Introduction 1

Previous Research 6

Race and Shooting Incidents 13

Shooting Incident Characteristics 29

Suspect Characteristics 33

Officer Characteristics 35

Geographical Distribution of Shooting Incidents 36

Administrative Policy and Shooting Incidents 37

Departmental Adjudication and Shooting Incidents 41

Departmental and Community Variables 42

Criticisms of the Available Research 45

CHAPTER 2 - LEGAL AND HISTORICAL CONSIDERATIONS OF THE POLICE USE OF DEADLY FORCE

Deadly Force: A Definition 52

Deadly Force: An Historical Perspective 53

Historical Rationales for Use of Deadly Force 55

Historical/Legal Restrictions to the Use of Deadly Force 58

The Common-Law, Any-Felony Justification: An Historical Anachronism 67

Statutory Restrictions to the Use of Deadly Force 75

Common-Law, Any-Felony Rule: Michigan 77

Model Penal Code Provisions 80

The Forcible-Felony Rule 84

Defense-of-Life Rule 88

Deadly-Force Policy: A Schematic Summary 94

Police Department Policies 97

Liability Issues 101

Judicial Response to Police Use of Deadly Force 105

Some Relevant Cases 110

Legislative Deference 120

The Equal Protection Argument 122

The Eighth Amendment Argument 126

The Fourth Amendment Argument 129

The Due Process Arguments 132

Summary 137

CHAPTER 3 - METHOD

Population and Sample 140

The Study Period 143

Data Collection Instrument 144

Data Sources 147

Data Collection 151

Terms 153

Variables 155

Operationalization of the Variables 156

Incident or Situational Characteristics 157

Suspect Characteristics 162

Police Officer Characteristics 163

Reliability of the Data 164

Confidentiality 166

Analysis 167

Limitations to the Analysis 171

CHAPTER 4 - FINDINGS

Introduction 175

Part I: Descriptive Findings: All Incidents 175

Community Characteristics 175

Department Characteristics 178

Size and Composition 182

Policy and Training 182

Constraints to the Use of Deadly Force 182

Board of Review 185

Departmental Disposition of Shootings 187

Incident Characteristics 189

Suspect Characteristics 200

Officer Characteristics 207

Summary of the Descriptive Findings for All Incidents 222

Part II: Descriptive Findings: Comparisons Between Fatal, Injury and Missed Shot Incidents 227

Incident Characteristics by Incident Type 227

Suspect Characteristics by Incident Type 247

Officer Characteristics by Incident Type 261

Summary of Descriptive Findings by Incident Type 280

Part III: Relational Findings 285

Univariate Analysis: Population, Arrest Rates, and Shootings by Race 288

Departmental Racial Composition and Race of Officers Involved in Shooting Incidents 290

Crosstabulational Analysis: Race with Other Variables 294

Summary of Relational Findings 338

CHAPTER 5 - DISCUSSION

Introduction 344

Incident Characteristics 345

Suspect Characteristics 352

Officer Characteristics 353

Suspect Criminal History 359

Race and Police Shootings 363

Conclusion 373

APPENDICES

Appendix A: Data Collection Instruments

Part 1: Incident Characteristics 378

Part 2: Suspect Characteristics 390

Part 3: Officer Characteristics 397

Appendix B: Shots Fired Report 408

REFERENCES 411

LIST OF TABLES

TABLE NUMBER	TITLE	PAGE NUMBER
1	Population Composition in Agency Jurisdiction in 1976 and 1981	177
2	Frequency Distribution of Residency of Suspects Fired Upon by Police	177
3	Jurisdictional 1980 Arrest Rates by Race (All Part I Offenses)	179
4	1980 Jurisdictional Arrest Rates by Race for Personal and Property Crimes	179
5	Jurisdictional Arrest Rates for Separate Part I Offenses by Race	180
6	Race of Sworn Personnel in Police Department 1976-1981	181
7	Department Disposition of Shooting Incidents	188
8	Frequency Distribution of Shooting Incident Types	190
9	Frequency Distribution of Shooting Incidents by Month	193
10	Frequency Distribution of Shooting Incidents by Year: 1976-1981	194

LIST OF TABLES

TABLE NUMBER	TITLE	PAGE NUMBER
11	Selected Shooting Incident Characteristics: Time, Location, Call Initiation, Suspect Weapon Possession, and Type of Felony	195
12	Frequency Distribution of Type of Weapon Carried by Armed Suspects Involved in Police Shooting Incidents	199
13	Frequency Distribution of Race of Suspects Involved in Shooting Incidents	201
14	Criminal History of Suspects Prior to Involvement in Shooting Incidents	204
15	Criminal History of Suspects After Involvement in Shooting Incidents	206
16	Suspect Incarceration Record: Number of Suspect Jail and Prison Terms Prior to and Following Involvement in Shooting Incidents	208
17	Number of Officers Involved in Shooting Incidents	210
18	Frequency Distribution of Race of Officers Involved in Shooting Incidents	210

LIST OF TABLES

TABLE NUMBER	TITLE	PAGE NUMBER
19	Frequency Distribution of Sex of Officers Involved in Shooting Incidents	210
20	Selected Officer Characteristics: Age, Length of Departmental Service, and Education at Time of Shooting	212
21	Selected Officer Characteristics: Rank, Assignment, Duty Status, Uniform Status and Marksmanship at Time of Shooting Incident	214
22	Number of Shots Fired at Suspects, Suspect Vehicle, and Shots Hitting Intended Targets by Police Involved in Shooting Incidents	218
23	Frequency Distribution of Officers with Military Service: Officers Involved in Shooting Incidents; All Department Officers	220
24	Shooting History of Officers Involved in Shooting Incidents Between 1976 and 1981 (Number of Shooting Incidents): 1970-1975, 1976-1981	221
25	Frequency Distribution of Shooting Incidents by Type	229

LIST OF TABLES

TABLE NUMBER	TITLE	PAGE NUMBER
26	Number of Incidents by Type by Number of Suspects	230
27	Frequency Distribution of Suspects in Incidents by Incident Type	230
28	Number of Incidents by Type by Number of Officers	232
29	Frequency Distribution of Officers in Incident by Incident Type	232
30	Selected Incident Characteristics by Incident Type	233
31	Distribution of Incidents by Month by Incident Type (1976-1981)	235
32	Distribution of Incidents by Year by Incident Type (1976-1981)	237
33	Frequency Distribution of Times and Locations of Incidents by Incident Type	239
34	Frequency Distribution of Suspects' Involvement in Felonious Activity by Incident Type	241
35	Frequency Distribution of Types of Suspect Felonious Activity by Incident Type	242

LIST OF TABLES

TABLE NUMBER	TITLE	PAGE NUMBER
36	Description of Officer-Suspect Interaction by Incident Type (Primary Officers/Primary Suspects)	244
37	Age of Suspects in Years by Incident type (Primary Suspects)	249
38	Frequency Distribution of Sex of Suspects by Incident Type (Primary Suspects)	250
39	Frequency Distribution of Race of Suspects by Incident Type (All Suspects)	251
40	Types of Weapons Possessed by Suspects by Incident Type (Primary Suspects)	253
41	Number of Jail and Prison Terms of Suspects by Incident Type (Primary Suspects)	254
42	Number of Suspects' Pre-Incident Arrests/Convictions/Incarcerations: Fatal Incidents (Primary Suspects)	256
43	Number of Suspects' Pre-Incident Arrests/Convictions/Incarcerations: Injury Incidents (Primary Suspects)	257

LIST OF TABLES

TABLE NUMBER	TITLE	PAGE NUMBER
44	Number of Suspects' Pre-Incident Arrests/Convictions/Incarcerations: Missed Shot Incidents (Primary Suspects)	258
45	Average Number of Suspects' Pre-Incident Arrests/Convictions/Incarcerations by Incident Type (Primary Suspects)	260
46	Number Suspects' Post-Incident Arrests/Convictions/Incarcerations: Injury Incidents (Primary Suspects)	262
47	Number of Suspects' Post-Incident Arrests/Convictions/Incarcerations: Missed Shot Incidents (Primary Suspects)	263
48	Number and Percentage of Suspects on Parole During the Incident (Primary Suspects)	264
49	Age of Officers in Years by Incident Type (Primary Officers)	266
50	Frequency Distribution of Race of Officers by Incident Type (All Officers/Primary Officers)	268
51	Selected Officer Characteristics by Incident Type (Primary Officers): Length of Service, Education	269

LIST OF TABLES

TABLE NUMBER	TITLE	PAGE NUMBER
52	Frequency Distribution of Rank of Officers by Incident Type (All Officers/Primary Officers)	270
53	Frequency Distribution of Assignment, Uniform, and Duty Status of Officers by Incident Type (All Officers/Primary Officers)	271
54	Frequency Distribution of Firearms Qualification of Officers During Incident by Incident Type (All Officers)	276
55	Frequency Distribution of Firearms Qualification of Officers During Incident by Incident Type (Primary Officers)	277
56	Shooting Ratios of Primary Officers During Incident by Incident Type	279
57	Jurisdiction Population, Arrests, and Police Shooting Suspects by Race (All Suspects)	289
58	Shooting Suspects and Specified Crime Arrests by Race (All Suspects)	291
59	Departmental Racial Composition and Race of Officers Involved in Shooting Incidents	293

LIST OF TABLES

TABLE NUMBER	TITLE	PAGE NUMBER
60	Suspect Race by Type of Shooting Incident (Primary Suspects)	295
61	Suspect Race by Number of Officers Using Deadly Force (Primary Suspects)	296
62	Suspect Race by Suspect Weapon Possession (Primary Suspects)	299
63	Suspect Race by Suspect Weapon Possession (Fatal Incidents) (Primary Suspects)	301
64	Suspect Race by Suspect Weapon Possession (Injury Incidents) (Primary Suspects)	302
65	Suspect Race by Suspect Weapon Possession (Missed Shot Incidents) (Primary Suspects)	303
66	Suspect Race by Threatened Use of Deadly Force (Primary Suspects)	304
67	Suspect Race by Felonious Involvement (Primary Suspects)	305
68	Suspect Race by Suspect Fleeing (Primary Suspects)	306
69	Suspect Race by Suspect Assaulted Officers (Primary Suspects)	307

LIST OF TABLES

TABLE NUMBER	TITLE	PAGE NUMBER
70	Suspect Race by Suspect Assaulted Third Party (Primary Suspects)	308
71	Suspect Race by Suspect Shot at Police (Primary Suspects)	309
72	Suspect Race by Suspect Shot at Third Party (Primary Suspects)	312
73	Suspect Race by Officer's Reason for Use of Deadly Force (Primary Suspects)	313
74	Officer Race by Ruled Justifiable (Primary Officers)	314
75	Suspect Race by Ruled Justifiable (Primary Suspects)	316
76	Officer Race by Officer Assignment (Primary Officers)	317
77	Suspect Race by Misdemeanor Arrests (Primary Suspects)	318
78	Suspect Race by Felony Arrests (Primary Suspects)	319
79	Suspect Race by Misdemeanor Convictions (Primary Suspects)	320
80	Suspect Race by Felony Property Convictions (Primary Suspects)	321

LIST OF TABLES

TABLE NUMBER	TITLE	PAGE NUMBER
81	Suspect Race by Felony Convictions: Crimes Against Persons (Primary Suspects)	322
82	Suspect Race by Suspect Ever in Jail (Primary Suspects)	323
83	Suspect Race by Ever in Prison (Primary Suspects)	324
84	Suspect Race by Officer Race (Primary Suspects/Primary Officers)	326
85	Suspect Race by Officer Race (Fatal Incidents) (Primary Actors)	327
86	Suspect Race by Officer Race (Injury Incidents) (Primary Actors)	329
87	Suspect Race by Officer Race (Missed Shot Incidents) (Primary Actors)	330
88	Officer Race by Duty Status (Primary Officers)	332
89	Officer Race by Officer Uniform Status (Primary Officers)	333
90	Suspect Race by Number of Civilian Eyewitnesses at Incident (Primary Suspects)	334

LIST OF TABLES

TABLE NUMBER	TITLE	PAGE NUMBER
91	Officer Race by Halt Order Given (Primary Officers)	336
92	Officer Race by Officer's Reason for Use of Deadly Force (Primary Officers)	337

CHAPTER 1

REVIEW OF THE LITERATURE

Introduction

The police use of deadly force--that force likely to cause or be capable of causing serious bodily injury or death--is a timely target of social science research deserving close empirical scrutiny. Death or serious bodily harm resulting from police weapons discharges seem to occur with what some term "an alarming frequency" in our contemporary society (Margarita, 1980:218). Some writers on the subject (e.g. Fyfe, 1978; Geller and Karales, 1981; and Sherman and Langworthy, 1979) suggest that one to two persons per day die in the United States as a result of police gunfire and three times that number are nonfatally injured. Moreover, it is likely that the number of incidents involving police who fire at but miss civilians exceeds this figure many times over.

On the other hand, the dilemma of "shoot-don't shoot" is a relatively infrequently encountered event in the myriad activities of police officers; and yet, because the decision made by police officers in that dilemma may have more severe consequences than other decisions, it takes on an importance that stands alone. As Bittner (1973:39) forcefully argued, for instance, it is the capacity to use force--particularly deadly force--that characterizes police work: "...the police are nothing else than a mechanism for the distribution of situationally justified force in society."

Thus, it might be assumed that the police use of deadly force would be a central and predominant issue in the research of those concerned with police work. This, however, is not the case. Until the last decade, scholarly research in the police use of deadly force--particularly firearms usage--had been subordinate to other areas of weighty moral, legal, and empirical concern in criminal justice, e.g., capital punishment. But even there, as the Supreme Court noted in Furman v. Georgia:

> The power to take life exists not only at the final stage of the criminal process where the state may execute prisoners, but also at the earliest stage where deadly force may be used by the police in the apprehension of suspected law breakers (Furman v. Georgia, 408 US 238, 1972).

In fact, not only do the police have this power, for all practical purposes, they possess it constantly, legally and exclusively. As Kobler (1975a:31) observes, the "police are...in a special category in that they are sworn to enforce the law at all times, on- or off-duty in most jurisdictions, so that their access to firearms is constant and legal." This power is exclusive in the sense that police officers are the sole embodiment of the government's authority to use nonpunitive force (Sherman, 1980; Friedrich, 1980) and "who in the course of ordinary events are legally permitted to use physical force against a citizen...to gain compliance...to compel the citizen to obey" (Kobler, 1975a:31). But the transfer of this power from the people to the government to the police in the form of a subcontract, while it "makes our lives infinitely more pleasant...leaves our police with dirty hands, and leaves us puzzled about why our society has so much violence" (Sherman, 1980:83). Fyfe (1978:1) accurately describes the police officer's firearm "as the ultimate symbol of the police power to use force" and the use of this tool of the trade is, of course, highly discretionary, "ranging from mere physical restraint to the use of deadly force." Thus a

study of the police use of deadly force is, in effect, an examination of one of the more interesting and dramatic aspects of police discretion. This discretion is in no other place more clearly documented than by the absence of rules requiring the officer to shoot (Sherman and Blumberg, 1981:318). Only in recent years has the police use of force been subjected to this kind of intense scrutiny of empirical researchers, and it is, perhaps, partly for that reason that deadly force is such an extremely controversial topic today.

On the one hand, there are those who feel that a substantial number of incidents involving deadly force are unnecessary, unjustified, and based on decision criteria related to personal characteristics of alleged criminal offenders rather than criteria that would legitimate the use of such force. On the other hand, there are those--particularly those involved in law enforcement--who believe that the abuse of police power in the use of deadly force is rare; that is, law enforcement agencies and personnel are extremely judicious in their approach to and use of deadly force.

Although the controversy about deadly force is not limited to only these broad issues, they do tend to characterize the nature of the conflict--essentially one that

shows the strain and tension between different normative values with respect to the very nature of law enforcement in a free and open society. Fortunately, in spite of this conflict, there seems to be a clear recognition by most interested persons, regardless of their personal or professional convictions, that a better understanding of the police use of deadly force is necessary. To this end there has been an increasing interest on the part of social scientists to investigate empirically issues related to deadly force; in fact, there are now several large-scale studies of this topic that have been recently completed (Fyfe, 1978; Geller and Karales, 1981; Matulia, 1982).

Although the results of these studies have not been unambiguous--as we will show--the very fact that such studies have been and are being done is a sign of encouragement that public policy issues regarding deadly force will not be resolved in the abstract, that is, to the extent that empirical findings can benefit, clarify, and give discretion to public policy, they are at least no longer silent on the issue.

The purpose of this study was three-fold: First to describe the most salient features of the police shooting incident and its participants in a large Midwestern city for

the period of September 1, 1976 through August, 1981; second, to ascertain those characteristics that distinguish fatal, nonfatal injury and missed-shot incident; and third, to examine these events within the context of the race of these participants to determine if evidence exists which comports with the contention of some that police officers systematically act in deadly force incidents to the disadvantage of minority groups in the location under study. Before presenting those findings and the methodological considerations involved in this study, it would be useful first to describe other related research on deadly force.

Previous Research

It has only been within the last decade that there has been an explosion of literature, both legal and empirical, on the subject of the police use of deadly force. And while collectively fragmentary, there are several pieces that suggest fruitful avenues for social science empirical research.

While this research can be categorized in a number of ways, for the purpose of this study, the empirical efforts fall within one of the following classifications discussed below. Some researchers, e.g., Conley (1979) and Sherman

and Langworthy (1979), have skillfully critiqued the various sources of data from which most studies have attempted to account for the use of deadly force by police officers. Others, including Sherman (1980), have taken the broader stroke of evaluating the current state of quantitative research explaining police behavior generally and discussing the use of deadly force within that framework.

The research that has dealt directly and exclusively with police deadly force has tended to be strictly quantitative in nature (Conley, 1979) focusing on national trends, single-city data, and multiple-city data (Brenner and Kravitz, 1979). The first category includes the efforts of Harring, Platt, Speiglman and Takagi (1977), Jacobs and Britt (1979), Kobler (1975 and 1975a), Kuyendall (1981), Matulia (1982), Robin (1963), and Takagi (1974). These studies relied heavily upon nonrandom samples of municipal police department internal affairs records, news accounts of deadly-force incidents involving the police, or data from the National Center for Health Statistics (NCHS) for primarily descriptive analyses of the phenomenon.

Within the second category, that of single-city studies, falls the research of the Boston Police Department Planning and Research Division (1974) in Boston, Fyfe (1978, 1979,

1979a, 1980, 1980a, 1981) in New York City, Geller and Karales (1981) in Chicago, Inn and Wheeler (1977) and Inn, Wheeler, and Sparling (1977) in an unidentified city, Jenkins and Faison (1974) in New York City, Knoohuizen, Fahey, and Palmer (1972) in Chicago, Meyer (1980) in Los Angeles, the Public Interest Law Center of Philadelphia Study (PILCOP) (1975) in Philadelphia, Renner and Gierach (1974) in an unidentified Midwestern city, Robin (1963) in Philadelphia, and Sherman and Blumberg (1981) in Kansas City. These studies sought to render primarily a descriptive, univariate account of a single city's police use of deadly force against civilians, though a few conducted some correlational analyses looking at suspect race, officer race, officer shooting rates, and the criminal activity in which the suspect was involved.

Research that has been targeted to examine either a few or several municipal police departments with either the explicit or implicit purpose of cross-site examination include the California Department of Justice Study (1974) which examined the use of deadly force by several police departments throughout that state; Friedrich (1980) who, using Reiss's 1966 data, investigated Boston, Chicago, and Washington, D.C.; Knoohuizen et al., who compared Chicago

with Philadelphia, New York City, Los Angeles, and Detroit; Matulia (1982), a study done for the International Association of Chiefs of Police (IACP) examining police use of deadly force in 57 U.S. cities with populations of 250,000 or more; Milton, Halleck, Lardner, and Albrecht (1977), a Police Foundation study of seven major U.S. cities; Robin (1963), who compared eight medium-sized cities; and Uelman (1973), who investigated 50 independent police departments within the Los Angeles metropolitan area.

The vast majority of this research concentrated only on those incidents involving the use of deadly force which resulted in a fatality of a citizen and/or officer. These include the California Department of Justice Study (1974), Harring et al. (1977), Jacobs and Britt (1979), Jenkins and Faison (1974), Knoohuizen et al. (1972), Kobler (1975 and 1975a), Kuyendall (1981), Lester (1978), Matulia (1982), and Robin (1963). A few have a slightly broadened scope of inquiry characterized by the inclusion of incidents involving nonfatal police shooting injuries as well as the more-or-less standard investigation of fatal incidents: e.g., PILCOP (1975) and Milton et al. (1977). Finally, the most comprehensive studies to date have been those which not only examined the fatal and nonfatal injury incidents, but

also included those where shots were fired by the police at civilians (and vice versa), but where the shots missed their intended targets. Those studies analyzing "missed-shot" incidents include the Boston Police Department Study (1974), Inn and Wheeler, Inn et al. (1977), Fyfe (1978, 1979, 1979a, 1980, 1980a, 1981), and Friedrich (1980).

Given the paucity of the literature on the topic of police use of deadly force prior to the early 1970's, it could be safely assumed that our current knowledge of the subject is considerably lacking. Yet given Robin's early study (1963) to the most recent by Matulia (1982), the literature has appeared to have concentrated along a progressively comprehensive continuum of five distinct but related foci: 1) individual characteristics of the officer; 2) incident or situational variables; 3) organizational features of the police department; 4) community characteristics; and 5) legal constraints. This typology, developed by Sherman (1980a) and Friedrich (1980), is useful for categorizing much of the research cited above.

Most, if not all, of the research to date has assumed the individual and situational approaches to studying the phenomenon of deadly force by indicating those characteristics or features of the officer, the incident and, less

extensively, the suspect or opponent that may be significant in accounting for its use. Some, notably Fyfe (1978), Geller and Karales (1981), Harding and Fahey (1973), Knoohuizen et al. (1972), Kobler (1975), Matulia (1982), and Uelman (1973), have examined the impact of organizational variables on the police use of deadly force by taking into account the shooting review board process, deadly-force policy modifications, racial composition of the department, or department size. Fewer studies still attempt to explain the variation in the police use of lethal force across departments in terms of the characteristics of the communities which are policed. Research efforts to this end generally consider community racial composition and arrest rates by race in relation to police officer shooting rates. Last, most empirical attempts neglect almost entirely any account of deadly force usage as constrained by legal requirements. Notable exceptions to this criticism are Geller and Karales (1981) and Sherman (1980) who present succinct and timely discussions of the police use of deadly force at common law and of the procedural and substantive legal requirements upon contemporary police managers attempting to control its use.

During the period from 1965 to 1976, inclusive, between three and four thousand civilian deaths were reportedly

attributable to the police use of deadly force. That figure represents approximately 2.5% of all homicides in the United States; on the average, about one civilian per day was killed by police action during that period. Moreover, it has been suggested that estimates of the number of civilian deaths related to the police use of deadly force are considerably biased by the manner in which the data used to record those estimates are collected, that the estimates may be as much as fifty percent under the actual number (Sherman and Langworthy 1979).

Although the number of civilians killed by police may not be known with precision, it is not that problem that has been of major interest to researchers. Rather, most research has focused on the nature of the incidents in which deadly force was used. That is, what factors lead to the police decision to use deadly force and what is the context of the situation in which deadly force is used?

Of the several dozen studies investigating the police use of deadly force, a handful have made laudable attempts to summarize the previous research, particularly Fyfe (1978), Brenner and Kravitz (1979), Geller and Karales (1981), and Geller (1982). While it is from these research efforts and from several of the original studies themselves that this present review of the literature is developed, we

have slightly modified the structure of our discussion by considering variables of interest in the previous research separately. That is, rather than discussing each study individually, we examined what appear to be the more significant variables and the respective findings by groupings of related variables. This strategy, we believe, accomplishes two objectives: First it enables the consumer to readily identify the factors of major import which are considered by most to be related to police shootings of civilians. Second, it allowed for the development of a cogent, coherent framework from which our analysis will proceed.

Accordingly, we reviewed the significant groups of deadly force variables in the following order: race and shooting incidents, shooting incident characteristics, suspect characteristics, officer characteristics, geographical distribution of shooting incidents, administrative deadly force policy, departmental adjudication, and departmental and community characteristics.

Race and Shooting Incidents

Much of the previous research on the police use of deadly force has concentrated on the issue of race as a significant and influential variable in explaining variance

in police shooting incidents across jurisdictions. As Geller (1982:163) has noted in his fine summation of the prior research:

> almost everywhere, minority-race civilians are disproportionately shot by police (compared to the racial makeup of the community), and black officers are disportionately involved as shooters and shooting victims (compared to the racial composition of their police forces).

As reported by the NCHS for years 1968 to 1976 inclusive, police officers killed an average of 342 civilians per year, 51% of which were nonwhite.

Robin (1963) reported that in Philadelphia from 1950 to 1960, blacks constituted 87.5% of all "victims" of police shootings while comprising only 22% of the city's total population. His investigation of nine cities including Philadelphia revealed that the ratio of black to white victims of fatal police shootings ranged from 5.8 to 1 in Akron to 29.5 to 1 in Milwaukee. Nationwide, he also observed for the same period that of the average of 240 police shooting fatalities per year, 49% were nonwhite with blacks being killed seven times more often than whites when controlling for racial composition of the general population.

Knoohuizen et al. (1972) in a study of Chicago shootings for years 1969 and 1970 found that blacks constituted 75% of all police shooting fatalities while representing only 33% of the city's population. Moreover, they observed that the black death rate per 100,000 due to police shootings was 6.3 times higher than the white death rate. Another Chicago study by Harding and Fahey (1973) a year later reported similar findings. In addition, they found that blacks had a 2.67 shooting fatality rate per 100,000 and whites .34 per 100,000. That same year for New York City, blacks constituted 59% of all citizens slain by police shooting while comprising only 19% of the city's population (Burnham, 1973).

In his study of major urban areas across the U.S. for the period of 1960 to 1968, Takagi (1974) observed that blacks represented 51% of all police shooting fatalities while constituting only 10% of the general population. He reported that blacks were nine times more often the victims of fatal police firearms discharges than were whites. Similarly, in his study of both large urban areas and jurisdictions with populations of 50,000 and less, Kobler (1975a)

found that blacks and whites were roughly equally distributed as fatal victims of police shootings: whites, 43%; blacks, 42%; Hispanics, 13%; and other, 2%.

In an investigation of seven large U.S. cities, Milton et al. (1977) disclosed that although blacks comprised only 39% of the population across all seven locations, they represented 79% of all police shooting victims. For a large unidentified Midwestern city for years 1970 to 1972 inclusive, Inn et al. (1977) found that although 25% of the city's population was black, blacks represented 64% of all police shooting targets.

Fyfe (1978) reported that in New York City from years 1971 through 1975, of the 2,149 police shooting opponents, 58% were black, 23% were Hispanic, and 19% were white; for the period of the study, blacks comprised 20% of the city's population. Meyer (1980) observed that in Los Angeles blacks and Hispanics comprised 55% and 22% respectively of all police shooting targets while constituting only 18% and 24% of the city population. In another Chicago study, Geller and Karales (1981) reported that minority citizens constituted 80% of all police shooting victims (70% black, 10% Hispanic) while constituting 53% of the general population (41% black, 12% Hispanic). In an investigation of

police firearms discharges across 57 U.S. cities with populations of 250,000 or more, Matulia (1982) reported that blacks constituted 60% of all police homicide victims.

The obvious and disproportionately high number of nonwhites as victims of police shootings has led some investigators to conclude that the police use of force, specifically firearms discharges, is racially motivated (Harring et al. 1977; Takagi, 1974). They posit that the suspect's race is the primary criterion on which a police officer decides whether to shoot, i.e., that police have one trigger finger for whites and another for blacks (Takagi, 1974). Moreover, they accuse the police of having assumed a role of dominance, repression, violence, and discrimination against minorities in contemporary American society (Tagaki, 1974). Takagi (1974:33) even suggests that "there is some basis to suspect that the police killing of black citizens is punishment to control a surplus labor population."

Many more researchers, however, have attempted to determine whether the disproportionate number of blacks as shooting victims may be accounted for by some other factors, specifically their disproportionately high representation in both violent and property crimes. As Binder and Scharf (1982:19) noted,

> Police as a general rule do not shoot college professors (white or black), physicians (white or black), infants (white or black), shopkeepers (white or black), and so on. It would seem that one needs a base for comparison indicating relative exposure to situations that potentially precipitate shooting incidents. A move in that direction would be arrest rates, particularly, for violent crimes. (Emphasis added)

Yet many have argued that arrest rates, while probably accurate as measures of reported crime, are inappropriate as indicators of minority contact with the criminal justice process (Takagi, 1974; 1978). Thus, it is maintained that the highly discretionary decision to arrest is motivated by the same racial prejudice that accounts for the shootings of nonwhites. The substance of this contention is succinctly depicted in Goldkamp's seminal article (1979) which lays out two basically antithetical explanations of racial disproportionality in police use of deadly force. One view has it that black arrest rates for violent crimes are substantially inflated by law enforcement because the police actively label and ferret out blacks and other members of the lower economic strata as crime-producing and thus deserving of special attention. Goldkamp (1979) however attempts to refute this contention by comparing victimization survey data (data not fabricated by the "system") with official

F.B.I. crime statistics. The result is that the data of the former are strikingly comparable to those of the latter in terms of racial representation. This seems to indicate that high black arrest rates for property, in particular, and personal and violent crimes are not a product of systematic or official manufacture. For a counterinterpretation, see Hindelang, (1978), who has suggested that crime victimization surveys reveal that minorities are disproportionately arrested in terms of their actual participation in criminal activity.

The second position described by Goldkamp maintains that minority members do in fact participate disproportionately in the commission of violent and property crimes and that arrest rates are a reasonable reflection of their representation in this activity. Moreover, Fyfe (1978:141) claims to have found partial empirical support for this view. At minimum, arrest rates appear to be better indicators of police-citizen contact in which deadly force is likely to result than general population proportionality data, which has been rejected by many researchers in the field as having little comparative value in terms of suggesting racial discrimination in police shooting incidents.

In one of the first efforts to examine the relationship between arrest rates and police shootings, Harding and Fahey (1973) reported that black arrest rates were comparable with the rate of blacks as victims of police deadly force: black constituted 73% of all violent crime arrests and 74% of all police fatal shooting victims; whites 20% and 19% and Hispanics 7% and 6% respectively. The same year in New York City, Burnham (1973) found that while blacks comprised 59% of all victims of police shootings, they constituted 62% of all those arrested for violent crimes. In their sample of 320 fatal and nonfatal injury police shootings in seven cities, Milton et al. (1977) also reported similar findings: 79% of all shooting victims were black as were 73% of all index crime arrestees. From Fyfe's investigation (1978) of 2,149 police shooting opponents in New York City from 1971 to 1976 inclusive, it was found that 60% of all shooting opponents and 62% of those arreted for violent crimes were black. In Los Angeles, 55% of all police opponents were black: Blacks constituted 36% of the overall arrest rate, 46% of all Part I arrests, 44% of all assaults, and 42% of all deadly-weapon assaults on police officers (Meyer, 1980).

For years 1974 through 1978 in Chicago, an investigation of 650 shooting incidents revealed that blacks constituted

70% of all police fatal and nonfatal shooting victims and 72% of all forcible felony arrestees (Geller and Karales, 1981). The researchers also reported a moderately high, positive correlation (r=.64) between the forcible felony arrest rate and the number of civilians shot by the police.

In his examination of deadly force incidents across 57 large U.S. cities, Matulia (1982) found that blacks comprised 60% of all justifiable police homicide victims, 73% of justifiable civilian homicide victims, 71% of all robbery arrestees, 64% of the violent crime arrestees, and 58% of those arrested for weapon violations.

In conclusion, as a basis of comparison for minority disproportionality in police shooting incidents, arrest rates have been criticized on at least two accounts. First they "may not accurately reflect the number of total encounters which civilians of different races have with police" (Geller and Karales, 1981:121). Second, as mentioned earlier, rates of arrests may simply be alternate indications of racial discrimination by police toward members of a minority (Takagi, 1974). Notwithstanding these deficiencies and given that there are also contradictory findings in at least two other studies showing that the minority death rate

due to police shootings is proportionately higher than the minority arrest rate (Knoohuizen, et al., 1972; Takagi, 1974), it should be noted that arrest rates -- particularly forcible felony arrests -- are better indicators of racial participation in those types of activities where deadly force may be used than general racial population composition data. Both logically and empirically, prior research seems to vindicate the claim that arrest rates are indicative of encounters between the police and citizens where the potential for force is greater. Yet the reader is cautioned that "(d)ifferential arrest rates for different racial groups are, at best, only a partial explanation for racial disproportions in shooting victims" (Geller and Karales, 1981:5). In sum, even forcible or violent felony arrests in and of themselves "do not demonstrate a casual connection," only a moderately strong positive correlation, between the race of the victim and the number of incidents involving minority citizens (Geller and Karales, 1981:122).

Another facet of the relationship between race and shooting incidents has been suggested in the works of Fyfe (1978, 1981) and Geller and Karales (1981), both of which investigated the race of police officer shooters. Each

study found the number of minority officers to be disproportionately high in terms of involvement in shooting incidents. Black and Hispanic officers participated at a rate of 207 and 177.5 per 1,000 black and Hispanic officers respectively; whites, 144 per 1,000 white officers (Fyfe, 1979). And though Geller and Karales (1981) observed that white officers shot black civilians in almost twice as many incidents as black officers, when controlling for the racial composition of the department, black officers were 2.5 times more likely than their white counterparts to shoot black civilians. Moreover, white officers were four times more likely to shoot white civilians than were black officers.

Similarly in New York, Fyfe (1978) reported that while 58% of all white officer opponents were black, 73% of all black officer opponents were black. Almost 20% of all white officer opponents were white while only 8% of black officer opponents were Caucasian.

A further observation from the Fyfe (1978) study indicated that an overrepresentation of black officers was evident for both on- and off-duty shootings relative to white and Hispanic officers when controlling for departmental racial composition, though this disproportionality was more

pronounced for off-duty incidents. Geller and Karales (1981) however, found black officer overrepresentation to be an off-duty phenomenon almost entirely. Fyfe (1978, 1981) claimed that the high disproportionate number of black officers involved in on-duty shootings could be accounted for by racial differences in assignment, i.e., that blacks having less seniority with the department received more hazardous assignments. As such, the officers found themselves in situations where the risk of shooting involvement was greatest. Black officer over-involvement in off-duty shootings were accounted for by the varying residential patterns between black and white officers. Off-duty shootings were more likely to occur in areas in which minority groups were most heavily represented--those areas in which minority officers resided--again, where the risk of shooting involvement was greatest.

Unlike Fyfe, Geller and Karales found little difference between black and white officer representation in on-duty shootings in Chicago: Blacks were not significantly overrepresented and yet they were disproportionately assigned to high crime areas.

In sum, some of the previous research efforts, particularly the earlier ones, have terminated the inquiry

regarding the police use of deadly force against civilians with the observation that the disproportionate number of minority citizens as victims of police homicide relative to their composition in the general population lends substantial support to the claim that the police are racially motivated to shoot. Takagi (1974) claims that arrest rates do not explain this disproportionate representation; his contention, as mentioned earlier, is that police use deadly force on the basis of a systematic subjugation of minority citizens and to control a surplus labor population. Harring et al. (1977:34) posit that there are "ideological and strategic premises underlying state efforts to manage police killings of civilians." Ultimately Takagi (1978:36) maintains that "in the final analysis, the role of the police in contemporary American society is dominance, repression and violence" particularly toward nonwhites.

Later researchers on the other hand have taken this as a point of departure, examining not only the relationship between police shooting rates and arrest rates, but also the relationships of suspect weapon possession, criminal activity at the time of the shooting, officer race, "income inequality", police-civilian ratios, administrative policy,

police department size and levels of community violence to shooting rates.

While the research community itself is sharply divided over the claim that police shootings of civilians is an exemplification of police prejudice against nonwhites, many more than not have concluded that such claims presently can be neither proved nor disproved. Even though Robin (1963) found that 87.5% of all fatal victims of police shootings in Philadelphia were black and further that they constituted only 31% of the general arrest population and 38% of all Part I arrests, he surmised that:

> The context within which killings occurred, the serious crimes for which the V-O's (victim-offenders) were being arrested, their realization of the possible consequences of resistance and flight, and the officer's reliance upon fatal force as a last resort--all these things make it clear that criminals killed by police officers generally are responsible for their own deaths (230).

Further, he maintained that:

> The large number of Negro justifiable homicides in Philadelphia suggests both absolutely and relatively might be interpreted as an indication of racial discrimination by the police. Such an inference, however, would be unwarranted.... A close examination of

> the 32 cases indicates that, with few exceptions, the officers who took the criminals' lives acted as any "reasonable man" in their position would have. In many cases the officers exercised considerable restraint in delaying the use of fatal force as long as they did (227).

Fyfe (1978:144), in concluding that the racism claim was not demonstrated in his own research, speculated that:

> Blacks are the mode among New York's police shooting opponents because they are also the mode among the lower socioeconomic groups which most frequently precipitate extreme police-citizen encounters.

Though Sherman (1980:97) makes the claim that:

> In the absence of more conclusive evidence, the demonstrably high rates of police homicide for blacks strongly suggests racial discrimination on a national basis...

and further that:

> Although such patterns are quite likely to vary from one city to the next, such a variation would support the argument that present procedures allow police homicide to be administered in a discriminatory fashion...

he concludes with the assessment that:

> The existence of racial discrimination in police homicides can be neither proved

> nor disproved with the available evidence... Short of a mammoth systematic observation study costing millions of dollars, there is no reliable way to obtain such data.

Like Fyfe (1978) and Sherman (1980), Geller and Karales (1981:140) reach a similar conclusion:

> In sum, a definitive conclusion on the possible role of racism as a motivating factor in police shootings of civilians is impossible without far more extensive and intensive data and statistical analysis techniques than we have been able to use... While our data are not adequate for drawing confident conclusions, our analysis does not reveal findings which, on balance, are consistent with the racism theory. (Emphasis added).

Finally, and in the most recent and probably most extensive study to date, Matulia (1982:71) claimed of his own work:

> These research findings do not prove conceptually or statistically the existence of police discrimination. What the data are consistent with is that the disproportionate rate of black victims of police justifiable homicide and use of deadly force is in proportion to the level of crime committed by blacks and black victimization in crimes of violence.

Moreover, these results were found to be consonant with Fyfe's conclusions (1978) that the police use of deadly force "is concentrated within an environment of community violence in general" (IACP Newsletter, 1981:3). In the final analysis perhaps Blumberg (1980) has captured the best response to the racism theory, namely with his contention that those who make the claim that the police are racially discriminatory in shooting incidents must somehow shoulder the burden of proof.

Shooting Incident Characteristics

While the findings varied from study to study with regard to certain incident characteristics, a picture, albeit painted with the broadest of strokes, may be presented. It was reported for example, that most police-civilian shooting incidents occurred at night, at a "public" location within what was considered by police to be a high-crime area, usually in the inner city. Robin (1963) found that 72% of all Philadelphia incidents occurred between 2100 and 0900 hours, 75% out-of-doors. Kobler (1975b) found that most occurred between 2100 and 0300 hours, on weekends, during the last six months of the calendar year. The California Bureau of Criminal Justice Statistics (1974)

disclosed that 42% of all such incidents occurred during this time frame, one-third taking place out-of-doors. Geller and Karales (1981) indicated that 72% of Chicago police shootings transpired between the hours of 1800 and 0600, 68% outside, and 51% on Friday through Sunday inclusive. Regarding the monthly distribution of police shootings, both the Fyfe's (1978) and Geller and Karales' (1981) findings diverged from those of Kobler (1975a). While the former showed no seasonal frequency differences, the latter indicated that almost three of every five shootings occurred in the first half of the calendar year (Geller and Karales, 1981).

Most of the shootings as reported by various studies indicate that the officer's most frequently cited reason for firing his or her weapon was that of self-defense (72%, Fyfe, 1978; 67%, Geller and Karales, 1981). In comparison, the proportion of suspects shot or shot at while "fleeing without further resistance" was significantly lower (39%, Boston Police Department, 1974; 13%, Meyer, 1980; 17% Geller and Karales, 1981).

Not surprisingly, most police shooting incidents involved or were precipitated by criminal activity of the suspect or opponent. Without elaboration, Robin (1963)

disclosed that 28 of 32 (88%) of the fatal suspects in his study were involved in some type of criminal act. In another Philadelphia study (PILCOP, 1975), most opponents involved in criminal activity were allegedly perpetrating the act of armed robbery; most of those confronting the police with arms were shot during the confrontation; finally, 14% of all those shot had committed no offense.

Kobler (1975a) reported an even higher proportion of police homicide victims as having been involved in no criminal activity (approximately 30%). Also revealed were the following: 27% of all victims were involved in property crimes; 20% in dangerous felonies; and 7% in assaults. In California (California Bureau of Criminal Justice Statistics, 1974) over 70% of all police homicides followed assaults on the police with the largest proportion of these having begun as misdemeanor investigations. Milton et al. (1977) disclosed that 32% of police shooting incidents involved disturbance calls; 21%, robberies; 20%, burglaries; 11%, other offenses; and 8%, traffic offenses. For New York City, Fyfe (1978:148) reported that robberies constituted 39%; disturbance calls, 25%; traffic incidents, 12%; burglary, 7%; and other crimes, 6% of those situations in which police fired upon civilians. Further Fyfe (1978)

indicated that 46% of all armed robbery suspects upon whom police fired were black, followed by Hispanics at 26% and whites at 23%. Finally, Geller and Karales (1981) found that Chicago police fired upon civilians more often in disturbance calls (39%) followed by robbery (27%), burglary (15%), other (8%), traffic situations (7%), and officer personal business situations (4%).

Previous research has also revealed that a significantly large proportion of police shooting events involved opponents who were armed. In Philadelphia (PILCOP, 1975), it was disclosed that of the 236 police shootings investigated, 126 or 53% involved armed suspects. In Kobler's study (1975b), 50% of the incidents involved opponents with firearms and 25% with knives or similar instruments; 25% involved unarmed suspects. Of the 530 armed suspects, 24% were either killed or injured by the officer; 60% had used their weapons in an allegedly menacing fashion. Of 210 incidents studied by the Boston Police Department (1974) in Boston, 74 or 35% involved assailant suspects; of these, 45% used an auto as a weapon followed by firearms (27%), knives (22%) and other physical force (5%).

In seven large cities researched by Milton et al. (1977), 57% of all suspects were armed, 45% with firearms.

In New York City, Fyfe (1978) found that 61% of the black opponents, 54% of the Hispanic suspects, and 35% of all white opponents were armed. Eight percent of blacks and 36% of whites were involved in incidents in which they neither carried a weapon nor assaulted an officer. Finally in Chicago, of a total of 523 opponents, Geller and Karales (1981) discovered that over half of all suspects shot by the police used or threatened the use of a weapon other than a gun. In addition, 17% were shot while fleeing without further resistance. Last, Geller and Karales (1981), like Fyfe (1978), found that blacks and Hispanics were more likely to be using or threatening to use a firearm than white opponents (55% and 56% to 37%).

Suspect Characteristics

By virtue of our previous discussion of the literature regarding suspect race, weapon possession, and alleged criminal activity--variables viewed by previous research as possible precipitators of police shooting incidents--we will only briefly review here a few remaining suspect variables considered by consensus to be of major import.

In terms of age and sex of the shooting suspect, most studies indicated a mean age from 17 to 30 years (Geller,

1982) with 97% of the suspects being male. Robin (1963) reported in Philadelphia that over half of the 32 victims of police homicide were under 24 with the average age of 27.6 years. Knoohuizen et al. (1972) found the age group of 25 years and under to constitute 62% of all shooting victims with those under 25 being twice as likely to be killed by the police as those over this age. Takagi (1974) in a nation-wide study reported that those 19 to 29 years comprised 58% of all police homicides.

In Kobler's study (1975a) of 1,500 police-caused civilian fatalities and 400 civilian-caused police deaths between 1952 and 1969, the mean suspect age was 29 years, the median age, 25.5 years. The mean age for black and Hispanic victims was four years younger than their white counterparts (27 and 31 years respectively). Last, Fyfe (1978) revealed that 51% of all civilians shot at by police were 23 years of age or younger.

In terms of prior criminal history and occupational and marital status of the suspect, only one researcher has investigated these characteristics. Robin (1963) found that over three-fourths of all victim-offenders of police homicide had prior criminal records, five-sixths had jobs which required no skill or special training, and over two-thirds

were single. Presently, no one has examined any other significant socioeconomic variables such as educational attainment, employability, or wage earnings of suspects.

Officer Characteristics

Officer duty status and dress (uniform and plainclothes) were also investigated by several researchers (Knoohuizen et al., 1972; PILCOP, 1975; Milton et al., 1977; Fyfe, 1978; and Geller and Karales, 1981). All found that off-duty shootings comprised a small but significant proportion of all police shooting incidents (approximately 20%). In particular, Knoohuizen et al. (1972) reported 20%; PILCOP (1975), 19.5%; Milton et al. (1977), 17%; Fyfe (1978), 21.5%; and Geller and Karales (1981), 22.5%. Further, Milton et al. (1977) found that 18% of the officers were on-duty, in plainclothes while 65% were on-duty in uniform when the shootings occurred; Fyfe (1978) reported 26% and 52% respectively. Similarly Geller and Karales (1981) disclosed that 68% of the on-duty officer-shooters were in uniform at the time of the shooting incident.

To date, only two efforts have examined the officer's level of educational attainment and both reported that education had little bearing on the likelihood that the officer would participate in a shooting incident (Sherman and

Blumberg, 1981; Matulia, 1982). Officer length-of-service with the department has also received some modest attention, as has officer rank and prior shooting history (Fyfe, 1978; Geller and Karales, 1981). As with education, length of service and prior shooting history appear to be fairly weak predictors of officer involvement in shooting incidents. Finally, and as expected, previous research reveals that the vast majority of all shooting officers are of the rank of patrol.

Geographical Distribution of Shooting Incidents

With regard to the geographical distribution of police shooting incidents across city precincts, Fyfe (1978 and 1979) reported a higher frequency of these events in areas considered by the police to be hazardous--that is, in so-called free-fire zones. Shooting incidents were found to be lowest in those precincts perceived by the police to be relatively safe from violent crime.

Fyfe (1980) has also reported a third study using the same data base to examine the geographic distribution of police shootings and indices of police exposure to violent crime and public safety. He postulated three hypotheses:

> The higher the violent crime arrest rate of a neighborhood (zone), the higher the police shooting rate;
>
> The higher the reported public homicide rate of a neighborhood (zone), the higher the police shooting rate;
>
> Both of these relationships will be highest for shootings involving on-duty police officers and lowest for shootings involving off-duty police.

The variables examined by Fyfe were arrest rates, homicide rates, total shooting rates, on-duty uniformed shooting rates, on-duty plainclothes shooting rates, and off-duty shooting rates all by neighborhood. Fyfe reported confirmation of all three hypotheses and concluded that a police officer reacts to the community as he perceives it and that this perception is usually an accurate reflection of neighborhood characteristics. He further observed that the relationship between police shootings and the frequency of violent felony arrests and homicides support suggestions for stricter departmental policies on the use of deadly force.

Administrative Policy and Shooting Incidents

None of the studies to date has addressed specifically what causes deadly force to be used in a particular incident. The research efforts of Uelman (1972), Milton et al. (1977), Fyfe (1978, 1979, 1980), and Meyer (1980) however

suggest that the attempt to impose criminal or civil sanctions against officer misuse of deadly force may not be the most effective means of control. Alternately, they advance the claim that the implementation and enforcement of administrative policy regarding the use of deadly force is related to a reduction in police shootings of civilians.

Uelman (1973) showed a relationship between the rate of firearm discharges and the restrictiveness of a department's firearms policy; departments with the least restrictive policies had twice the rate of firearms discharges as those with the more restrictive rules. In suggesting that administrative policy may impact on shooting frequencies, Milton et al. (1977) also found that:

> Policies and review procedures for use of deadly force vary widely among departments;
>
> While many police departments apparently are attempting to develop written policies on the use of deadly force, these policies are often not contained in any single document; and
>
> The fear of increasing vulnerability to civil actions leads many police administrators to avoid adopting use-of-force policies which are more restrictive than state law. In addition, administrators are forced to contend with increasing police union opposition to restrictive policies.

A major implication of the Milton, et al. (1977) study was that a restrictive and enforced policy on the police use of deadly force was perhaps the most important determinant of police shooting rates. This suggestion is consistent with findings reported by Fyfe (1978), who examined the effect of the implementation of a New York City Police Department (NYPD) directive upon the frequency, nature, and consequences of police shootings in New York City. The directive, Temporary Operating Procedure 237 (T.O.P. 237), narrowed officer shooting discretion and established a high-level review board to investigate and adjudicate all firearms discharges by officers. Fyfe analyzed 4,904 NYPD Firearms Discharge/Assault Reports filed by officers during the period of January 1, 1971 to December 31, 1975. The new directive, T.O.P. 237, was made effective on August 18, 1972; thus, Fyfe was able to examine firearms use before and after the implementation of the new policy.

Fyfe's analysis essentially showed that: (1) there was a considerable reduction (80%) in the frequency of police shootings after the implementation of T.O.P. 237; (2) the reductions were greatest for the more controversial types of shooting incidents (e.g., shootings to prevent or terminate crimes and to apprehend nonviolent fleeing felons); and (3)

the reduction in shootings was not accompanied by any increase in officer injuries or deaths. Fyfe concluded that considerable reductions in police shootings and in both police officer and civilian injury and death rates are associated with the establishment of clearly delineated guidelines and procedures for the review of officer-shooting discretion.

In addition to the Uelman, Milton, and Fyfe studies, Meyer (1980) in Los Angeles documented a substantial decrease in the number of fatal police shootings after the implementation of a restrictive deadly force policy. In these cases, the reduction in fatal shootings by the police was not accompanied by any increase in the number of injuries or fatalities suffered by police. Thus, the relationship between police shootings and departmental policy is certainly deserving of further investigation. It is also the case, however, that the identification of policy elements effective to achieve a balance between the objectives of policing and the appropriate public interest in the use of deadly force by the police is not now possible. Such identification awaits further empirical developments and, as most researchers on this topic have emphasized, policy development in this critical area must proceed cautiously.

Departmental Adjudication and Shooting Incidents

A last policy-related variable often investigated in the literature is the departmental disposition of the police shooting incident. Milton et al. (1977) found it very difficult to categorize certain shootings as justified or unjustified on an ex-post-facto basis. That is, analysis of recorded data alone was neither easy to deal with nor without serious limitations in their attempts to determine whether policy or law was violated in particular instances. Across several studies (e.g., Fyfe, 1978; Geller and Karales, 1981; Harding and Fahey, 1973; Knoohuizen et al., 1972; Kobler, 1975; Meyer, 1980; Milton et al., 1977 PILCOP, 1975; Uelman, 1972), the adjudication rate of intentional police firearms discharges as being "within departmental policy" was relatively high, ranging from 70% (Fyfe, 1978) to 92% (Milton et al., 1977). In truth, most shootings were determined as justified with only a small proportion resulting in criminal charges against the officer (Milton et al., 1977).

Disciplinary action, when imposed for shootings "outside departmental policy", usually consisted of suspension, loss of days off, and in extreme cases, termination (Meyer,

1980). Reasons most often cited for the high disposition rate favoring the officer were that: (1) the review process was outside public view (Knoohuizen et al., 1972); (2) the interdependent working relationships among the prosecutor, coroner, and police executives precluded independent evaluation of the incident (Knoohuizen et al., 1972); (3) the contradictory function of district attorney as both "police officer" and prosecutor impeded prosecution of the guilty officer to the fullest extent of the law; and (4) the fear of potential civil liability suits or civil service board reversals made police executives reluctant to find the officer guilty (Uelman, 1972; Harding and Fahey, 1973).

On a final note, while Geller and Karales (1981a) "see promise not only for an adjudicatory panel but for a departmental panel whose mission would be to review shootings for the purpose of identifying preventive strategies" (Geller, 1982:171), Milton et al., (1977) conclude that formal review of incidents even by civilians or part civilian bodies would not in itself guarantee a fairer resolution.

Departmental and Community Variables

As Sherman (1980), Friedrich (1980) and Geller (1982) have perceptively noted, one of the gaping holes in our

current knowledge of the police use of deadly force concerns the lack of empirical research in the sphere of community variables or characteristics that may account for the frequency and the circumstances in which deadly force is used. Fortuitously, this is somewhat less the case with regard to the impact of police departmental or organizational factors on police shootings (in general, see Fyfe, 1978 and Geller and Karales, 1981). Due to its broad, comprehensive approach, the findings of Matulia (1982) regarding those organizational and community factors that appear to have some relationship to police shootings are reported in this last section.

In an attempt to determine the statistical relationships between certain departmental and community characteristics and the rate of police "justifiable homicides", Matulia carried out a series of 40 tests of univariate hypotheses. Those factors which were found to be statistically ($p=.10$) related to the rate of police justifiable homicides were: the size of the population, the number of police officers in the jurisdiction, homicides committed by civilians, justifiable homicides committed by civilians, the number of robberies, the amount of violent crime in the community, a high number of officers per supervisor, the use of semi-automatic weapons by SWAT units, in-service SWAT unit training, the

absence of policy for the management of both stake-out and decoy units, patrol command response to the scene of deadly force incidents, in-service crisis intervention training, in-service and pre-service exertion (stress) firearms training, the awarding of incentives for firearms marksmanship, in-service officer survival training, the use of on-duty weapons larger than .38 caliber, and the issuance of shotguns to officers.

Among those factors which were shown not to be statistically related to the police rate of "justifiable homicides" were: turnover in the office of the chief police executive, the use of pre-service psychological examinations, the existence of active hostage negotiation units, the existence and control of a decoy unit, the existence of a labor union contract agreement, the use of mandatory psychological review for officers involved in a shooting incident, the existence of a local gun registration statute, mandated training upon appointment, strict policy regarding physical fitness standards, the number of hours of training in crisis intervention techniques, the frequency of training in the use of firearms, whether firearms were owned by the department or by the officer, and whether officers were required to register or to carry weapons off-duty.

Criticisms of the Available Research

Several criticisms may be made of the collective body of literature concerning police use of deadly force. Most, for example, examine fatal shooting incidents only. These lack comprehensiveness of approach and are thus severely restricted in the accuracy of their accounts of the phenomenon (Fyfe, 1978). The utility of this research is vulnerable to successful challenge because consideration of injurious and "missed shot" incidents are clearly of equal gravity (Fyfe, 1978). Whether a shot hits its intended target has less to do with the decision to fire it or with the circumstances precipitating that decision than it has to do with chance or poor marksmanship. We think the decision to discharge the weapon and the precipitating factors are the more noteworthy phenomena to investigate; moreover, it seems that the decision in all three types of incidents, whether fatal, nonfatal injury, or "missed shot," are similar. All three are of a kind, yet much of "the research to date has treated them as discrete phenomena" (Fyfe, 1978:32).

Some studies are clearly outdated, and most employ samples that are nonrandom or too small for valid generalization. Still, a small number rely solely on newspaper

accounts as data sources; as a basis for data collection, these are unfortunately incomplete and often inaccurate (Sherman and Langworthy, 1979). Some studies simply describe the nature and extent of the shooting incidents and do not attempt to explore some potentially fruitful relationships among the data or provide, at minimum, possible accounts or explanations for the variance in the police use of deadly force. A few studies are little more than the grindings of ideological axes, designs to justify previously drawn conclusions, or attempts to defend organizational policies and postures (Fyfe, 1978).

Another salient feature characterizing almost all of the prior research is a heavy reliance on in-house police departmental records as the sole data source (Conley, 1979; Geller, 1982). These records, ostensibly set up for purposes other than research--primarily as a basis for potential disciplinary action--necessarily limit the range of inquiry and all too often cast the officer in the most favorable light. These defects are somewhat ameliorated however in that at minimum, key variables of certain interest to the researcher are quite likely reported accurately (e.g., officer and suspect age, gender, race, and extent of injury and officer duty status, uniform status,

and assignment) (Geller, 1982). Moreover, officer veracity may in most instances be checked with the convenience of the shooting review board. As Meyer (1980:109) noted, "(S)hooting reviews...do not necessarily comport with what the officers actually believed at the time of shooting incidents." (Reliance on police records as data sources is discussed more fully in the "Method" chapter.)

Friedrich (1980) accurately typifies the current empirical literature as a plethoria of hypotheses purporting to account for the police use of deadly force accompanied by little evidence which convincingly supports them. Most are "supported by only the most casually gathered impressionistic evidence" (Friedrich, 1980:85). Moreover, systematically gathered evidence is rare and when done so, is usually from "a narrow setting or with insufficient adherence to the principles of good research" (Friedrich, 1980:85).

Many of the research efforts also suffer from a serious lack of analytical rigor thereby yielding questionable findings (Geller and Karales, 1981). The most sophisticated analysis to date (e.g., the work of Fyfe, 1978 and Geller and Karales, 1981) are largely confined to contingency tables and correlational matrices. Friedrich's multivariate

analysis (1980) of Reiss's data is, of course, the singular exception. Given the type and measurement level of the data, there is nothing inherently wrong with crosstabulations; they are easy to understand and do reveal the extent of variation in the police use of deadly force (Friedrich, 1980). They do not, however, provide a strong basis for discerning the relative influence of certain variables on the use of deadly force. A last difficulty with the previous research on the police use of deadly force is the lack of useful inter-city comparisons. Major differences in operational definitions and data sources across studies, for instance, do not permit valid comparisons, as Geller and Karales (1981) have so indicated.

In sum, the existing literature in the area of deadly force lacks cohesion in both structure and direction. Perhaps the most discouraging feature has been the inattention to the development of general, supporting theory and, consequently, a plausible conceptual framework or approach to the phenomenon. This neglect has, of recent, been partially remedied by the fine work of Sherman (1982) and Friedrich (1980), both of whom offer complementary conceptual paradigms of inquiry. But given the seemingly poor state of affairs, it would be a mistake to conclude that the

collective body of research is of little value. Many of the difficulties posed are merely symptomatic of an area which is still in the infant state of development. Moreover, several of these efforts, when couched in the larger perspective of police and violence, as suggested by Sherman (1980a), offered viable, useful, and instructive guidance for the research presented here.

In spite of the problems and weaknesses in the studies we have discussed, one fact makes their value unquestionable. They have clearly pointed out and drawn considerable attention to the fact that the use of deadly force by police is an issue of national importance to both those in and outside of the law enforcement community. Perhaps, therefore, the most important question then is what can be done to reduce the possibility of an unjustified police killing without concurrently increasing the possibility of a police officer's death or injury.

It is clear from this brief review of the research that there are many issues relating to police use of deadly force that remain to be resolved; in fact, there are many that remain to be addressed. One of the obvious reasons for these deficiencies in the literature, of course, is the lack of significant number of sound empirical studies. Even if

this were not the case, however, it is also evident that because of methodological problems it is exceedingly difficult to draw useful comparisons between studies and to generalize from any one group of apparently similar findings (Geller & Karales, 1981; Matulia, 1982; Sherman and Langworthy, 1979). Thus, it is not likely that either (police) departmental policy generally would benefit greatly from an uncritical appraisal of the available research. The most promising approach to dealing with deadly force, therefore, is to determine empirically--to the extent possible--what are the factors related to the use of deadly force in a particular jurisdiction and, as a logical extension, what are the factors that can be manipulated (reasonably) to affect the use of deadly force to conform to reasonable standards.

CHAPTER 2

LEGAL AND HISTORICAL CONSIDERATIONS OF THE POLICE USE OF DEADLY FORCE

Deadly Force: A Definition

Because several legal authorities and social scientists have written about and researched the topic of the police use of deadly force, it would be expected that definitions of the term would vary significantly. This variance is, in fact, one of the obstacles to valid comparisons between several of the research efforts conducted since the early 1960's (Geller and Karales, 1981).

After examining several state statutes, the opinion of legal authorities and the Model Penal Code, we developed a composite definition of deadly force which will serve as the model for the ensuing chapters of this research.

It seemed to us, based on our review of the literature, that four relevant considerations enter into the development of a comprehensive definition of deadly force:

a) the intent to cause bodily harm by force;

b) the likelihood of causing bodily harm by force;

c) the actual result of the use of force; and

d) the gravity of the result of the use of force.

All definitions of deadly force argue from d), viz. death or serious bodily injury. Whether and, how a), b), and c) should be used in the definition is the significant question. At least four viable alternatives arise:

i) (a and b) and a result of death or serious injury;

ii) (a or b) and a result of death or serious injury;

iii) (a and b) and with or without death or serious injury; and

iv) (a or b) and with or without death or serious injury.

Definition (i) supposes that for a particular action to be considered one of using deadly force, the actor must have intended to cause and have been likely to cause death or serious bodily injury; moreover, death or serious injury must have occurred. Definition (ii) differs from definition (i) only in that it presupposes that either intent or likelihood is both the necessary and sufficient condition. Again, the actual result must have been death or serious injury. Definition (iii) assumes as in definition (i) that

both intent and likelihood are necessary and sufficient conditions but that death or serious injury may or may not have been the actual consequence of the action. Definition (iv), the most comprehensive of all those suggested requires only that the actor either intended or was likely to cause death or injury. In addition, as in definition (iii), death or injury may or may not have actually occurred for the actor to have been considered to have been using deadly force.

If we, in addition, limit our definition of deadly force to specific types of action (e.g., to the discharge of firearms only) we can now suggest a fairly comprehensive yet specific definition of the police use of deadly force that, in fact, served as our guide for the study:

> Deadly force, for the purpose of this study, is the discharging of a firearm by a police officer with the intent or the likelihood of causing serious bodily harm or death regardless of whether death or injury actually resulted from the discharge.

Deadly Force: An Historical Perspective

The current American law enforcement agent's use of deadly force to prevent or control criminal activity is rooted, as one might expect in British legacy. From the

fifteenth century, "medieval British courts evolved case--or common law--stating conditions under which agents of the State could use deadly force against its subjects" (Geller and Karales, 1981:21). Notwithstanding a nineteenth century British change-of-heart, those conditions or situations under which an agent for the State could justifiably use deadly force against citizens were six:

1) self-defense;

2) prevention of an imminent, life-threatening crime;

3) effectuation of an arrest of a person suspected of any felony;

4) capture of an escaping prison inmate;

5) recapture of a fleeing arrestee; and

6) suppression of a riot

(Geller and Karales, 1981:21; DeRoma, 1979:69; Sherman, 1980).

Of these six situations, the third--namely the use of deadly force to effect the arrest of any fleeing or resisting felon--legally and historically has been the source of intense, often heated controversy. And it is for this reason that the focus of attention for the remainder of this chapter will concentrate on this one condition, often referred to as the common-law, any-felony rule. Historically, the any-felony provision "reflected the social

and legal context of felonies in fifteenth century England and eighteenth century America" (Finch, 1976:365) and at those times had several rational justifications.

Historic Rationales for Use of Deadly Force

In short, the any-felony rule grants to a law enforcement agent of the state "the privilege of effecting arrest...if the crime for which the arrest is attempted is a felony" (1965 Restatement of Torts, 2d.). Several writers including DeRoma (1970), Zittler (1971), Finch (1976), Boutwell (1977), Day (1978), Ronkowski (1979), and Geller and Karales (1981) have succinctly indicated both the various historical rationales of and restrictions on the common-law, any-felony rule.

The major justification for the any-felony rule at common law in fifteenth to nineteenth century America was that there were few felonies enumerated at common law and all were punishable by death upon conviction. These felony offenses were murder, rape, manslaughter, robbery, sodomy, mayhem, burglary, prison breach, larceny, and rescue of a felon (Finch, 1976:365; DeRoma, 1970:68; Sherman, 1980:73; Geller and Karales, 1981). The use of deadly force by the police officer to effect an arrest for one of these offenses

was simply viewed as an acceleration of the penal process "albeit without providing a trial" (Finch, 1976:365), because, as Geller and Karales (1981:21) add, execution upon capture was "a virtual certainty." Yet, this was entirely consistent with the then prevailing attitude that in committing the felonious act, the perpetrator had willingly and knowingly forfeited his or her life if apprehended--trial or no. Committing a felony was considered a de facto forfeiture of all individual rights; by fleeing, the felon was simply "postponing the penalty of certain death now for certain death later" (Finch, 1976:365). In sum, there appear to be two distinguishable elements in this justification: 1) all felonies were punishable by death, and 2) the commission of a felony was both the necessary and sufficient condition for the forfeiture of all rights, including the right to life.

A second justification for the use of deadly force to effect the arrest of a felon was, as Sherman (1980), Geller and Karales (1981), and Finch (1976) indicate, the almost complete absence of a network of police forces and communication. The implication was that, given the current technological state of weaponry (long bows and cross bows) and their short, ineffective range, the prospects of eluding

capture were quite promising. Moreover, the difficulty of establishing a new identity in another community, town, village, or country was relatively minimal for the perpetrator. Consequently, without a reliance on deadly force to effect capture, escape meant that justice (bringing the felon to trial and possible punishment) would be invariably defeated. A third and final rationale suggested by Geller and Karales (1981) and Sherman (1980) was that most felons of the colonial and pre-colonial era defended against capture, not by fleeing the arrestor, but rather by confronting him, thus often necessitating the use of lethal force to exact an arrest.

In conclusion, while the legal and social context within which deadly force was exercised to apprehend any felon appeared necessary for the colonial period, they were by no means in and of themselves sufficient as justifications for its use--even in those times. As Zittler, quoting the American Law Institute's brief for the Third Restatement of Torts reports:

> There is no American case which actually sustains the use of deadly force for the sole purpose of effecting an arrest for an offense merely because the offense is a felon at common law or is made such by statute. (1971:257)

Several additional criteria, most of them discussed below, governed its use.

Historic/Legal Restrictions to the Use of Deadly Force

That any felon could be arrested with either the use or threatened use of deadly force by an agent of the state, did not imply that it could be used arbitrarily or without restriction at common law. The first and most readily apparent restriction was the felony-misdemeanor distinction. As early as the fourteenth century, England's law enforcement officials, as well as its citizens, were restricted at common law from using deadly force to apprehend resisting, fleeing misdemeanants (unless, of course, the misdemeanant used or threatened to use deadly force to elude capture or defeat the arrest).

With regard to the use of deadly force, one justification for this classification was that the fleeing misdemeanant was considered much less desperate than the fleeing felon who was certain to face the death penalty upon capture, trial, and conviction. The misdemeanant on the other hand, facing a much less severe sentence, would be less likely to resort to grave measures in order to elude arrest (Finch, 1976). A second rationale for this distinction as determinative of against whom deadly force might be

applied related directly to the penal character of the justice system and is evocated in two relatively recent court decisions:

> In such cases (misdemeanors) it is better, and more in consonance with modern notions regarding the sanctity of human life, that the offender escape than that his life be taken, in a case where the extreme penalty would be a trifling few days imprisonment in jail (Klinkel v. Sadder, 1930; quoted in Day, 1978:287).

Echoing this sentiment, a Kentucky court maintained that:

> Human life is too sacred to admit of a more severe rule...(T)o permit the life of one to be charged with a mere misdemeanor to be taken when fleeing from the officer would, aside from its inhumanity, be more productive of abuse than good... The security of a person and property is not endangered by a petty offender at large... (Head v. Martin, 85 Ky 483-484; quoted in Finch, 1976:365).

The point raised here is that in medieval times, it was morally and legally repugnant to use a force necessary to capture either a suspected or known misdemeanant, that was grossly and disproportionately harsh relative even to the most extreme penalty faced by the offender upon conviction. (Note: This same argument, which will be addressed later in the chapter, is used by those maintaining that a

violent/nonviolent felony classification ought to be drawn as determinative of whether deadly force is justifiable in the effectuation of arrest).

If the felony/misdemeanor distinction was considered at common law as determining against whom deadly force could not be used as a means of apprehension--namely a misdemeanant--it did not indicate without ambiguity, against whom such force might be used. The issue addressed here is the distinction between a felon-in-fact and an apparent felon. According to Finch (1976:364) and Day (1978), American courts have generally required that police officers "be certain, rather than reasonably suspicious" that a felony has been committed by the person they were attempting to arrest by means of deadly force. DeRoma (1971) however, maintains that most courts, in applying the common law, any-felony rule, have held that if the officer had "reasonable grounds" to believe that the perpetrator was a felon, the homicide would be justifiable. Moreover, if justified, the officer could not be held criminally liable. An instance of case law adhering to the standard of the officer's reasonable belief as determinative of whether deadly force is justified is found in the Illinois case, Fornuto v. Police Board, 1976:

> The fact that a police officer acted on the mistaken belief that a felony had been committed...by the subject in question does not defeat his justification for using deadly force, as long as the belief upon which he acted was reasonable given the circumstances of the situation (Schiller, 1978:10).

Other state courts require a felon-in-fact, regardless of the officer's perceptions at the time of the deadly force incident (DeRoma, 1970). Consequently, in these cases strict or absolute liability is imposed on police officers whether or not they acted "reasonably and in good faith."

Day's view (1978) differs somewhat from DeRoma's assessment of the judicial response to the actual-versus-apparent felony distinction. According to Day, if officers act in good faith, pursuant to a warrant for the arrest of the person shot, they are protected from both criminal and civil liability "even if the warrant is in error" (1978:291). However, without a warrant, the "majority of courts holds that in order to use deadly force to secure arrest, the person against whom the force is used must be a felon in fact" (Day, 1978:292). Citing Davis v. Hellwig (21 NJ 412), State v. Barr (115 Ariz. 346), and Piatkowski v. State (43 Misc. 2d. 424), Day maintains that at common-law, actual knowledge or virtual certainty by the police

officer that a felony has been committed is nearly universally required by the judiciary. He offers the rationale that "while probable cause is sufficient for arrest, our respect for human life is great enough so that we will not allow a police officer to use deadly force on that basis" (1978:293). Similarly, DeRoma (1970) sees the rationale for actual-felon, strict liability as resting on the traditional common law argument mentioned earlier: 1) it is not in the interest of public safety that a felon be at large, 2) the felon has already forfeited his or her life with the commission of the felony, but 3) if, however no felony is committed or if it is only suspected, principles #1 and #2 no longer apply, hence deadly force is not justified to apprehend the suspect.

A large minority of state courts, however, reject the doctrine of strict liability as it applies to police use of deadly force (Day, 1978). Citing Reese v. Seattle (81 Wash. 2d. 374) and Marty v. Donlin (151 Conn. 402) as examples of cases supporting the apparent-felon view, Day reports that some courts protect the police from criminal and civil damages if it can be shown that their mistake was reasonable. It is maintained by those courts rejecting the felon-in-fact requirement that such a doctrine is unfair to the police,

that is, second guessing their split-second decisions with hours of courtroom deliberation-- a liesure not allowed the officer. Second, it is argued that the felon-in-fact rule "impairs vigorous, productive law enforcement" because it may force officers to become overly cautious in the performance of their duty. (Day, 1978:294). In sum, most state and federal courts require that an actual felony be committed by the person against whom deadly force is being used to apprehend before the officer may justifiably pull the trigger.

A third restriction to the use of deadly force at common law under the any-felony rule is that, since the fourteenth century, it could be used only as a last resort; i.e., officers were, as they are today, required to exhaust all available alternative means short of deadly force to effectuate arrests (Geller and Karales, 1981; DeRoma, 1970; Day, 1978; Ronkowski, 1979; Finch, 1976; Schiller, 1978; Boutwell, 1977). The case most frequently cited in support of the requirement is Love v. Bass (529, 238 S.W. at 96) in which the prevailing opinion of the court maintained that there "must be no way short of deadly force of accomplishing arrest."

Day (1978:288) enumerates several factors that a court might consider in the determination of necessity to use deadly force to effect arrest at common law. Some of these are:

1) the distance between the arrestor and the arrestee;
2) the nature of the terrain (e.g., rough, smooth, hilly, flat) between officer and suspect;
3) the presence (or absence) of obstructions (e.g., fences, bushes, trees) which could prevent the arrestor from reaching the arrestee;
4) time of day (e.g., day or night) and;
5) whether the officers identified themselves as police officers and issued a command or a warning prior to discharging the firearm.

Geller and Karales (1981) add three more:

1) the number of police in the area and their location;
2) the number of hostile, friendly, or innocent by-standers in the immediate vicinity of the incident; and
3) weather and lighting conditions.

It is these considerations, as well as others, which are examined by the trial court to ascertain whether the

officer's use of deadly force to apprehend the suspect was "actually" as opposed to "apparently necessary."

Many legal authorities consider as a fourth restriction the requirement that the officer or third party be in "actual" as opposed to "apparent danger" by the presence of the suspect. However, this restriction in itself does not appropriately apply to the any-felony provision but more correctly to a defense-of-life doctrine which is discussed later. It is sufficient here to indicate only the types of circumstances the court may entertain in its determination of the extent of danger and thus the extent of justification of the officer's use of deadly force. Ronkowski (1979) notes three:

1) whether the suspect's weapon, if any, was observed,
2) whether the suspect was known to commonly carry a weapon, or
3) whether the suspect moved to use or threatened to use a weapon.

An interesting circumstance sometimes considered by the court is whether the officer made some attempt "to avoid the peril" altogether (Ronkowski, 1979:709). Life threatening situations often offer the choice of either retaliation or retreat; however, the option to retreat is usually not

available to officers because of their "legal duty to effectuate an arrest and because they are not required to retreat in the face of deadly force" (Ronkowski, 1979:709). Moreover, one legally justified in using deadly force is not required to afford a criminal opponent "the opportunity of a fair and equal struggle" (Ronkowski, 1979:709). It is only when a gross disparity exists in the opposing parties' use of force that will usually warrant the imposition of criminal or civil sanctions on the officer's actions (Ronkowski, 1979).

With regard to the "apparent" or perceived versus "actual" or real danger, the courts only require that the danger be apparent based on a standard of good faith and reasonable belief (People v. Kelly, 24 Ill. App. 3rd 1018, 1975). Nor must the officer's judgment to shoot as based on this belief be infallible (People v. Lenzi, 41 Ill, App. 3rd 825, 1976).

In conclusion, with regard to the distinction of "apparent" versus "actual" necessity--whether in reference to the felony/misdemeanor distinction, danger, or arrest--most states seem to hold that only apparent necessity is required toward justification of the use of deadly force at common law under the any-felony provision. The distinction

"seems in any case, to have been largely academic, no cases having been found in which it was crucial." (Day, 1978:289). Judicial findings that a shooting was unnecessary are extremely rare because: 1) they rarely appear so far out of line as to shock the conscience of a jury; 2) appellate courts are largely unwilling to reverse the verdict of a jury in civil cases; 3) courts are generally hesitant to second-guess or place their judgment ahead of the officer, who usually is confined by the circumstances to a split-second, shoot-don't shoot decision; and 4) most courts will defer to the legislature as being the appropriate mechanism for changing what might appear inappropriate or even unconstitutional common-law, any-felony statutes.

The Common-Law, Any-Felony Justification: An Historical Anachronism

Many legal scholars, a large minority of state legislatures, most large municipal police department executives, and federal law-enforcement agencies today view the common-law, any-felony rule as an historical anachronism. According to these authorities the various rationales underpinning this provision have been laregly undone by modern legal and technological developments. This section of the

chapter will explore those developments and their impact on the traditional common-law, any-felony justification for police use of deadly force, a rule still embraced by a majority of the American states.

One noteworthy technological change was the revolutionary development of weaponry in the nineteenth century. During the era of the medieval "hue-and-cry," most police-citizens were armed only with knives, swords, or farm implements. Not until 1415 was the long bow invented and even though the crossbow became a common weapon in 1504, it was restricted to the upperclass (Sherman, 1980). In the time of early common-law then, the practical meaning of deadly force was that "suspects would be killed only if they resisted in hand-to-hand struggle" and not from behind at a distance while in flight (Sherman, 1980:73). The invention and dumping of thousands of long guns and revolvers on the open market immediately after the American Civil War of course drastically and irrevocably altered the meaning of deadly force at the common law: Shooting felons in flight became a more common practice.

A second historical development was the change in the legal definition of a felony. Early common law distinguished all criminal offenses by three classes: 1) treason; 2) felony; or 3) misdemeanor. As indicated

earlier, the number of felonies--all punishable by death--were seven to nine in number depending on the authority cited. To repeat, they included murder, manslaughter, arson, rape, robbery, burglary, larceny, prison breach, and harboring or rescuing a felon. The rationale behind the state's use of deadly force to apprehend a fleeing felon was primarily penal in character-- "but a premature execution of the inevitable judgment" (DeRoma, 1979:68).

With the advent of the latter half of the nineteenth century, however, the scope of felony offenses had expanded greatly while the scope of capital felonies had contracted. By then, only treason and crimes immediately endangering life or bodily security (i.e., murder, manslaughter, and rape) were punishable by death upon conviction in many states, e.g., Michigan in 1847, Wisconsin in 1853, and Maine in 1887 (Finch, 1976; Sherman, 1980; Geller and Karales, 1981). By 1900 these three states along with several others had abolished capital punishment altogether.

The creation of new felonies (i.e., the increased designation of "felony" to crimes not considered capital offenses by the state) without an accompanying change in the rule permitting the use of deadly force to arrest fleeing felons led to more frequent police-citizen encounters

creating "a gross difference in proportion between the severity of the post-trial period penalty and the severity of the penalty for attempting to escape arrest" (Sherman, 1980:76). Hypothetically, a police officer, with perfect legal justification, could shoot and kill a fleeing embezzler or tax evader (or any felon not posing an immediate threat to life or bodily security) if he could not effect capture with any available, alternative means. Coupled with the advent of the revolver, the expanding scope and potency of the any-felony rule fundamentally undermined the meaning of justified police use of deadly force in America (Sherman, 1980).

A third and last development that contributed to the undoing of the traditional any-felony rationale was the bureaucratization of policing and the consequent rise in the capability of communication between police agencies (Sherman, 1980). At the time of the early development of common law, there was "virtually no communication among law enforcement officials" in different communities (Sherman, 1980:73). As mentioned earlier, in the eleventh century, a felon who successfully eluded capture could flee to neighboring communities with little fear of facing justice. However, with the invention of telecommunications

(specifically the telegraph, radio, and telephone) at the beginning of the nineteenth century, such a possibility became much more remote. Sherman, thus, maintains that:

> The effect of the increasingly sophisticated apprehension techniques due to enhanced communication between police agencies meant that it was no longer absolutely necessary to kill a suspect if his identity were known, in order to insure his eventual capture (1980:76).

It should be noted that these fairly substantial changes in technology coupled with the expanded scope of the non-capital felony, the contraction of the number of capital felonies, and the demise of capital punishment in several states did not go unnoticed by the American press or the courts (Sherman, 1980). As early as 1858, the New York Times questioned, upon constitutional grounds, one of the first police shootings to occur in that city (Sherman, 1980). The State Supreme Court of Alabama in 1888, noting "the legislative inflation of crimes to felony status" (Storey v. State, 71 Ala. 329, 340; 1882) restricted the common-law, any-felony provision by prohibiting the use of deadly force by police to prevent secret felonies not involving force or violence (Sherman, 1980:77).

By this time, the British, unlike their American law enforcement counterparts, had already experienced a change

of heart having "effectively abandoned the absolute right to kill to prevent felonies or apprehend felons" (Sherman, 1980:77). Replacing the any-felony stipulation with a balancing test "emphasizing necessity and proportion" (Sherman, 1980:77) -- a rule consonant with retributivism or a principle of fairness in the theory of punishment -- the courts in Regina v. McKay (V.R. 560, 572-73, 1957) maintained that "(I)t cannot be reasonable to kill another merely to prevent a crime, which is directed only against property." Again, according to Sherman, this principle was so well established in English case law by 1879 that it was taken by the Criminal Code Bill Commission as a "great principle of common law," namely that the "'mischief done by the use of force to prevent crimes should not be disproportioned to the injury or mischief which it is intended to prevent'" (Regina v. McKay, 1957:572-73 in Sherman, 1980:77). At bottom, at English common law as early as 1879, while deadly force by the state was allowed to prevent crimes against a person's bodily safety, such force was not allowed to prevent property crimes or to apprehend the perpetrators of those crimes.

Moreover, Sherman (1980:77) even questions whether there ever was an any-felony rule at common law in the early

English tradition. In evidence he maintains that "a close reading of the original common-law codifers Foster, Blackstone, Hawkins, and others reveals...many internal contradictions and exceptions to the right to kill all felons" (Sherman, 1980:77). In addition, he cites the Criminal Law Revision Committee Report (1965) to Parliament. Quoting sporadically, he states the Committee reported that:

> despite 'old authority' for the right to kill all felons, 'the matter is very obscure; owing no doubt to the restraint of the police there is a dearth of modern authority on it;' and concluded that their central proposal to reclassify crimes would have no effect on police powers since 'the likelihood that anything would turn nowadays on the distinction between felony and misdemeanor is very slight' (Sherman 1980:77-78).

DeRoma (1970) corroborates, at least in part, Sherman's contention as to whether any any-felony rule ever existed in a consistent form at common law. Quoting an article in the Virginia Law Review, he offered that:

> The term felony long ago lost its original and characteristic meaning. In the early common law it denoted those offenses which were punishable by forfeiture of lands and goods. This was the only test. The criterion of felony was not the character or degree of the unlawful act, but rather the penal consequence of forfeiture. At a later period those crimes which worked a forfeiture were spoken of as felonies, and eventually the actual

> crime committed was designated by the word felony. These crimes were of such a nature that capital punishment was often superadded, according to the degree of guilt, and in time felony erroneously came to include all crimes punishable by death (Legalized Murder of a Fleeing Felon, 15 Va L. Rev. 582, 583, 1929).

Consequently, DeRoma maintains that the definition of a felony had been distorted over time and erroneously assumed by early English legal authorities to include only those crimes punishable by death (not mere confiscation of lands and property), thereby making the use of deadly force to apprehend any fleeing felon more intellectually palatable (DeRoma, 1979).

In conclusion, if the any-felony rule is historically anachronistic as a justification for police use of deadly force, it poses serious moral, legal and practical implications for law enforcement in this country when one considers that approximately half of this nation's state legislatures embrace some codified variation of that rule. As Sherman (1980) maintains, even though it is very slight that anything in England today with regard to police use of deadly force would turn on the felony/misdemeanor distinction, such a distinction is anything but slight in the United States.

Statutory Restrictions to the Use of Deadly Force

The regulation of police use of deadly force by state legislatures across the U.S. can be roughly classified as one of three types of legislation. These categories are: 1) a simple codification of the common-law, any-felony provision or adherence to any-felony case law, 2) the adoption of the Model Penal Code or a variant of it, and 3) the stipulation of forcible felonies (i.e., the "forcible-felony rule). A fourth classification of deadly force policies, commonly referred as the self-defense or defense-of-life doctrine will also be discussed in this section even though no state at present has enacted such a provision as governing the police use of deadly force. The introduction of its discussion (of both its practical and constitutional virtues) at this point is done primarily as an acknowledgment of the defense-of-life doctrine as a reasonable statutory alternative to existing law. (As will be shown shortly, this rule has been adopted either de jure or de facto by several police departments across the country.)

Depending on the authority cited, each of the fifty states fall into one of these classifications. According to DeRoma (1970), by 1970 only 25 states had statutes dealing with the justifiable use of deadly force with four of these

embracing the forcible-felony rule. The remaining half of the states, in the absence of legislation, relied on appropriate case law. By 1976, Finch (1976:368-369) reported that 37 states had enacted justification statutes limiting the use of deadly force by police officers to effect arrest; 24 of these by codification of the common law, any-felony rule, and seven others by specifying forcible or violent felonies. A year later, Boutwell (1977:30) indicated that 38 states had laws limiting the police use of deadly force, 24 by common-law codification, seven by ennumerating forcible felonies and seven others embracing a variant of the Model Penal Code.

Day (1978:541-542) makes a fuller account for 1978 maintaining that historically 50 states had minimally adopted the common-law distinction prohibiting the use of deadly force by common-law, any-felony codification, nine states employed the forcible-felony rule, and another nine operated under the guidance of the Model Penal Code. Seven states still relied on case law and the remaining five, while having statutes regulating the use of deadly force to prevent the commission of a felony, had no legislation with regard to the apprehension of the fleeing felon. By Sherman's account (1979:581) for the same year however, ten states employed the forcible felony rule, eight followed the

Model Penal Code restriction, and 24 the common-law, any-felony rule.

For 1981, Geller and Karales (1981:25-27) list 29 states following the common-law, any-felony rule: 22 by codification and seven by case law. States with common-law codification include Alabama, Arizona, Arkansas, California, Connecticut, Florida, Idaho, Indiana, Kansas, Mississippi, Missouri, Nevada, New Hampshire, New Mexico, Oklahoma, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Washington and Wisconsin. The seven states restricting police use of deadly force by any-felony case law include Maryland, Massachusetts, Michigan, Ohio, Virginia, West Virginia and Wyoming. Twelve states adhere to the Model Penal Code restriction and include Alaska, Colorado, Delaware, Hawaii, Iowa, Kentucky, Main, Minnesota, Nebraska, North Carolina, North Dakota, Texas, and the District of Columbia. The nine remaining states have forcible/violent felony legislation and include Georgia, Illinois, Louisiana, Montana, New Jersey, New York, Oregon, Pennsylvania, and Utah.

Common-Law, Any-Felony Rule: Michigan

Given the rather detailed discussion of the common-law, any-felony provision in the preceding section, it will not

be necessary to review it here. It shall only be noted that almost three-fifths of the states of the union presently operate under this justification restricting police use of deadly force either by simple codification of the rule or by reliance on past case law which embraces the doctrine.

As indicated above, the State of Michigan assumes the any-felony rule justification coterminous with the latter. Though legislation aimed at governing the police use of deadly force is presently being considered by the state legislature, no statute as yet exists which accomplishes this purpose.

Law restricting the police use of deadly force in Michigan relies primarily on two court decisions, DeLude v. Raasaka (391 Mich. 296, 1974) and People v. Gonsler (251 Mich. 443, 1930) and to a lesser extent on Firestone v. Rice (71 Mich. 377, 1888), People v. McCord (76 Mich. 200, 1889), People v. Perez (66 Mich. App. 685), and People v. Doss (406 Mich. 90). (State of Michigan Civil Rights Commission Report; May 18, 1981, (heretofore cited as SMCRCR, 1981). DeLude dictated that the use of force by an officer be "necessary" for the apprehension of a fleeing felon (SMCRCR, 1981). The Firestone and Gonsler courts ruled that an officer's use of deadly force must have "'honestly appeared to him at the time to be reasonable and right'" (SMCRCR,

1981:11). Michigan courts have also applied the general self-defense justification as controlling, in part, an officer's use of deadly force. The justification, noted in People v. Perez, "'is based on circumstances as they appeared to the victim, and not as they actually existed'" (SMCRCR, 1981:11). The evidence standard, the officer's reasonable belief that he or she or an innocent third party is in danger of bodily harm or death, places Michigan in that category of states accepting "apparent" as opposed to "real" danger as controlling in the instant case. With regard to effecting an arrest, Doss allows the officer the privilege to use force that is "'reasonable under the circumstance'"; the "reasonableness of the force used must be judged 'in light of the circumstances as they appeared to the officer at the time he acted'" (SMCRCR, 1981:11).

In sum, Michigan police officers as governed by state standards alone are allowed to use deadly force to apprehend any fleeing criminal suspect if: 1) the officer reasonably believes the suspect has committed a felony; and 2) the officer has no other available, alternative means of apprehending the felon, or 3) if, in the officer's view, the suspect, whether misdemeanant or felon, poses a serious threat to life or bodily security to the officer or others in attempting to elude apprehension. As discussed later in this chapter, many police departments in Michigan and most

large departments across the country have much more restrictive policies governing the use of deadly force by their officers.

The Model Penal Code Provisions

While the Model Penal Code (M.P.C.), adopted in 1962 by the American Law Institute, covers such situations as police use of force to prevent escape from custody or to prevent suicide or the commission of a crime, the features pertinent to the present discussion pertain to the use of and limitations to force justifiable to effect an arrest. These relevant features are presented below:

> Section 3.07 Use of Force in Law Enforcement
>
> 1. Use of Force justifiable to Effect an Arrest. Subject to the provisions of this Section and of Section 3.09, the use of force upon or toward the person of another is justifiable when the actor believes that such force is immediately necessary to effect a lawful arrest.
>
> 2. Limitations on the Use of Force.
> a. The use of force is not justifiable under this Section unless:
> (i) the actor makes known the purpose of the arrest or believes that it is otherwise known by or can not reasonably be made known to the person to be arrested; and
> (ii) when the arrest is made under a warrant, the warrant is valid or believed by the actor to be valid.

> b. The use of deadly force is not justifiable under this Section unless:
> (i) the person effecting the arrest is authorized to act as a peace officer or is assisting a person whom he believes to be authorized to act as a peace officer;
> (iii) the actor believes that the force employed creates no substantial risk of injury to innocent persons; and
> (iv) the actor believes that:
> (1) the crime for which the arrest is made involved conduct including the use or threatened use of deadly force;or
> (2) poses a substantial risk that the person to be arrested will cause death or serious bodily harm if his apprehension is delayed (Emphasis added). (Model Penal Code, Section 3.07), (1), (2ai), (2aii), (2bi), (2bii), (2biii(1)), (2biii(2)), Proposed Official draft, 1962).

The philosophy or rationale for the Model Penal Code is that, rather than concentrating on the technical distinction of a criminal act as a felony or a misdemeanor as grounds for using deadly force, the direction of focus is to a balancing of interests: namely the "need for apprehension of felons-at-large, the safety of the arresting officers, and the value of human life" (Finch, 1976:369). The key departure from the any-felon rule at common law is that under the M.P.C., the use of force is justified only in situations where the felony involves violence--either real or threatened, or when a delayed apprehension of the felon

is likely to result in death or bodily harm of the police officer or third parties; i.e., that the person committing the felony is "likely to kill or maim in the immediate future" (Geller, 1981:27). Or, as DeRoma maintains in quoting the M.P.C. Tentative Draft (Comment 3:58-59), "'the use of deadly force should only be justified in those situations where the immediate apprehension of the person to be arrested overrides all competing considerations'" (1970:84).

Since its promulgation by the American Law Institute in 1962, the Model Penal Code has engendered widespread support not only from several legal scholars but from at least a dozen state legislatures as well. Yet, over the last five years, it has also reaped its share of critics. Regardless of its supporters' claims that the Code effectively abandons the felony/misdemeanor distinction, a reading of 3.07, 2.b.i., clearly shows this is not the case. The officer still must satisfy the common-law obligation of determining whether the suspect is in fact a felon.

Second, he must determine whether this felon either used or threatened to use force in the commission of the crime (usually not a difficult task) or is likely to cause death or serious bodily injury if not immediately apprehended

(often an impossible task) (3.07).2.b.iii (2) respectively) (Geller and Karales, 1981). Determining "substantial risk" of future danger is probably the most severe criticism of the Code,

> "as elaborate and expensive clinical experiments in predicting violent recidivism by parole applications have shown, our country's most qualified analysts are remarkably unable to accurately forecast dangerousness" (Geller and Karales, 1981:27).

Even an overt violent act committed before the officer might be an erroneous predictor of future violence:

> Certain types of extremely violent offenders, such as spouse killers, may not be likely to go out and kill again, yet the gory scene of the crime might well lead any person automatically to conclude that the perpetrator must be captured immediately with whatever force is required, particularly if the observer does not know at the time that this is a spouse killing (Geller and Karales, 1981:28).

Police officers in good faith and on reasonable belief cannot be expected to make better predictions with the time usually allowed them--which is usually a matter of seconds, not weeks or months: They, in effect, need a crystal ball (Geller and Karales, 1981).

Finally, Sherman (1980) maintains that not only is the Code's restriction on police use of deadly force impractical, but that it is unconstitutional as well. It is impractical because it requires "too much guessing and analysis...for an emergency situation" usually requiring split-second decisions; it "requires evaluation of all the details of the suspect's conduct" (Sherman, 1980:99). It is unconstitutional because the defense-of-life doctrine is the "only constitutional alternative..." anything else constitutes execution without trial, in violation of the Constitution (Sherman, 1980:97). Presumably, the Model Penal Code fits the category of "anything else."

The Forcible-Felony Rule

On the surface, a forcible felony statute may closely resemble the Model Penal Code restriction on police use of deadly force. For example, the Illinois statute (Ill. Rev. Stat. ch 38, 7-1 through 7-9) allows the use of deadly force 1) to either arrest a "forcible felony" suspect (one who has used, threatens to use, or indicates the likelihood of inflicting "great bodily harm unless arrested without delay") or 2) by specifying certain felonies for the commission of which deadly force may be used in effecting an

arrest (Popek, 1979). As defined, forcible felonies generally include murder, voluntary manslaughter, rape, robbery, burglary, arson, kidnapping, aggravated battery and "any other felony which involves the use or threat of physical force or violence against an individual" (emphasis added) (Popek, 1979:543).

Of the nine states operating under a forcible felony statute, few have "pure" forcible-felony provisions, i.e., a simple enumeration of those felonies involving force or violence for which a police officer may use deadly force to apprehend the felon. Most are a hybrid of forcible-felony enumerations and the Model Penal Code restrictions (Geller and Karales, 1981:29). The philosophy underpinning forcible felony statutes is to abandon the common-law, felony/misdemeanor distinction as codetermining the justification for police use of deadly force in favor of a violent/nonviolent felony distinction; that is, allowing deadly force to apprehend the violent but not the nonviolent felon at large. The distinction simply "enumerates certain 'forcible' felons whose unco-operative perpetrators may be stopped dead in their tracks" (Geller and Karales, 1981:28).

As with the Model Penal Code, forcible-felony statutes have their share of detractors. First, a forcible felony

connotes crimes of violence directed against a person, not property. Yet many of those nine states with forcible-felony statute enumerate burglary--a crime often involving neither force nor violence--among its lists of forcible or violent felonies. In fairness, however, it should be noted that some of these states have legislation refining burglary as a night-time, residential offense (Geller and Karales, 1981). However, even in these cases, the likelihood of the burglar being armed, using force, or threatening violence is at best speculative. It is for this reason that Model Penal Code advocates criticize the forcible-felony rule as:

> restricting the use of deadly force to situations in which a certain designated felony was committed, without any regard to the nature of and the circumstances surrounding that particular act, (thus, the rule) could result in unjustifiable killings (Popek, 1979:543).

In the case of the night-time, residential burglary it might be that the house is unoccupied and unlocked, the perpetrator unarmed and nonthreatening. Yet, shooting the perpetrator is technically justified under the rule.

A second and more practical difficulty with the forcible-felony rule is that it "imposes a burden on police in the heat of pursuit to stop and go through a mental

checklist of what type of suspects may be shot" (Geller and Karales, 1981:29). Based on an informal survey of New York City police officers who as it turned out, could not accurately recall the specific forcible felonies, Sherman (1980) concluded that it was impractical to enumerate the felonies privileging the use of deadly force. Some forcible-felony states train their police officers to memorize these felonies authorizing justifiable use of deadly force by acronyms (e.g., the acronym MA M BARKER indicates the felonies Murder, Arson, Mayhem, Burglary, Aggravated Battery, Rape, Kidnapping, Extortion, and Robbery; Boutwell, 1977:31). In short, the police officer is asked to make split-second decisions "with life or death in the balance", decisions attorneys, juries, and judges take days or weeks to decide (Geller and Karales, 1981:29). What must be determined under the forcible-felony rule is "whether all the technical elements of an offense were present and to ensure that various affirmative defenses are inapplicable before convicting a defendant" (Geller and Karales, 1981:29). An officer is expected to make this decision under less than ideal circumstances: the primary constraints of course are the lack of time and incomplete knowledge of special, perhaps mitigating circumstances surrounding the incident.

Finally, some (e.g., Sherman, 1980:97) maintain that the forcible-felony rule, like the common-law, any-felony rule and the Model Penal Code restrictions, is unconstitutional because it denies suspects their Fifth and Fourteenth Amendment rights to due process, imposes cruel and unusual punishment as proscribed by the Eighth Amendment, and appears to deny equal protection to blacks.

Defense-of-Life Rule

Another trend, though one with little support, is the adoption of a defense-of-life policy by a handful of police departments. This doctrine "permits the use of deadly force to arrest by an officer who eyewitnesses an immediate threat to life" (Geller and Karales, 1981:39). This policy, long advocated by several criminal justice practitioners and scholars (see Geller and Karales, 1981:40), has been the only deadly force policy used by the F.B.I. since 1972 (Sherman, 1980). According to DeRoma (1970:77), Texas may have even had a "self-defense" statute since at least 1970 which prohibits the use of deadly force against either an arrestee or an escapee (excepting prison breach) "unless the officer's own life is endangered, or he is threatened with a great bodily injury". This statute's focus is on "the

dangerousness of the arrestee vis-a-vis the police officer and not on the statutory classification of the criminal's act as a felony or misdemeanor" (DeRoma, 1970:77).

According to Geller and Karales (1981) the defense-of-life rule is followed by the Houston, San Jose, and Reno, Nevada police departments as well as "nine of every ten" city departments in San Diego County, California (Geller and Karales, 1981:40 citing Sherman, 1979:92). Fyfe is quoted by Geller and Karales (1981:40) via personal communication (March 22, 1981) that several municipal departments listed above (e.g., New York, Atlanta, Detroit, Oakland, New Orleans, and Washington, D.C.) have de facto defense-of-life policies.

There are several practical as well as legal arguments in support of the adoption of a defense of life policy. We will look presently at the practical reasons, addressing the legal arguments in the last section.

Proponents maintain that if the state adopts a defense-of-life policy, it could simply abolish its current deadly force statutes--whether common-law, forcible-felony or Model Penal Code--and rely on the self-defense portion of the criminal code to control in all cases of deadly force by both police officers and civilians (Geller and Karales,

1981). Second, such a policy would eliminate all of those practical difficulties posed by the Model Penal Code and forcible-felony restrictions discussed earlier. Since the defense-of-life rule requires the danger to be immediate, it requires no crystal ball predictions by the officer. It is no less difficult, for example, to predict whether a fleeing felon is likely to kill or maim than that of a paroled felon (Sherman, 1980). In addition, it eliminates the need to evaluate all the details of the suspect's behavior. All the officer needs to ascertain is whether his or her life or bodily security or that of another is in immediate danger. Moreover, such a policy eliminates the principal problems posed by forcing officers to memorize a list of forcible or violent felons (Sherman, 1980). It also makes no requirement of the officer to determine whether a felony has been committed. The only significant feature of the incident, whether felony or misdemeanor, is whether police officers perceive "immediate danger" to themselves or others; at bottom, "the nature of the crime is superseded by the threat to life" (SMCRCR, 1981:22). In addition, because the defense-of-life doctrine would include

> any situation in which the officer defends himself or herself from deadly force (and since) the officer has a legal

> duty to protect others from threats to person, the officer may also act for other persons (SMCRCR, 1981:23).

The implication, of course, is that the existing self-defense statutes in each state would extend to police officers firing not only in self-defense but also in defense of others.

Finally, it is maintained that this doctrine affords no less protection to the officer or third parties than does the common-law, any-felony statutes. The officers respond to overt attempts on theirs and others' lives or bodily security. The major practical restriction on the officer's conduct is simply the policy's prohibition against shooting at nonviolent or nonthreatening suspect, whether misdemeanor or felon.

The practical virtues of the defense-of-life doctrine aside, many writers maintain that, in virtue of the legal and moral difficulties of a deadly force policy which allows the killing of property offenders and nonviolent felons, the defense-of-life policy is the only constitutional alternative. Sherman (1980), Popek (1979), Finch (176), and the State of Michigan Civil Rights Commission (1981) are only a few of the many advocates of this change. It is from this work, however, particularly Sherman's that we briefly

characterize the two constitutional virtues of this approach to restricting police use of deadly force.

First, it is not penal in nature, i.e., it does not constitute punishment. As a self-defense response the officer is taking individual, not state action. The right to life is fundamental and the right to defend it need not be granted by the state. Moreover, its defense is something the state may not restrict and both police and citizens are defended under the same basis of evidence--the eyewitnessing of an immediate threat to life or bodily security. In fact, Sherman claims the defense-of-life is far from punitive; it is preventive in that "(I)t uses an overt act, e.g., the refusal to drop a gun on command as evidentiary basis for preventive action" (Sherman, 1980:98). In further support of its nonpenal character, Sherman notes that:

> by preventing the consummation of a violent crime threatened by an overt act, the defense-of-life killing looks toward the offender's future behavior and not toward his past (1980:98).

In addition, if the defense-of-life doctrine is nonpenal in nature, objections that police shootings are inherently cruel or disproportioinate to the conduct to which it responds are by definition moot.

Second, the doctrine does not violate due process rights such as a right to trial (Sherman, 1980). As an individual and not a state action, "self-defense killings do not deprive citizens of rights on behalf of the state, but merely on behalf of protecting their own rights" (Sherman, 1980:98). The state of Michigan Civil Rights Commission adds that:

> There can be no question that the officer should retain this right to defense of self and others. Failure to do so would provide a lower legal standard of protection for the officer than any other person in the state enjoys. Further, the defense of others is a necessary part of the officer's role...(SMCRCR, 1981:23).

In sum, the defense-of-life doctrine makes no requirement that the officer ascertain whether the offense allegedly committed by the suspect be a felony (violent or nonviolent). In fact, no weight at all is given to the suspect's past behavior as it relates to the situation in which the officer present at the scene finds himself or herself. The constitutional concern is only that the officers have the right to defend themselves and the duty to defend third parties from death or serious bodily harm when effecting the arrest of the suspect.

Deadly Force Policy: A Schematic Summary

Upon reflection, several factors should be considered in any attempt to describe deadly force policy. These factors might be organized in the following way:

1) Force against a person
    a) about to commit an offense
    b) is committing an offense
    c) has committed an offense
2) Kind of offense
    a) any offense
    b) any felony
    c) any violent felony
    d) any felony punishable by death
3) Status of the offender
    a) fleeing
    b) not fleeing
    c) resisting
    d) not resisting
    e) using or threatening use of deadly force against officers or third parties
    f) not using or not threatening use of deadly force

4) Grounds for arrest re (1) and (2)

   a) a warrant

   b) probable cause

   c) suspicion

5) Degree of officer belief re (3)

   a) occurring or immediate

   b) reasonable belief of substantial risk

   c) good faith

6) Officer's alternatives

   a) last resort

   b) others short of last resort

While these factors can be combined to construct various alternative deadly force policies, our concern is to depict the ones previously discussed. For example, the common-law, any-felony rule would have the following minimum construction:

1c + 2b + 3a +4 (a or b) + 6a.

In other words, a police officer may use deadly force as a last resort to effect the arrest of a suspect on whom he has a warrant or probable cause to belief that the suspect committed or is committing any felony. Moreover, the suspect must be fleeing or resisting arrest.

The Model Penal Code, adopted by 12 states (Geller and Karales, 1981) would have the following structure:

1c + 2c or (3e or 5b) + 4 (a or b) +6a.

Under the Model Penal Code, officers may use deadly force as a last resort to effect the arrest of a suspect on whom they have a warrant or probable cause to believe that the suspect committed a felony involving the use or threatened use of deadly force, or who poses a substantial risk of death or serious bodily harm to the officer or third parties if the arrest is delayed.

The forcible-felony rule while similar is different in one important respect; this difference can be structurally depicted as follows:

1 (b or c) + 2c + 3 (a or c) + 4 (a or b) + 6a.

Thus, at minimum, the forcible-felony rule allows officers to use as a last resort deadly force by virtue of a warrant or probable cause to effect the arrest of a suspect who has committed a violent felony and is fleeing or resisting to elude capture. The defense-of-life doctrine simply consists of:

3c + 5a + 6a.

That is, officers are allowed to use deadly force regardless of whether an offense has been committed, and if so, regardless of the severity of the offense or whether they have a warrant or probable cause to believe the suspect committed the alleged offense. Only three constraints exist:

1) the suspect is using or threatening the use of deadly force against the officer or others, 2) this use or threatened use must be immediate, and 3) the use of deadly force by the officer must be a last resort measure.

Police Department Policies

In previous research, several authors have admirably discussed the content of most large metropolitan and county police departmental deadly force policies across the country (Finch, 1976; Boutwell, 1977, Milton et al., 1977; Fyfe, 1978; Popek, 1979; Sherman, 1979; and Geller and Karales, 1981). This section will only highlight the assessments of some of these writers in an effort to summarize for the reader the general state of restrictiveness of most departmental policies.

Though rating the restrictiveness of a police organization's deadly force policy "is extremely difficult" (Geller and Karales, 1981:34), several features of various policies can be enumerated. A highly prominent feature is that of those departments that have written policies -- and most do (Finch, 1976) -- the policy appears more restrictive than the respective statute or case law (Geller and Karales, 1981: Milton et al., 1977; Popek, 1979; Sherman, 1979).

Both Sherman (1979) and Popek (1979) seem to suggest that the greater restriction at the departmental level is at least a consequence of community demands and seems to have the general support of the local citizenry. Albeit some of these policies are too vague or general to be of much guidance to the officer (Milton et al., 1977), most are more specific than either statutes or controlling case law (Geller and Karales, 1981). A few even provide affirmative guidelines, i.e., when deadly force should be used; this approach is largely ignored by statute and case law, which usually prescribe certain uses of deadly force (Geller and Karales, 1981).

It is also generally the case that those departments abandoning the common-law, any-felony rule have adopted the Model Penal Code restrictions (Finch, 1976; Geller and Karales, 1981). These departments include Boston, Oakland, San Francisco, Minneapolis, Minnesota Highway Patrol, Charlotte and Durham, N.C., and New Haven (Geller and Karales, 1981). Of course, a few., e.g., Memphis and St. Louis still operate under the any-felony provision while a few others have a mixed forcible-felony/Model Penal Code policy (e.g., Buffalo, Detroit, Seattle, and Chicago) (Geller and Karales, 1981).

With regard to warning shots, most departments in large, highly populated, metropolitan settings either prohibit entirely or at least caution the officer against their use (Geller and Karales, 1981). The reason for this proscription, according to Geller and Karales (1981), are several: Warning shots may cause the suspect to return fire, run faster, afford a cover story for an officer who fired to kill and missed, or hit an innocent bystander. In addition, warning shots may cause other police officers to shoot to kill a fleeing suspect thinking the previous warning shots were also intended to kill (Chapman, 1967). Geller and Karales (1981:36) enumerate at least 23 major cities prohibiting warning shots including Detroit, New York, Atlanta, San Diego, Denver, Portland, Kansas City, Los Angeles, and Birmingham. These and other departments also strongly advise against firing at or from moving vehicles due to risks to passers-by, to enhanced markmanship difficulties, and risks of auto accidents (Geller and Karales, 1981).

Most all departments with any-felony restrictions permit deadly force only after all available means of effecting an arrest have been exhausted (Geller and Karales, 1981). Some departments with slightly altered any-felony guidelines require "virtual certainty" that a felony has been committed

before an officer is allowed to use deadly force. Other departments (e.g., Los Angeles, Birmingham, Oakland, and Kansas City) prohibit the use of deadly force against fleeing nonviolent juvenile felons (Geller and Karales, 1981:37). The Kansas City, Oakland, San Francisco, Dallas, Atlanta, New Orleans, Honolulu, Phoenix, Portland, and District of Columbia police departments further prohibit the discharge of a firearm at any fleeing, nonviolent, burglary suspect.

While several writers have indicated a strong preference for and some even demonstrating evidence that restrictive departmental firearms policies would dramatically reduce the number of police homicides (Fyfe, 1978; Sherman, 1980; Geller and Karales, 1981), Popek (1979:547) argues otherwise:

> although it may be suggested that the internal adoption of a written policy that essentially embodies the Model Penal Code rule will solve the problem of the use of deadly force by the police without court intervention, inconsistent and arbitrary enforcement of the policy would defeat such an ideal. Where disciplining is left solely in the hands of a chief of police who may not support such a policy, or where no penalties are attached to violations of the regulations, the adoption of such policies by police departments, without court interpretation that

> such policies are constituionally mandated, may only be illusory.

Popek's suggestion seems to be that the monitoring and enforcement of the Code restrictions -- or any other policy more restrictive than controlling statutes or case law -- if only done so internally, will not necessarily produce compliance. Her suggestion amounts to a call for agents or individuals outside the formal police organizational structure to participate in the monitoring and review responsibilities to insure officer compliance and assessment of penalties in instances of noncompliance.

Liability Issues

A police officer using deadly force may incur civil or criminal liability under any number of negligent situations. It will be the purpose of this section to mention only a few of these. The negligent use of deadly force is generally restricted to "instances where an officer had a legal right to use his firearm, but did so without exercising reasonable care to avoid injury to innocent by-standers" (Michigan Police Advisor, Civil Liability Report, 1981:305); heretofore cited as Civil Liability Report, 1981). Negligence can be distinguished as both the unintentional and intentional

discharge of a weapon (Civil Liability Report, 1981). Under unintentional, negligent firing, an officer may incur liability due to horseplay (Marlin v. Garlotte, 270 So. 2d. 252, 1973), mishandling the weapon during arrest (Greggo v. City of Albany, 58 AD. 2d. 678, 1977) and while off-duty -- even when the officer was not the one firing his or her own weapon (Denby v. Sheridon, 3 Mich. App. 641, 1966) (Civil Liability Report, 1981).

Under circumstances of intentional discharge, an officer may be liable to both civil and criminal charges when 1) firing warning shots (Jones v. Wittenburg University, 534 F2d 1203, 1976), 2) failing to properly observe the line-of-fire (Davis v. Hellwig, 21 NJ 412, 1956), 3) firing indiscriminately (Jones v. State of New York, 352 NYS 2d. 269, 1973), 4) firing at the wrong person (mistaken identity) (Helsey v. County of Kern, 116 Cal. Rptr. 518, 1974), or 5) firing under the mistaken impression that the opponent is armed (Clark v. Ziedons, 513 F.2d 70, 1975) (Civil Liability Report, 1981) In addition, an officer may be found negligent for firing a weapon based on the incomplete or inaccurate information that the suspect is a felon, firing at or from an automobile, or firing at a fleeing misdemeanant. (Civil Liability Report, 1981).

Liability issues of course are a major concern of law enforcement administrators and of interest to them are two questions (Boutwell, 1977). First, if a police officer is sued for the use of deadly force, will the departmental firearms policy be admitted as evidence? Second, if the departmental policy is more restrictive than the existing deadly force statutes, will such admission create liability where none otherwise existed?

With regard to both questions, the response depends upon the state in which the shooting occurred (Boutwell, 1977). In Florida for example, (City of St. Petersburg v. Reed, 330 So. 2d. 256, 1976), the appellate court in reversing judgment against the officer maintained the trial court was in error in admitting the more restrictive policy because, it argued, departmental policy and regulations serve as standards to discipline, and not as standards to measure an officer's criminal or civil liability (Boutwell, 1977; Sherman, 1979). Consequently, state standards were found controlling in Florida. Further, an officer can raise a good faith defense against wrongful death if the local police department misinterprets the state law restricting police use of deadly force (Landrun v. Moats, 576 F.2d 1320, 1978).

In California, on the other hand, the State Supreme Court in Grudt v. City of Los Angeles (468 P.2d. 825, 1970) held that the department firearms policy may be introduced as evidence of alleged negligence in wrongful death suits (Boutwell, 1977; Sherman, 1979). Tennessee, likewise admits the more restrictive policy as evidence (Garner v. Memphis Police Department, 600 F.2d. 52, 1979).

If the policy is more restrictive than required by state law, courts may adopt the policy restrictions as controlling in the determination of civil damages against the officer and the city for which he or she works (Boutwell, 1977). And even though many courts refuse to do so (e.g., City of St. Petersburg v. Reed) in deference to the legislature, some police departments are still reluctant to introduce more restrictive deadly force policies. The primary reason for the apprehension is the fear that to do so would simply invite still more civil suits and judgments in the wake of police shootings (Sherman, 1979). For example, in Long Beach Police Officers Association v. City of Long Beach (61 Cal. App. 3d 364, 1976) a police union unsuccessfully challenged the department's more restrictive firearms policy on the grounds that "by subjecting the officers to greater civil liability, the policy in effect, deprived them of property without due process (Sherman, 1979:502). In a related

case, Peace Officers v. City of San Jose (98 L.R.R.M. 2171), the court held that department management did not have to bargain with the union over firearms policies (Sherman, 1979).

Judicial Response to Police Use of Deadly Force

In this section the discussion centers on federal constitutional challenges to common-law, any-felony justifications of police use of deadly force. Federal suits in this area are commonly characterized as government interests versus individual, fundamental rights.

Four basic government interests or goals can be advanced for retention of a state's common-law, any-felony statues:

1) the interest in specific deterrence or the prevention of future crimes by the fleeing felon (Finch, 1976:371; Geller and Karales, 1981:45; Popek, 1979:570);

2) the interest in general deterrence or the discouragement of crimes by others (Geller and Karales, 1981:45; Popek, 1979:570);

3) the preservation of the criminal justice system's capacity to bring suspects to justice (Finch, 1976:371; Popek, 1979; Sherman, 1980); and

4) the preservation of public safety (Popek, 1979; SMCRCR, 1981).

The first two interests ignore "the presumption of innocence" by viewing "possible criminality as sufficiently harmful to society to warrant killing the potential offender" (Geller and Karales, 1981:45). Both specific and general deterrence are highly speculative matters. They are based on a "widely questioned assumption that potential felons will avoid criminal conduct" because they fear being shot at or stopped by the police (Geller and Karales, 1981:45). The suggestion is made that if deterrence is based more on certainty and less on the severity of reprisal, then it would be highly unlikely that the possibility of getting shot would discourage the commission of felonies since the probability of such by a police officer is quite low (Geller and Karales, 1981). Moreover, Geller and Karales (1981) suggest that the prospect of getting shot often only makes the suspect either run faster or return fire.

Popek (1979) raises the objection often addressed in capital punishment cases that little persuasive evidence exists which demonstrates that the threat of capital sanctions deters future criminal activity. The speculative nature of the deterrence claim makes this interest something less than compelling. But even if it were assumed arguendo

that deadly force was a demonstrable deterrent and further, a compelling state interest, it is in no way the least restrictive method of attaining that interest. Popek (1979) suggests as an alternative the attachment of additional criminal penalties for fleeing an attempted apprehension, perhaps to the point of legislatively creating a separate criminal category for the offense of arrest evasion (1979:566). Further, "such an additional penalty would not be any more unlikely than the use of deadly force to achieve the presumed state interest of deterrence of the suspect's flight from arrest" (Popek, 1979:566 quoting ALI proceeding quoted in Mattis v. Schnarr, 547 F.2d. 1007;1914-15).

The third goal, the preservation of the system's capacity to bring the suspect to justice, becomes increasingly defensible "as the alleged offense becomes more serious" (Geller and Karales, 1981:46). But as both Finch (1976) and Geller and Karales (1981) point out:

> The real question raised about this state goal is whether society's welfare is so threatened by the possible inability of our justice process to determine a given suspect's guilt or innocence and to do something about it that we can justify killing a person for attempting to avoid the process (1981:46).

The last goal, preservation of public safety, calls for a test balancing the government's interest in protecting citizens at large versus the fleeing felon's right not to be deprived of life without due process. Where the felon is violent or life-threatening, the balance ought always be struck in favor of the former and deadly force might be the only way of attaining that interest. However, since common law also allows the killing of nonviolent felony suspect (e.g., property offenders), the components of the balance are altered. The balance ceases to be one of weighing the safety of the public against the right of the suspect. Rather the issue can be characterized as one which allows the use of deadly force to deprive an individual of his or her life without due process in the interest of protecting property, deterring criminal activity, or enhancing the efficiency of the criminal justice system -- all of which appear to be difficult to demonstrate as compelling relative to the abandonment of the fundamental, individual constitutional right to life.

Direct court challenges to the constitutionality of deadly force statutes have been been few and are always brought in conjunction with "the particular state's wrongful death act" as well as on 42 U.S.C. Section 1983 (Popek, 1979:548) This act provides that:

> Every person, who under color of any statute, ordinance, regulation, custom, or usage of any state or territory, subjects or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit in equity, or other proper proceeding for redress.

As several writers have indicated, there are basically five separate but related approaches to attacking the constitutionality of a state's common-law, deadly-force statutes. According to these sources, the common-law, any-felony statutes:

1) deny equal protection as guaranteed by the Fourteenth Amendment (Finch, 1976:375); Boutwell, 1977:9; Day, 1978:309; Sherman, 1980:95; Popek, 1979:569; SMCRCR, 1981:35; Geller and Karales, 1981:44). It is maintained that this clause "vitiates the laws because their broad grant of discretion to the police officer gives him room to make shooting decisions based on the suspect's race or other inappropriate factors" (Geller and Karales, 1981:45);

2) deny procedural due process guaranteed by the Fifth and Fourteenth Amendments by depriving the suspect of the fundamental rights to life and trial (Finch, 1976:385; Boutwell, 1977:11; Sherman, 1980:86; Popek, 1979:563; SMCRCR, 1981:45).

3) deny substantive due process in that shooting nonviolent felony suspects violates the standards of decency in this society (Finch, 1976:380; Sherman, 1980:86; Popek, 1979:563, SMCRCR, 1981:37; Geller and Karales, 1981:45);

4) permit the imposition of cruel and unusual punishment (punishment disproportionate to the crime committed) which is proscribed by the Eighth Amendment (Finch, 1976:381; Boutwell, 1977:11; Sherman, 1980:88; Popek, 1979:572; SMCRCR, 1981:38; Geller and Karales, 1981:45); and

5) permit unreasonable seizures as prohibited by the Fourth Amendment (Finch, 1976:384; Boutwell, 1977:11; Popek, 1979:574; Geller and Karales, 1981:45). This amendment's prohibition "is said to invalidate the seizure, or arrest, of a nonviolent person when accomplished with a deadly weapon" (Geller and Karales, 1981:45).

Before addressing each of the approaches separately, we will briefly examine a few relevant cases that bring these constitutional issues to light. To date, only one of these (Mattis v. Schnarr; 547 F.2d 1007) has held a particular deadly force statute as unconstitutional.

Some Relevant Cases

In Cunningham v. Ellington (323 F. Supp. 1027, 1971), the plaintiff sought the facial unconstitutionality of the common-law, any-felony Tennessee deadly-force statute

and unconstitutionality in the instant case on grounds of the equal protection clause prohibiting discrimination. Both claims were rejected because the Court maintained that the membership in the alleged class could be neither defined nor distinguished. The three-judge district federal court also rejected the plaintiff's cruel and unusual punishment argument because the Court claimed the statute did not deal with the type of punishment within the ambit of the Eighth Amendment prohibition against cruel or unusual punishment (Popek, 1979). The Court also rejected the contention that the statute was unconstitutionally overbroad in its authorization of the use of deadly force as to violate such due process rights to trial by jury, assistance of counsel, and confrontation of witnesses (Popek, 1979). The Court's claim was that under this argument, any force for any offense would deny such rights. It further replied that if shooting suspects expected to enjoy these due process protections, they must submit to the attempted arrest (Popek, 1979). Finally, the Court rejected the equal protection claim made by the plaintiff that the statutory distinction between felonies and misdemeanors allowing the use of deadly force only against felons was discriminatory against felons (Popek, 1979).

In Beech v. Melancon (465 F.2d 425, 1972) the Sixth Circuit Court of Appeals entertained a challenge to the same Tennessee statute. The plaintiff, seeking redress under 42 U.S.C. Section 1983, lost the appeal as the appellate court, in noting Cunningham, upheld the lower court's determination that the police officers were justified in using deadly force in effecting felony arrests. The Court also refused to review the constitutionality of the statute, reserving that judgment for cases that would involve a fleeing, nonthreatening felon. Finally, it strongly advised against any court second-guessing police officers:

> who, faced with making split-second decisions, reasonably and in good faith believe that their lives or those of third persons would be endangered if they refrain from employing deadly force to attempt to apprehend fleeing felons whose arrest cannot reasonably be accomplished by less dangerous means (465 F.2d 426, quoted in Popek, 1979:551).

In Jones v. Marshall (548 F.2d 1247, 1977) the federal Second Circuit Court of Appeals accepted the same reasoning of the Sixth Circuit cases Beech and Cunningham (Popek, 1979). The facts of this case dealt with an unarmed, fleeing, nonthreatening, juvenile auto thief who was shot to death by a police officer; the decedent's companions were

later charged with joyriding. As in Beech and Cunningham, the deceased's parents sought civil redress for damages under Seciton 1983. The Connecticut common-law, any-felony statute allowing the use of deadly force to apprehend in reasonable good faith by the officer was taken by the officer of his defense.

The plaintiff argued that the Connecticut statute ought not control in the instant case because it lacked logical support, the support of legal scholars, and was historically anachronistic (Popek, 1979). The plaintiff further maintained that it violated the procedural due process protections afforded by the Fifth and Fourteenth Amendments, specifically the right to trial, a presumption of innocence, and the prohibition against the arbitrary imposition of punishment without trial (Popek, 1979). At bottom, the plaintiff had asked the trial court to formulate its own deadly force restrictions remarkably similar to the Model Penal Code.

All claims by the plaintiff were rejected. Further, the Court of Appeals concluded that the same arguments advanced against the any-felony rule might be advanced against the Model Penal Code restrictions as well. Thus, if the any-felony statute was unconstitutional, the substituted Code

guidelines would be also -- even if the suspect had been using deadly force (Popek, 1979). Finally, in sidestepping the demand for judicial legislation, the trial court advised the plaintiff that it was not the function of the judiciary to rule on the constitutionality of statutory law on policy grounds alone. Moreover, it noted that the state legislature had recently reassessed and approved the existing common-law, any-felony, deadly-force statute.

The Eighth Circuit Court of Appeals in Mattis v. Schnarr (547 F.2d 1007, 1976) is the only court to date finding a common-law, any-felony statute unconstitutional. This case involved a fleeing, unarmed, nonviolent, juvenile burglary suspect who was shot in the back of the head and killed by the arresting officer. At the district court, the plaintiff's parents brought action under both the Missouri wrongful death act and Section 1983; plaintiffs also claimed that their son's rights under the Eighth, Ninth and Fourteenth Amendments had been violated. The Court dismissed the action holding that there was "no justifiable issue present permitting declaratory relief" (Popek, 1979:554). It also afforded the officer the defenses of good faith and probable cause maintaining that the officer had properly relied on the constitutionality of the Missouri any-felony statute in force (Popek, 1979).

The Eighth Circuit Court of Appeals reversed and remanded the case to the district court for determination of the statute's constitutionality on the grounds that while the trial court was correct in dismissing action for damages, good faith and probable cause were not available as defenses to action insofar as declaratory relief was concerned (Popek, 1979).

With the case remanded to district court, the plaintiff challenged the state's right to use deadly force to apprehend a nonviolent, nonthreatening, unarmed fleeing felon. A challenge was not made against this right in apprehending a violent, armed, or threatening felon or in terminating a crime involving violence or force.

The challenge, grounded on claims that the any-felony Missouri statute denied due process rights to trial and life, equal protection, and imposed cruel and unusual punishment were all rejected. Regarding due process, the court responded with a balancing test in which the state interest in "assisting policemen in fulfilling their duty to apprehend criminals and protect society" necessarily overrides the plaintiff's claim--the right to raise a family unless terminated by due process. In terms of the equal protection argument, the court found the statutory classification of against whom the police may use deadly force "to

be reasonable and free of arbitrariness" (Popek, 1979:556). Concerning Eighth Amendment prohibitions against cruel and unusual punishment, the court did not find the statute offensive to "any fundamental principle of justice or exceed the boundaries of civilized conduct" (Popek, 1979:556). Last, the court as in Jones, held that the legislature, and not the judiciary, should determine alternatives to the present Missouri any-felony, deadly-force statutes.

On appeal to the Eighth Circuit Court of Appeals, the Missouri statute was struck down. Using a test balancing two seemingly disparate interests of society--guaranteeing a person's right to life versus insuring public safety--the court held in favor of the former. The court reasoned that a fundamental right to life does exist and is protected by the due process clauses of the Fifth and Fourteenth Amendments. According to the appellate court, because a fundamental right was at stake (i.e., the right to life), the burden was upon the state to demonstrate the existence of a minimally equivalent government interest (i.e., insuring public safety) which would be lost without the any-felony, deadly-force rule. Because, in the instant case, a fleeing, nonviolent, nonthreatening, unarmed juvenile appeared to pose no threat to the safety of the public, the

court ruled that the government had failed to make the minimal demonstration. In effect, the government had asked the court to make the conclusive presumption that all fleeing felons posed a danger to the bodily security of both the officer and the public-at-large, a presumption clearly without substance as applied to the Mattis facts (Popek, 1979:357).

In its decision, the Court noted several sources of support for its view (e.g., leading scholarly opinion for the last 50 years, other more restrictive state statutes, the anachronistic character of the common-law, any-felony rule, the President's Commission on Law Enforcement and Administration of Justice report and the more restrictive policies of F.B.I. and many police departments) (Popek, 1979). Stating that the judiciary, and not the legislature, had the ultimate responsiblity in determining the balance between individual rights and government interest, the court formulated conditions allowing justifiable police use of deadly force that markedly resembled Model Penal Code restrictions. The Court argued that deadly force can be used only:

> where an officer has warrant or probable cause to arrest the felon where the felon could not otherwise be apprehended and

> where the felon had used deadly force in the commission of the felony or the officer reasonably believed the felon would use deadly force against the officer or others if not immediately apprehended (at 1120; quoted in Popek, 1979:558).

The dissent in Mattis, noting that the Missouri legislature had a year earlier rejected a Model Penal Code-type amendment to its existing common-law, deadly-force statute, chided the majority for assuming the legislature function (Popel, 1979).

The ultimate implication of the Mattis case appears to be that the question of whether deadly force to apprehend a nondangerous fleeing felon is federally unconstitutional "remains open" (Boutwell, 1977:13). The U.S. Supreme Court in a per curiam opinion held that the father of the slain juvenile, "lacked standing to secure a declaratory judgment" regarding "the constitutionality of the Missouri statute" (Geller and Karales, 1981:44). In short, the judgment of the Eighth Circuit Court of Appeals was vacated and remanded with instructions to dismiss the complaint without consideration of the merits of the appellate court's opinion (Boutwell, 1977).

In our last case, Wiley v. Memphis Police Department (548 F.2d 1247, 1977), the Sixth Circuit of Appeals held the

Tennessee common-law, any-felony statute (one very similar to the Missouri law) constitutional. The facts of the case were similar to Mattis with the significant exception that the suspects had broken into a sporting goods store and part of the loot taken consisted of shotguns and ammunition. These were found near the body of the deceased who, as in Mattis, ignored commands by police officers to halt flight (Popek, 1979; Geller and Karales, 1981).

The plaintiff brought civil rights and wrongful death action and sought a declaratory judgment that the Tennessee statute was unconstitutional under Section 1983 and the Fourth, Fifth, Sixth, Eighth, Thirteenth, and Fourteenth amendments. The appellate court, relying on Cunningham, affirmed the district court's decision "rejecting the plaintiff's claims that the police officers had deprived her son of due process and had inflicted cruel and unusual punishment on him" (Popek, 1979:559).

According to Sherman (1980:78) the court's posture indicated its preference for the protection of society over and above the individual's right to trial. In terms of the Eighth Amendment, the court maintained that police use of deadly force in this case did not constitute punishment (Sherman, 1980:78). The court also severely criticized the

Mattis court for improperly assuming a legislative function, for ignoring the need of any-felony statutes as necessary for law enforcement, and for ignoring controlling case law in Cunningham, Beech, and Jones.

It should be emphasized here that the most significant, perhaps determinative, difference between Mattis and Wiley was that in the latter, it was arguably the case that the officers perceived the fleeing suspects as a threat to bodily security to themselves as well as the public. In a separate concurring opinion, Judge McGree, who had withheld judgment on the constitutionality of the same Tennessee statute in Beech, made clear that this was the sole reason for his support of the constitutionality of the statute in Wiley (Popek, 1979:560).

Legislative Deference

Sherman (1980), Popek (1979) and many others have complained of the courts' lagging behind other institutions and organizations in repealing the common-law policy and practice of allowing the use of deadly force to arrest any fleeing felon. They cite police departments, federal law enforcement agencies, several state legislatures, scholarly opinion, legal organizations, and community sentiment as

having already opted for a change to more restrictive policies.

Before one could anticipate an increased number of challenges to existing statutory law however, the courts would have to overcome the obligation--some call it an obstacle--of deference to the legislature and its concomitant function of making law. While much has been written with regard to the legislative capacity and willingness of judges to "legislate" personal policy preferences into public policy (e.g., Spaeth, 1979), we will not here breach the subject of whether courts ought to legislate. We only note that the courts do legislate and are generally willing to do so when the legislative opinion appears not in keeping with the courts' policy preferences (Spaeth, 1979). Further, the courts have been legislating in the area of police use of deadly force for many years, even in cases where statutory law existed. For example, many courts filling in the statutory gaps, have had to make the felony/misdemeanor distinction in codified common-law, any-felony statutes--an essential feature of the law where legislatures had failed to recognize the importance of the classification. This type of court "interference" has also occurred in many states with regard to the apparent-versus-actual necessity, apparent-versus-actual danger, and

apparent-versus-actual felony distinctions. Popek (1979) suggests that were this legislative deference overcome, the constitutional challenges enumerated earlier would have been greater vigor in overturning existing any-felony statutes than they presently do.

The Equal Protection Argument

The equal protection argument against the common-law, any-felony rule arises when the state "laws which result in an adverse impact on a particular group without some compelling state interest to justify the effect, are violative of equal protection standards" as guaranteed by the Fourteenth Amendment (SMCRCR, 1981:35). Also known as the discrimination argument (SMCRCR, 1981), its foundation is based on the complaint that a different and harsher standard of treatment is afforded the fleeing felon relative to the fleeing misdemeanant. From another angle, the standard of treatment, it is claimed, applies more harshly to blacks than to whites (Sherman, 1980).

With regard to the first level, the challenge is not pitted against the state's right to classify crimes as felonies or misdemeanors, but rather against the use of such classifications as determining who may be lawfully killed by

the police (Popek, 1979). The objective of the plaintiffs in the cases reviewed above was to have the court limit the class of people against whom police can use deadly force to that of violent felons. But under the equal protection clause, this contention is made at the risk of some intellectual dishonesty because, as both Finch (1976) and Popek (1970) indicate, a court can only determine a classification's discriminatory impact as it is found in the statute. In the case of common-law, any-felony, deadly-force statutes, the classification is between all felonies--including nonviolent felonies--and all misdemeanors. But this is not the real objection of the plaintiff.

> The real objection to the use of deadly force against nonviolent felony suspects is not that such laws discriminate between nonviolent felony suspects and misdemeanants, but that nonviolent suspects are shot at all (Stanley v. Illinois, 405 U.S. 645, 1972 quoted in Finch, 1976:379).

Given this intellectual dishonestly however, there is still an insistence by some, notably Popek (1979:572), that the equal protection clause still signifies a valid constitutional attack. As a racially discriminatory claim, Sherman (1980), while admitting that racial discrimination in police

shootings can be neither proved nor disproved with the present empirical evidence, argues that such evidence, at bottom, strongly suggests discrimination due mainly to the disproportionately high number of blacks as victims of police shootings.

In either case, however, the court may employ either of two types of two-tiered approaches in its determination of discrimination (Finch, 1976; Popek, 1979). Under the strict standard, the state must show: 1) that the classification furthers a compelling public interest or goal and, 2) that the classification is the least restrictive way to attain that goal (Finch, 1976:376). Put another way, if a particular statute leads to a suspect classification or deprives a group of persons of a fundamental right or interest, then "the standard of review is one of 'strict scrutiny' whereby the state, in order to justify the challenged classification, has the burden of proving that the classification 1) furthers this compelling state interest and 2) that it is both necessary to and the least restrictive means for attaining that interest (Popek, 1979:569).

The second approach, known as the medium-strength test requires the state: 1) to enumerate the legitimate government interest at stake and, 2) to demonstrate how the particular classification furthers the enumerated state interest (Finch, 1979:376). On this test, the court can declare unconstitutional a statute either because its means are irrational or its ends are illegitimate (Finch, 1979:376).

Similar to the substantive due process argument described below, under the strict scrutiny standard, if a fundamental, individual right can be established (e.g., the right to life established according to Finch, 1976, in Palko v. Connecticut, 1937), the equal protection clause would require that the state demonstrate a compelling interest obtained through the any-felony, deadly-force statute (e.g., public safety, or general or special deterrence) which is minimally equivalent to the individual right being denied and further, to show that the statute is the least restrictive way that interest can be attained. Under the medium-strength test, it must be shown that protection of the public from harm by all fleeing felons, for example, is a legitimate state interest, and its means for attaining that interest (to the extent of using deadly force on nonviolent

property criminals) is rational. Most legal scholars have argued that the any-felony provision fails under either test.

The Eighth Amendment Argument

Many legal authorities (e.g., Popek, 1979; Finch, 1976) doubt the efficacy of the Eighth Amendment prohibition against cruel or unusual punishment as a constitutional challenge to existing common-law, any-felony, deadly force statutes. Cunningham, followed by Mattis and Wiley, was the first case to raise this objection: It was summarily dismissed by the courts in all three cases. One barrier to this strategy is the question of whether deadly force constitutes "punishment" under the ambit of the Eighth Amendment (Popek, 1979). A second obstacle is the question of whether the Eighth Amendment restricts any police practices that are carried out in advance of trial (Finch, 1976). To date, no court, federal or state, has held so in either instance (Finch, 1976; Popek, 1979).

Even though no court has found this argument particularly persuasive and though most legal scholars doubt its usefulness in overturning the common-law, deadly-force rule, many (e.g., Popek, 1979; Finch, 1976; Sherman, 1980)

have developed arguments maintaining that deadly force: 1) does constitute punishment within the scope of the Eighth Amendment, 2) that its premature execution against non-violent felons denies due process, and 3) as punishment, it is both cruel and unusual.

Citing moral philosophers Packer and Hart, Sherman (1980) argues that deadly force fits the function that punishment supposedly serves. Indeed, at early common-law, deadly force against fleeing felons was almost entirely punitive in character. (Recall that killing the fleeing felon was but a premature execution of the inevitable sentence). Deadly force, it is said, has strong penal overtones; ironically the stated purpose of the killing, to effect arrest, is apparently nonpenal (Finch, 1976).

Further, Sherman (1980:89) contends that against criteria employed by the Supreme Court to determine the constitutionality of capital punishment in Furman v. Georgia (408 US 238, 1972) and its predecessor cases, the any-felony statutes would be found to be disproportionately severe, unacceptable to the morales of contemporary society, and arbitrarily inflicted. He claims that as a punishment, whether on moral or utilitarian grounds, deadly force is disproportionately severe to the offense committed:

> Comparison to actual punishments typically imposed after trial would probably show that killing a fleeing suspect of any crime, even murder, would impose a more severe punishment without trial than could be expected after conviction (1980:90).

Sherman (1980), like many others, also argues that as a punishment, deadly force is generally unacceptable to the moral standards of contemporary society. As evidence he cites the more restrictive standards of modern police departmental firearms policies, the growing scholarly opinion opposing any-felony statutes, fairly recent mass protests against unbridled police use of deadly force, the defense-of-life firearms policies of the F.B.I. and other federal law enforcement agencies, and moves by some legislatures to adopt, at minimum, the Model Penal Code deadly-force restrictions.

Third, Sherman also claims that deadly force is inflicted arbitrarily by police:

> Relative to the total number of arrests and police-citizen encounters, police homicide is inflicted so rarely and with such arbitrariness as to be wanton and freakish. It can be likened to a lottery system in which there are no safeguards for the capricious selection of criminals for the punishment of death (1980:93

> citing Justices Steward and Brennen in Furman v. Georgia, 408 U.S. 238, 310, 1972).

Popek (1979) and Finch (1976) are in agreement with Sherman's view. Because the use of deadly force has the appearance of arbitrariness, disproportionate harshness, and severity "as to degrade man's dignity," it violates "evolving standards of decency" (Popek, 1979:574). Popek (1979) reaffirms the claim specifically that when the courts admit that deadly force constitutes punishment, these standards will provide a valid basis for attacking the constitutionality of common-law, any-felony statutes. Finally, Finch (1976:382) maintains that the use of deadly force against nonviolent, fleeing felons serves no interest outside the maintenance of the integrity and efficiency of the criminal justice system; it serves only to punish the recalcitrant suspect for refusing to submit to the criminal process.

The Fourth Amendment Argument

According to the Fourth Amendment, "the right of the people to be secure in their persons...against unreasonable searches and seizures, shall not be violated." Several writers have previously noted this amendment as a legitimate

prohibition against the use of deadly force on nonviolent fleeing felons (e.g., Boutwell, 1977; Finch, 1976; Popek, 1979; Geller and Karales, 1981). Some (notably Finch, 1976 and Popek, 1979) have developed plausible arguments for its use in attacking the constitutionality of the existing common-law, deadly-force statutes.

To date, only one case, Wiley v. Memphis Police Department, has brought this strategy to the attention of the courts and it was rejected as meritless because the plaintiff had been unable to cite any previous federal cases which construed Fourth Amendment protections as applicable to the use of deadly force to arrest nonviolent, felony suspects (Popek, 1979:574). Historically the amendment has been interpreted to embrace security against arbitrary police intrusion (Boutwell, 1977). Both Finch (1976) and Popek (1979) enumerate several cases holding that the amendment "clearly applies to arrest: arrest being 'quintessentially a seizure'" (Popek, 1979:384). (See Giordenello v. U.S., 357 U.S. 480, 1958; Henry v. U.S., 361 U.S. 98, 1959; Terry v. Ohio, 392 U.S. 1, 1968; Davis v. Mississippi, 394 U.S. 721, 1969; Cupp v. Murphy, 412 U.S. 291, 1973; U.S. v. Watson, 423 U.S. 411, 1976). In the case of the nonviolent felony suspect, the use of deadly force to

effect the arrest must be reasonable with regard to both: 1) the general method chosen for making seizures (Schmerber v. U.S., 757, 1966) and 2) the manner in which the specific seizure was made (Terry and Schmerber) (Popek, 1979).

Apparently following Dworken's line of argument (1975)--in balancing a state interest against an individual fundamental right, the state interest must always surrender --both Finch (1976) and Popek (1979) conclude that common-law, any-felony, deadly-force statutes are unconstitutional. The means whereby the state attains its interest of preventing future crime and sustaining the efficiency of the criminal justice system is through an unreasonable seizure which risks the loss of life and a denial of the right to trial. Both Popek (1979) and Finch (1976) are careful to stipulate that the seizure is unreasonable only with regard to the nonviolent felony suspect. In that case, deadly force is the "most intrusive and destructive possible method or manner of making a seizure of a person accused of a non-violent crime" (Popek, 1979:575; quoting the appellant brief in Wiley).

In conclusion, it should be noted that while the Fourth Amendment, like the Eighth Amendment argument, in and of itself is a farily weak strategy, it does mesh well with the

procedural due process objection that the use of deadly force threatens to deprise the nonviolent felony suspect of life without trial, assistance of counsel, and confrontation of accusers.

The Due Process Arguments

Due process arguments against any-felony, deadly-force statutes can be distinguished as either substantive or procedural (Finch, 1976; Popek, 1979). As implied above, the flaw with the equal protection argument was the taint of intellectual dishonesty--a product of disguised substantive judgments (Finch, 1976). If substantive judgments are to be made about deadly force statutes, an alternative format seems to lie in substantive due process review (Finch, 1976; Popek, 1979). The Fifth and Fourteenth Amendments have historically been the primary mode for substantive review but of late have been largely "discredited as a usurpation of legislative power which, because of its unprincipled application, saps the legitimacy of the courts" (Finch, 1976:380). But, citing Roe v. Wade (410 U.S. 113, 1973) and Grisworld v. Connecticut (381 U.S. 479, 1965), Finch (1976) and Popek (1979) indicate that the Supreme Court on occasion:

> has acknowledged that if no other constitutional provision can honestly be used to invalidate a disfavored practice, the due process clause may be a last resort of constitutional review (Finch, 1976:380).

In order for a substantive review to be intellectually honest under either the Fifth or Fourteenth Amendments, the right in question must be considered "fundamental," i.e., held to exist for its own sake and to constitute part of the normal legal order of a society. The fundamental right in question under substantive review in deadly force incidents is, of course, the suspect's right to life. Arguably, however, the Supreme Court has never explicitly or directly held the right to life to be fundamental. (Popek, 1979). Yet, the Court has referred to it as fundamental often enough such that a claim that it is, is not a reckless one (Popek, 1979).

As with the equal protection argument, if the right to life is indeed fundamental, then the test of strict scrutiny is applied; that is, the state must demonstrate a compelling governmental interest in order to sustain the common-law, any-felony statute (Popek, 1979). Furthermore, the state must show that the statute achieves this interest and is the least restrictive method of all possible alternatives

(Popek, 1979). The vitality of these interests have been briefly critiqued above and in several scholarly legal articles (Finch, 1976; Sherman, 1980; Popek, 1979, Geller and Karales, 1981) and thus, will not be repeated here. Popek (1979), in part, sums up the general scholarly opinion, however:

> It thus cannot be maintained that the state has a compelling interest in killing every felon, of every stripe, who flees from arrest. Neither the protection of the general public nor the deterrence of others from crime or from fleeing arrest can override the fleeing nonviolent felon's fundamental right to life (emphasis added) (1979:566).

Further, even if the state could demonstrate a compelling interest, the killing of fleeing felons is not a necessary means of achieving that objective. Instead, the act of fleeing to avoid arrest itself could have serious criminal penalties attached to it (Popek, 1979). According to Popek (1979), the real interest of state is apprehending the suspect alive, fairly and justly trying him, and formally punishing him if convicted.

Popek (1979) continues that even if the proposition that the right to life is fundamental is not accepted, a simple rationality test would lead to the conclusion that any-felony statutes are unconstitutional. Citing evidence that

such laws are anachronistic, her claim is that modern common-law, any-felony statutes consist of an irrational distinction that prohibits the killing of nonviolent misdemeanants while exempting nonviolent felons. Since most all nonviolent felony suspects are property offenders, the court must consider a rather inappropriate--some would call it absurd--balancing test: the state's interest in protecting property versus the nonviolent felon's right to life (Sherman, 1980). And though Sherman (1980), taking Dworkin's line, chides the judiciary for its use of tests balancing fundamental human rights against state interests altogether, he recognizes it as the prevailing method and insists that if the government is to demonstrate an interest, the most compelling one would be the protection of life of third parties and police officers.

The procedural due process argument, while inextricably entwined with its substantive counterpart, can be sketched out. Its major feature is an insistence that the use of deadly force by the police against nonviolent felons under common-law, any-felony statutes potentially deprives suspects of life without affording them the constitutionally mandated protections of due process. Of these, the right to trial dominates the argument.

The Supreme Court has historically emphasized that any "permissible abrogation of due process is limited to the seizure of property and demands prompt postseizure hearing" (Finch, 1976:387). Since, "summary seizure by deadly force threatens to destroy life without any hearing, due process requires the government interests to be of the highest order" (Finch, 1976:387). The argument concludes that applying the strict scrutiny test to deadly force:

> requires that act threatening deprivation of life without due process would be constitutional only if exercised in defense of a substantial and immediate threat to the right to life and bodily security of other human beings (Finch, 1976:387-88).

This rationale, of course, is the underpinning philosophy of the defense-of-life doctrine and to a lesser extent, the Model Penal Code.

In terms of considered legal opinion, the due process arguments taken together indicate "the best initial approach" to attacking the constitutionality of common-law, any-felony, deadly-force statutes (Popek, 1979:563). This judgment is primarily based on the fact that the Mattis decision turned on this issue.

Summary

The object of this chapter was to review the legal and historical perspective from which the police use of deadly force in contemporary American has arisen. First, a definition of police deadly force was presented. This definition was then examined in the light of its common-law historical antecedents. Couched in this discussion was a description of both the historical rationales for and legal restrictions on the police use of deadly force to effect the arrest of a fleeing felon at early common law. An analysis of the common-law, any-felony provision was then attempted to demonstrate its inherent anachronistic character relative to the contemporary administration of criminal justice in general and to law enforcement in particular.

In the section that followed, a review of the statutory restrictions governing the police use of deadly force was undertaken with a discussion of 1) the common-law, any-felony rule, 2) Model Penal Code provision, 3) forcible-felony policy; and 4) the defense-of-life doctrine. The practical virtues and limitations of each were discussed. A schematic summary of these four was subsequently presented suggesting the order of restrictiveness of these policy types.

The next section briefly identified the wide variance among police departments in the U.S. regarding departmental policy restrictions. It was noted, for example, that most departments operate under deadly force guidelines that are considerably more restrictive than governing state statute--many operating under either forcible-felony or Model Penal Code provisions with a few having adopted a defense-of-life rule. The last part of this section reviewed the major police civil and criminal liability issues arising from the use and misuse of deadly force by the police.

The remainder of the chapter was devoted to an explanation of the most recent judicial responses to the common-law police use of force. A significant portion of this discussion involved the delineation of state interests allegedly protected by common-law, any-felony statutes, a review of some relevant cases, and finally an evaluation of some of the more promising strategies attacking the constitutional validity of these statutes. We indicated that these strategies or arguments considered whether the police use of deadly force in the United States violated constitutionally mandated proscriptions against the imposition of cruel and unusual punishment, unwarranted seizure of life, and denial of due process and equal protection under the law. We

concluded with the claim that, at present, the combined due process arguments offer the most vigorous legal strategy toward constitutional invalidation of any-felony, common-law, deadly-force statutes.

CHAPTER 3

METHOD

Population and Sample

It is recognized that a comprehensive, empirical investigation of the police use of deadly force would entail the examination of all types of force used by the police -- including those involving firearms discharges -- which were potentially lethal to its victim(s). Yet we have not examined every type of deadly force incident and such a limitation requires some justification.

First, as was indicated early on, ample precedent exists by way of previous research to limit the focus of this kind of investigation to police firearms usage alone. Second, and more significantly, the vast majority of all police

instances of deadly force involve firearms discharges as opposed to, for example, clubbings, fisticuffs, or the use of motor vehicles as weapons. Third, as has been noted by Fyfe (1978), the police firearm, more than anything else, symbolizes the ultimate expression of both police authority and discretion. Consequently, an identification of those factors which may in part account for both its use and misuse is requisite to an understanding of the police use of deadly force in American society. Furthermore, even granting the substantive justifications mentioned above coupled with various constraints on time, money, personnel, and in some cases, data access, not all police firearms discharges were examined in our study. For example, accidental discharges and intentional discharges resulting in warning shots, animal destruction, and police suicide were not investigated.

The population of interest for this study consisted of all incidents involving intentional firearms discharges at civilians by police officers employed in a large, Midwestern, municipal department for the five-year period of September, 1976 through August, 1981. Data were collected on the entire universe of intentional police shooting incidents resulting in civilian deaths (N=82 cases) and injuries (N=166 cases).

In addition, a systematic sample of 15% of the universe of "missed shot" incidents -- incidents in which officers intentionally fired at but missed intended civilian targets -- was selected. This sampling strategy, which enabled us to collect information on 101 of the 682 missed shot incidents, was conducted by selecting chronologically every seventh such incident occurring between September 1, 1976 through August 31, 1981. In our research, two major advantages over pure random sampling are associated with a systematic sampling technique. First, because the files from which we extracted firearms reports were chronologically ordered, the technique was convenient and less consumptive in terms of time and personnel. Second, because our systematic sample required the selection of every seventh event and because the universe from which the selection was made was sufficiently large, a proportionate distribution of cases over time was guaranteed. Consequently, those years with a higher absolute number of missed shot incidents were sampled proportionately more heavily than those years with fewer cases. Moreover, the same principle applied to those months within years which had a higher number of incidents, thus allowing for detection of both annual and seasonal variation in the distribution of these events over time.

The Study Period

As already indicated, the period of time with which we were concerned was from September 1, 1976 through August 31, 1981. We chose that time period for several reasons. First, it was believed that a five-year period would be sufficient to permit us to capture changes in the frequency with which "deadly force" incidents occurred over a reasonably long time frame. Second, we believed that the number of incidents in that time period would be sufficiently large to permit valid comparisons and yet sufficiently small to be manageable. Third, because we chose a relatively recent time period, we felt that the data available about incidents of interest would be reasonably complete and accessible. Fourth, we were convinced that incidents occurring in that time period would be recalled by those involved if the necessity arose to carry out interviews to seek clarification of data. (No such interviews were conducted, however, because of time and financial constraints). Last, because we were interested in information about the internal (departmental) adjudication of incidents, it was thought

that such data would be more complete if we surveyed only more recent incidents. Since in recent years the issue of "deadly force" has become a prominent public concern, it was believed that departmental interest in maintaining accurate and thorough reports of the investigation and adjudication of incidents would be enhanced.

Data Collection Instrument

Based upon several sample incident reports provided to us by the police agency, our review of prior research, and the input from selected police administrators, it was decided that data would be collected in each incident to provide information about four separate units of analysis:

1. the victim/suspect(s) involved in each incident;
2. the officer(s) involved in each incident;
3. the contextual/situational characteristics in which each incident ocurred; and
4. the community and departmental characteristics of the city and police agency involved.

In order to collect these data, we developed a four-part, color-coded questionnaire to be completed for each incident. In those incidents involving more than one victim/suspect or officer, data were to be collected about each separately.

The four-part collection instrument is included in Appendix A. In the first part, dealing with the victim or suspect (in police parlance, generally the "opponent"), it was decided to collect data about a number of variables of interest, including age, race, sex, type of injury, criminal history, possession of a weapon, and a number of other characteristics that were believed to be theoretically, empirically, or experientially related to involvement in "deadly force" incidents (see Appendix A, Part 1). In the second part of the survey instrument, data pertinent to each officer known to have participated in each incident were specified, including age, race, sex, educational background, type of assignment at the time of the incident, duty status at the time of the incident, and--as in the suspect section-a number of other variables believed to be related to involvement in "deadly force" incidents (see Appendix A, Part 2). The third part of the survey instrument was developed to record data relevant to the situational characteristics in each incident, such as the time and place of occurrence, weather conditions, and other contextual conditions (see Appendix A, Part 3). The fourth and last sec tion of the survey instrument was prepared to accomodate the collection of data pertaining to certain community and organizational characteristics, specifically general population,

arrest, and department racial composition data. In addition, the firearms policy and subsequent modifications that governed the officers' use of deadly force over the period of the study were also collected in this section.

For each incident, then, the first three parts of the four-part survey instrument were to be completed. In some incidents, of course, in which more than one suspect or police officer were involved, additional, appropriate parts of the instrument were completed.

Following completion of the development of the survey instrument (after small scale pilot testing), members of the data collection team met in a number of training sessions. This was done to ensure to the extent possible consistency in the collection and coding of data and to clarify a number of potentially ambiguous or judgmental issues. (For example, it is apparent that certain criminal behaviors involved a number of different legal offenses, e.g., a robbery might also involve a homicide. In such instances, the most serious violation was that which was to be recorded in response to what, if any, criminal activity the suspect may have been involved prior to or during the "deadly force" incident.

Data Sources

Three separate sources of data were used for this study. Internal police department firearms discharge reports, known as Shots Fired Reports, constituted the sole data source for police shooting incidents resulting in either misses or non-fatal suspect woundings. The completion of these reports were departmentally required of all officers who discharged their weapons regardless of duty status with the single exception of mandatory firearms practice. Information contained in these reports which was found useful for our investigation included: 1) officer's length of service with the department; 2) rank; 3) duty status; 4) uniform status; 5) markmanship qualification; 6) firing type (e.g., accidental, intentional, suicide); 7) incident date, time and location; 8) alleged suspect offense; 9) number of officers and suspects at the scene; 10) whether officer or subject fired first; 11) officer's and suspect's weapon type; 12) number of shots fired by the officer and suspect; 13) reason for the officer's firearms discharge; 14) extent of officer's and suspect's wounds; and 15) final departmental disposition of the shooting incident. In addition, lengthy,

detailed narratives and criminal incident reports were attached to the Shots Fired Reports. These provided a wealth of information with regard to the specific circumstances surrounding the incident not available on the first page of the report (see Appendix B).

Internal police Board of Review documents -- much lengthier and more detailed than Shots Fired Reports -- were used in this study as the data source for shootings resulting in civilian fatalities. A Board of Review investigation and commensurate documents were required by the department in every instance in which a firearms discharge -- or any other method of force by the officer -- killed a civilian or, as in some cases, seriously maimed a juvenile. These particular reports were surprisingly complete and generally included: 1) witness statements; 2) psychiatric evaluation reports on the officer; 3) the officer's personnel information card; 4) the criminal record of the fatal shooting suspect; 5) autopsy and coroner reports; 6) crime lab reports and sketches; 7) an evidence list; 8) Shots Fired Report(s); 8) preliminary complaint reports; 9) photographs of the scene and the deceased; and 10) the final disposition of the shooting incident by the Board of Review members.

A third and last source of data used in this research consisted of a set of documents developed in a collaborative effort by the city planning agency and the police department. From these we were able to collect racial population composition and crime rate data by race for homicide, rape, robbery, assault, arson, burglary, motor vehicle theft, and larceny. In addition to this information, we were also able to obtain from these documents data on a limited number of organizational or department characteristics including department size and racial composition for the years 1976 and 1981.

Although Conley (1979:11) maintains that "the current uncritical reliance on official police reports as a primary data source is doomed to failure" because of their untrustworthiness and because such compliance implicates the researcher in a grand-scale "coverup", we think his fears are largely impractical. We recognize the possible and rather obvious difficulties posed by officer noncompliance with the reporting mechanism as well as the dilemma of relying strictly on a set of reports that chiefly consists of the police officer's perceptions of the incident. We do not, however, see these as insurmountable. The latter criticism in fact applies only to the Shots Fired Reports

because, as noted above, Board of Review documents contain witness testimony when witnesses are known to have been present at the scene of the shooting incident. As Sherman and Langworthy (1979) point out in their comparison of deadly force data sources, both police records and death certificates (NCHS records) are far superior to any other data source presently employed -- including newspaper accounts which Conley (1979) seems to prefer.

Both police reports and death certificates, while potentially misleading for purposes of inter-city comparisons are quite valuable in terms of yielding absolute frequencies of such incidents and as a basis for the examination of relationships between certain variables. Newspaper accounts are, on the other hand, flawed in several respects. First, many incidents involving police use of deadly force never appear in the local paper because editorial policy often does not consider them as newsworthy; thus news accounts often "undercount" the absolute number of police deadly force incidents (Sherman and Langworthy, 1979). Second, experience on the present research project has indicated that news reports are frequently inaccurate in even providing the correct names of the officer(s) and suspect(s) involved. Third, newspaper reports cannot be considered as

a primary source as Conley (1979) proposes: Most crime reporters obtain information directly from either officers or from officer reports; in both cases, the primary information source is either the report or the officer and not the newspaper story.

Data Collection

All data were collected during the period of October, 1981 through February, 1982 by personal visitation to the law enforcement agency. The function of our initial meeting with agency administrative personnel was to explain the purpose of the project and what and how data were to be collected. In our case agency personnel were extremely helpful and co-operative and, in fact, greatly exceeded our expectations.

We personally collected data from the complete dossier kept about each incident within the agency. Since personal identifiers were of no interest, in those cases in which it was necessary, personal identifiers were deleted and instead numbered identifiers were used to "track" individuals through files. This was, of course, necessary only in those cases in which an individual officer or victim/suspect was

included in more than one incident. In the normal case, about one hour was required to complete data collection per incident.

It is important to note that in any large-scale study such as this, it is inevitable that apart from "judgmental errors", there are bound to be certain amounts of missing data and errors in collection, coding and keypunching. We have made all reasonable attempts to prevent these errors and, where possible, to correct those that were known to us. In addition, due to both financial and time constraints, there were some data that we were either unable to collect or to collect and verify adequately. For example, in most incidents we were unable to identify either the suspect's marital and occupational status, his or her use of alcohol or controlled substances, or the officer's marital status at the time of the incident. In the few cases in which this information was known, we were prohibited by time from verifying it. Nor in some cases were we able to ascertain the extent, if any, of a suspect's prior criminal record; this was due in large measure to inadequate suspect identifiers in the incident dossier or the large number of aliases used by some of the suspects. Of these cases in which verification was prohibitive, we relied on data

recorded only in the agency's files; in some cases this led to greater amounts of "missing" data than presumably was actually the case.

Terms

Previous research on the police use of deadly force has employed a variety of terms to describe shooting incidents and their actors. In this study, three types of incidents were examined: 1) fatal incidents or incidents resulting in a civilian fatality due to police gunfire; 2) nonfatal "nonfatal injury" and "injury" incidents are used interchangeably as are the terms "missed shootings" and "missed shot incidents."

Deciding on terms which impartially and adequately describe the actors in these incidents or events also proved to be problematic in the sense that the terms used may plausibly be taken to reveal a particular viewpoint or bias of the researcher. For example, Robin (1963) refers to those killed by the police as "victim-offenders"; Takagi (1974) employs the term "victims of police homicide" as does Sherman (1979). Geller and Karales (1981) use the terms "victim" and "civilian" to denote those who fired at or were

wounded or killed by the police. Fyfe (1978), on the other hand, refers to those who fired and were fired upon by police simply as "opponents". In this research the term "suspect" is the most frequently used referent to those civilians who were targets of police gunfire; in addition to "suspect", the terms "opponent", "civilian", and "victim" are also employed to designate these persons.

Reference in this study is also made to "first" or "primary" suspects, "second" suspects, "third suspects", "first" or "primary" officers, "second" officers, "third" officers, etc.. Unlike Fyfe (1978), we do not refer to "primary" or "first" suspects or officers as the principle civilian or police actors in the incident. Rather, the designation as used here is normal, that is, it simply refers to the order in which the suspects and officers respectively appeared on the police incident report and consequently reflects the order in which the actors in a particular incident were coded on the data collection instrument. In a final note, and unless otherwise indicated in the text of the study, the term "officer(s)" refers to police officers who actually discharged firearms during the incidents studied.

Variables

The general approach of this research is best described as an examination of certain individual, situational, and organizational characteristics that might plausibly account for the police use of deadly force in the city under study. Individual characteristics pertained specifically to the police officer's sex, age, race, nature of assignment, prior military experience, duty status, shooting history, length of department service, and rank to mention a few. Furthermore, data on the individual suspect or shooting opponent were collected and analyzed. Variables here included the suspect's age, race, sex, weapon possession, and the possession and extent of criminal history or prior arrest, conviction, and incarceration record.

Situational variables concerned those features of the police shooting incident--the chief unit of analysis--which indicated the type and nature of the encounter resulting in the officer's intentional discharge of a firearm at a civilian. These variables included the time and location of the shooting incident, and those situational factors precipitating the officer's use of deadly force: e.g., the number

of witnesses and officers at the scene, whether the suspect was armed, whether the suspect used or threatened the use of deadly force and against whom, whether the suspect was involved in criminal activity and type of crime perpetrated, whether the suspect was fleeing or confronting the officer, whether the officer had used means short of deadly force to effect arrest or terminate the crime, and the officer's stated or evident reason(s) for using deadly force.

Like previous research on the topic, this study examined only a restricted range of organizational variables that are generally considered as potentially related to an officer's use of deadly force. Information about department size, department racial composition, the shooting review board process, and firearms policy is presented. In addition, data pertaining to the organizational domain of the department including jurisdictional crime rates by race and the racial composition of the community are shown.

Operationalization of the Variables

Most of the variables in this study on which data were collected have relatively clear and unambiguous definitions. For example, the police officer's or suspect's race, age,

sex, type of weapon used, and the like are straight-forward, widely understood concepts and thus require no explanation. Much the same may be said, for instance, with regard to the time of occurrence of the shooting incident itself. However, other variables of interest in this study involved an assessment or judgment on the part of those collecting the data and it is in this section that we will operationally define those terms.

Incident or Situational Characteristics

The first incident variable requiring some clarification pertains to the location of the shooting incident as being in either a private or public place. Private areas consisted of those locations which were privately owned and to which the public normally has no legal access (e.g., one's home or surrounding property). Public areas, on the other hand, regardless of ownership were those to which the public had legal access (e.g., a business such as a convenience store, a bank, or a government office). In addition, public areas also consisted of public streets, highways, and recreational facilities.

The variable, number of officers on the scene, represents those officers called in to or present at the scene

prior to or during the shooting incident. The officers in this account may or may not have been actual eyewitnesses to the shooting; the only stipulation is that they were in the near vicinity. In addition, the number of officers at the scene using deadly force simply denotes the number of officers reported to have discharged a firearm during the incident.

The variable, number of civilian witnesses, accounts only for those nonpolice witnesses who were in fact eyewitnesses to the actual shooting, i.e., witnesses who had both seen and heard the discharge. Another variable which sometimes required a degree of discernment on the part of those collecting the data concerns the police officer's reason(s) for using deadly force. More frequently, the reason(s) were specifically stated by the officer in the incident report; however, of those cases in which it was not, the reason was inferred by the researcher based upon the totality of the reported circumstances. In any case, the range of justifications for the officer's firing a weapon were: 1) self-defense; 2) defense of others; 3) to prevent or terminate a crime; or 4) to prevent the escape of a suspected fleeing felon. In those cases in which there appeared to be a combination of these reasons, the most weighty was chosen according to the just-mentioned order.

The variables concerning whether the shooting was ruled justifiable also requires a short explanation. The criterion for justifiability was the police department's final adjudication or disposition of the shooting incident as either "justified" or "not justified"; i.e., whether the shooting was within established or official departmental policy or procedure. A related variable, whether the officer was disciplined as a consequence of his or her role in an "unjustified" shooting, consisted of a range of sanctions imposed upon the officer -- from simple verbal or written reprimands to termination and/or prosecution by the district attorney's office.

The variable, was victim fleeing, was answered in the affirmative in all cases in which the suspect fled the arresting officer -- whether or not the suspect previously resisted, assaulted, or confronted the officer. The variable, was victim ordered to halt (as reported by the officer), was defined as an audible, intelligible command directed by the pursuing or arresting officer to the suspect to cease his or her present activity, whether this activity consisted of flight, resistance, assault, or other conduct preventing the officer from effectuating a legal arrest. Similarly, the variable, was victim resisting arrest,

constituted any conduct on the part of the suspect which impeded the officer's efforts to effect an arrest.

Another variable of interest, did the victim appear to the officer to reach for a weapon, also requires some discussion. This question was answered in the affirmative only if the suspect appeared to have, or did in fact, reach for a weapon after the officer's arrival at the scene. For purposes of this question, whether the suspect actually produced a weapon was immaterial since what was sought was the officer's initial perceptions immediately prior to the shooting when no weapon was previously known to exist.

In response to the variable, type of criminal activity (if any) perpetrated by the suspect, it is apparent that a certain criminal act may involve a number of legal offenses. As examples, a robbery may also involve a homicide; a rape, an assault; a burglary, possession of an illegal weapon or tool and so forth. In such instances the most serious violation was that which was recorded in response to what, if any, criminal activity in which the suspect may have been involved prior to or during the shooting incident. As a general rule, crimes against person, (i.e., 1) homicide; 2) rape; 3) robbery; and 4) felonious assault), were judged as more serious than crimes against property, (i.e., 5) arson;

6) burglary; 7) motor vehicle theft, and 8) larceny). In those cases in which multiple offenses were of the same class (i.e., crimes against person or crimes against property), the most serious offense and thus the one recorded was the one which was assigned the lower number above. For example a homicide (#1) was considered more serious than a rape (#2), arson (#5) more serious than a burglary (#6) and so on.

A final incident characteristic to be defined is whether the officer attempted any type of resolution to the situation short of deadly force prior to shots being fired. As might well be expected, this variable does not apply to those shooting incidents occurring in a matter of a few seconds, the officer having not had the opportunity to pursue alternative means of resolution. However, in those cases in which, because of time, the officer had been afforded such opportunity, the question becomes highly relevant. The minimum criterion for establishing that an officer attempted other means of resolving a potentially explosive situation was two-fold: 1) The officer in fact notified the suspect of his or her official police presence and further, 2) advised the suspect to cease his or her present activity at risk of being fired upon for failure to do so (e.g., "Halt...police or I'll shoot!").

Suspect Characteristics

The variable, criminal history of the suspect, consisted of several variables, designed to elicit information regarding the extent (if any) of the suspect's criminal record both before and after the particular shooting incident being investigated. (Needless to say, post-shooting criminal histories were collected only on those victimes of nonfatal injury and missed shot incidents.)

In this research, suspect criminal history was defined by several variables including the number of prior and post-shooting 1) felony convictions, crimes against person, 2) felony convictions, crimes against property, 3) misdemeanor convictions, 4) felony arrests, 5) misdemeanor arrests, 6) prison sentences served, and 7) jail terms served. In addition, data were also collected regarding whether the suspect was on parole at the time of the shooting incident. In keeping with previously defined terms, crimes against person included homicide, rape, robbery, and assault; crimes against property consisted of arson, burglary, motor vehicle theft and larceny. Also included in this latter category were drug, weapon, and forgery offenses.

Police Officer Characteristics

As with suspect variables, and for the same reason, few officer characteristics or variables require comment. Of these, the first to note is the shooting history of the officer, which was defined as the total number of separate shooting incidents in which the officer participated regardless of type (i.e., whether fatal, nonfatal injury, or "missed shot" incident) for two distinct time frames: 1) the five-year period preceding the study (1971-1976) and 2) 1976 through 1981 or the period of the study itself. Operationally defined in this manner, we were then able to record the total number of multiple-incident officers occurring in our five-year study for a period of ten years. Moreover, from this we were able to calculate the proportion of all police shooting incidents for fatal and nonfatal civilian injuries that was due to repeat shooters.

The other characteristic requiring some comment, number of hours of firearms training and practice received by the officer in the twelve months preceding the shooting incident, was defined by department policy. That policy required at least two hours of such training each year. Therefore, data reported for this characteristic were the

same for all officers of the department, both shooters and nonshooters alike, hence training was not considered as a variable in the study since it was, in fact, a constant.

Reliability of the Data

As many researchers have noted, and as we have acknowledged above, it is exceedingly difficult to interpret consistently information about deadly force indicents when one must necessarily rely on departmental documentation. For instance, in our study -- as in numerous others on the same topic -- it was often the case that an officer's written account of the event was a major if not sole source of information about what specifically precipitated his or her use of a firearm.

It would be extremely naive to believe that such written reports always reflect exactly what took place during the incident such as those with which we have dealt. That is not to say, however, that either police officers or other witnesses deliberately lie about such events -- even though it is likely that some do -- but rather, that these events usually occur quite quickly, and that even the best recollection of what was observed may not always square with

"objective" facts (e.g., a police officer said the suspect had a weapon, or reached for a weapon, but no weapon was found).

In short, dependent as we were on information collected by the agency to investigate incidents in which their personnel were involved, we feel obliged to point out the limits in our data. When for instance, we describe the factors that led to the "shooting" incidents we studied, our description is usually only a reiteration of what was included in official department records. Moreover, in some cases in which departmental records did not directly state, for example, the reason an officer used deadly force, we had to make inference as to that reason. That was done by requiring coders to indicate "self-defense" when it was clear someone either shot at or attempted to shoot at the officer, or clearly used another threatening weapon (e.g., a knife). Similarly, "defense of others" was indicated when, as in the previously mentioned definition, a person other than the officer was so threatened; if a person was in the act of committing a crime when observed and the officer shot during that time, the reason for the use of deadly force was recorded as "prevention/termination of crime"; "prevent escape" was indicated when a person was clearly fleeing the

scene or the officer. In short, we are suggesting here that our data are no more immune to certain kinds of biases than those reported by other researchers. We are not, however, apologizing for that fact; rather, we are merely expressing a concern and caution to those who may wish to make more (or less) of these data than are warranted.

Confidentiality

Although we have not been explicitly asked by the agency from which we collected deadly force data to maintain in confidence its identity, we have chosen to do so since no useful purpose would be served by doing otherwise. In addition to the confidentiality of the agency, we have also maintained anonymity with respect to those persons involved in each of the incidents to which we had access. In some of these cases, we of necessity maintained a list of suspect names in order that criminal history information about those individuals could be collected and coded. We obtained that information in some cases from the files maintained in the agency, and in other cases, by appropriate written requests to the State Police.

As mentioned previously, in some instances it was necessary to determine to the extent possible whether particular officers had been involved in more than one incident within the agency. To do so, we -- in co-operation with agency personnel -- assigned numbered identifiers to individual officers. In this way it was possible to track officers through incidents; this was necessary, of course, because the agency we investigated had a relatively large number of such incidents.

Generally, agency dossiers about incidents did not contain information about certain characteristics (e.g., race and age) of officers; such information was separately provided to us by agency personnel who extracted it from other department records. The co-operation we received in this and in other requests was outstanding, and we again express our appreciation to both the personnel assigned to us and to the supervisors authorizing them to work with us.

Analysis

Three major analytical sections comprise the next chapter which concerns the findings of our investigation of the police use of deadly force. Two distinctive analyses

were made. The first two sections present the results of descriptive analysis for all shooting incidents combined and for shooting incidents by incident type (i.e., fatal vs. nonfatal injury vs. missed shot incidents). Measures of association between selected variables, vis-a-vis contingency tables (crosstabulations) are presented in the third and last section. Like most empirical social science research of this sort, the first step in our data analysis consisted of a presentation of descriptive, distributional characteristics of the variables of interest. This analysis of certain variables was conducted for all incidents combined as well as for fatal, injury, and missed shot incidents separately.

One-way frequency distributions and accompanying statistics were computed with The Statistical Package for The Social Sciences. (Nie, Hull, Jenkins, Steinbrenner and Bent, 1975) for several variables with limited value ranges. An examination of these distributions served the two-fold purpose of enabling us 1) to verify whether each variable of interest "had sufficient variability to be used in subsequent relational analysis" (Nie et al., 1975), and 2) to check for coding, keypunching, and other input specification errors.

Variables for which frequencies were calculated include officer rank, assignment, race, sex, duty status, and uniform status. Frequency distributions for certain incident characteristics were calculated and include year, month and time of occurrence, incident location, types of precipitating factors, the officer's reason for the use of deadly force, type of call (citizen-, dispatcher-, or police-initiated), and type of criminal act perpetrated by the suspect. Frequencies for nominal suspect variables such as sex and race were also computed.

One-way frequency distributions were computed and presented for classificatory variables requiring either an affirmative or negative response and included whether the officer had prior military service, the shooting was departmentally justifiable, the officer was retrained, disciplined, transferred, criminally charged, the suspect had been fleeing, ordered to halt, resisting arrest, using a weapon, threatening to use a weapon, assaulting the officer or third party, appearing to reach for a weapon, firing a weapon, or had been involved in criminal activity immediately prior to or during the incident.

For variables which were interval-level, the appropriate summary statistics were computed by a standard SPSS

subprogram, CONDESCRIPTIVE (Nie et al., 1975). Measures of central tendency and dispersion (i.e., mean, mode, median, minimum, maximum range and variance) were computed for the following variables in our study: officer's length of service with the department, officer's level of education at the time of appointment, officer's age, number of shooting incidents involving the officer for a ten-year period, number of officers at the scene of the shooting incident, number of officers using deadly force during the incident, number of civilian eyewitnesses at the scene, and the shooting suspect's age. Summary descriptive statistics were also calculated for each suspect's felony convictions (crimes against person and crimes against property), misdemeanor convictions, felony arrests, misdemeanor arrests, prison sentences served, and jail terms, both prior to and after the shooting incident. These same frequency distributions and measures of central tendency and dispersion were also computed for all shootings by type to allow for descriptive comparisons of fatal, injury, and missed shot incidents.

The last set of analyses consisted of a series of contingency tables computed by a standard SPSS subprogram CROSSTABS (Nie et al., 1975). These analyses were aimed at

discerning the existence of relationships between variables of interest in our study. Our primary, though certainly not the sole interest in our investigation, was the relationship of race (both the officer and the suspect) to other incident, community, and organizational variables in our research.

Limitations to the Analysis

To the research consumer, some obvious deficiencies or limitations in our analyses will be evident. Though previous researchers in this area, such as Friedrich (1980) and Geller and Karales (1981), have advocated more sophisticated analytical techniques, (for example, the use of multiple or ordinary least squares regression), such analysis would be inappropriate for our data set.

The use of these or other such analyses rests on the consideration of several factors including the type of data collected, the measurement level of the data (particularly for the dependent variable) and the extent of "missing" data to mention a few. Our research efforts were severely constrained by these as well as other factors which, in turn, precluded the use of more sophisticated statistical

techniques. To have employed them would not have been in adherence to good research principles.

For example, because we collected no data on incidents in which deadly force was not but could have been used by police officers, we were unable to employ analyses that would have facilitated the prediction of whether officers in one incident and not another would have been more likely to use such force. In other words, the probability that a particular police-citizen encounter would devolve into a shooting incident could not be measured since we examined only those incidents in which shootings did in fact occur. In effect, the dependent variable in such analysis, the likelihood that police-citizen encounters would result in police firearms discharges, could not be formulated for either bivariate or multivariate models.

Alternate multivariate statistical analyses such as probit and discriminant analyses would have been more appropriate for our data in terms of identifying those independent varaibles which would appear to indicate or predict whether a particular incident would more likely be either a fatal, nonfatal injury, or missed shot incident. (Ordinary least squares regression requires the assumption of an interval-level dependent variable--an assumption clearly too

rigorous with a dependent variable consisting of only three categories).

On the other hand, with rank ordering of incident types by severity as the dependent variable, a probit analysis would have enabled us to identify those independent variables with the highest predictive validity in terms of class membership. If no ordinal assumptions were made regarding the incident outcome or type (i.e., if incident type as the dependent variable was treated as simply a categorical or nominal variable only), a discriminant analysis would have been the more appropriate analytical technique. (For a succinct and informative discussion concerning the appropriate uses of ordinary least squares, probit, and discriminant analyses, see Aldrich and Cnuddie, 1975). In either case however, even these two alternative analytical techniques were unsuitable and thus not used because of the large amounts of missing data for those variables thought to be the most discriminating in predicting the group or class membership of shooting incidents (i.e., as either a fatal, nonfatal injury, or missed shooting).

In sum, the analyses employed in this study were limited to descriptive and crosstabulational techniques, techniques which clearly lack the predictive and explanatory

power often sought but rarely achieved in research of this type. Therefore, the consumer is again cautioned against making more (or less) of the findings to be reported than is warranted.

CHAPTER 4

FINDINGS

Introduction

As indicated previously, this chapter is divided into three separate sections. Part I reports the descriptive results pertaining to various community, organizational, incident, suspect, and officer characteristics for all 349 shooting incidents combined. Part II presents descriptive findings concerning certain incident, suspect, and officer characteristics by type of incident, i.e., fatal, nonfatal injury, or missed shot. The final section is reserved for a presentation and brief discussion of certain relational findings which were of interest.

Part I: Descriptive Findings: All Incidents

Community Characteristics

Though Sherman (1980) recommends that information across a wide range of community variables ought to be collected

for an empirical study of the police use of deadly force--and on this we agree--time and funding constraints limited our collection efforts to two variables of interest: Population composition and arrest data. Based on the prior research and from our findings that almost 95% of the suspects for whom we could obtain this information were residents of the city and thus the most likely targets of the department's use of deadly force, we thought the collection of general population data quite appropriate for our investigation. Additionally, because arrest rates have been employed in previous deadly force research as a gauge of minority participation in criminal activity and as a surrogate measure of the level of community violence, we have collected and presented these findings as well.

Table 1 reveals the racial composition in the jurisdiction of the police department for the first and last years of our study period. Over the five-year period of the investigation, a notable population shift occurred both in absolute numbers and racial proportionality. The city population decreased by more than 11,000 or a -8% change. In terms of racial composition, year 1981 shows a loss of almost 144,000 whites or a proportionate 8% decrease from 1976. Blacks show a proportionate 7% gain and "other"

TABLE 1

Population Composition In Agency Jurisdiction
in 1976 and 1981

Year	White	%	Black	%	Other	%	Total	%
1976	565,020	43.0	735,840	56.0	13,140	1.0	1,314,000	100.0
1981	421,168	35.0	758,104	63.0	24,067	2.0	1,203,339	100.0

TABLE 2

Frequency Distribution of Residency of
Suspects Fired Upon by Police

Residency	Absolute Frequency	Relative Frequency	Adjusted Frequency (%)
Within City	368	79.1	94.4
Within County	12	2.6	3.1
Within State	10	2.2	2.5
Missing	75	16.1	Missing
Total	465	100.0	100.0

minorities a 1% population increase. In short, the population decline for the period can be largely attributable to what is euphemistically referred to as "white flight."

The next series of tables (Tables 3, 4, and 5) present findings concerning arrest rates by race for the last full year of the study (i.e., September 1980 through August, 1981). For all Part I offenses combined (homicide, rape, assault, and robbery), blacks comprised 85% and whites 15% of these arrests. Racial disproportionality in terms of arrests for property crimes (arson, motor vehicle theft, burglary, and larceny) was identical to arrest rates for all Part I crimes combined: blacks, 84%; whites, 16%.

With the exception of arson, black overrepresentation in arrests for separate Part I offenses is also quite pronounced. Blacks constituted 89% of the arrests for homicide, 85% of all rape arrests, 91% of all robbery arrests, 79% of all arrests for assault, 89% of all arrests for motor vehicle theft, 80% of all burglary arrests, and 85% of all arrests for larceny.

Department Characteristics

We collected information on four departmental variables thought be previous researchers to be related to the police

TABLE 3

Jurisdictional 1980 Arrests Rates by Race
(All Part I Offenses)

Race *	Absolute Frequency	Relative Frequency (%)
White	3,806	16.0
Black	20,010	84.0
TOTAL	23,816	100.0

* "Other" minorities constituted less than 1% of the municipal population and were thus excluded from the analysis.

TABLE 4

1980 Jurisdictional Arrest Rates by Race
for Personal and Property Crimes

Type of Crime *	Race	Absolute Frequency	Relative Frequency (%)
Crimes	White	1,377	15.0
	Black	7,729	85.0
	TOTAL	9,106	100.0
Property Crimes	White	2,429	16.0
	Black	12,281	84.0
	TOTAL	14,710	100.0

* Personal crimes are homicide, rape, burglary, and assault
Property crimes are burglary, larceny, motor vehicle theft, and arson

TABLE 5
1980 Jurisdictional Arrest Rates
for Separate Part I Offenses by Race

Type of Offense		Absolute Frequency	Relative Frequency (%)
Murder			
White		90	11.0
Black		729	89.0
	TOTAL	819	100.0
Rape			
White		158	15.0
Black		903	85.0
	TOTAL	1,061	100.0
Robbery			
White		271	9.0
Black		2,838	91.0
	TOTAL	3,109	100.0
Assault			
White		858	21.0
Black		3,259	79.0
	TOTAL	4,117	100.0
Arson			
White		106	37.0
Black		180	63.0
	TOTAL	286	100.0
Motor Vehicle Theft			
White		217	11.0
Black		1,730	89.0
	TOTAL	1,947	100.0
Burglary			
White		1,001	20.0
Black		3,964	80.0
	TOTAL	4,965	100.0
Larceny			
White		1,105	15.0
Black		6,407	85.0
	TOTAL	7,512	100.0

TABLE 6

Race of Sworn Personnel in Police Department
1976 - 1981

Year	White	%	Black	%	Total	%
1976	4,116	78.0	1,147	22.0	5,263	100.0
1977	3,808	69.0	1,704	31.0	5,512	100.0
1978	3,684	65.0	1,946	35.0	5,630	100.00
1979	3,391	68.0	1,615	32.0	5,006	100.0
1980	3,094	74.0	1,072	26.0	4,166	100.0
1981	2,907	71.0	1,187	29.0	4,094	100.0
Mean	3,500	71.0	1,445	29.0	4,945	100.0

use of firearms against civilians. These were as follows:

Size and Composition

One variable of interest was department size in terms of sworn personnel. Table 6 displays these data by year and by racial composition for the period of time encompassing our study. As can be seen from the findings, the racial composition of the department varied from year to year. However, means for each column were calculated for the six-year period and indicated that white police officers averaged 71% and black officers 29% of the department for that period.

Policy and Training

Departmental firearms policy and training were also points of interest in the present research. Of the four major types (i.e., any-felony, Model Penal Code, forcible-felony, or defense-of-life only), the firearms policy of the police department under study can be classified primarily as a forcible-felony rule. The constraints of the department's policy, which remained without modification during the study period, are quoted below:

> #### Constraints to the Use of Deadly Force
>
> Officers must understand and accept the Department's principle that life must always be preserved whenever possible.

Therefore, officers must learn to recognize cues to dangerous confrontations and consider alternatives, before they commit themselves to action.

a. Self-defense and fleeing felons - limits to both

   1. Must be confined to situations of strong and compelling need.

   2. Warning shots are strictly prohibited.

   3. Shots from moving vehicle only in cases of extreme necessity.

b. Self-defense

   1. Unwarranted exposure: Officers must not recklessly expose themselves to barricaded gunmen, suicidal persons, or moving vehicles.

   2. Jeopardy of serious bodily harm must be present.

c. Fleeing felon

   1. Deadly force is authorized only for the crimes of: Murder, Robbery, Rape, Felonious Breaking and Entering, Assault where serious injury has resulted, or Arson. Officers must know with virtual certainty that the person has committed one of these crimes. Probable cause is not sufficient to justify the use of deadly force.

   2. Officers must consider these consequences before using the firearm:

* Maximum sentence imposed by court would result in neither death nor injury.
* The danger that misdirected or ricochet bullets pose to innocent persons.

3. Officers must exhaust all other reasonable means of effecting the arrest.

4. Officers must use lesser force if possible.

5. Officers must not use deadly force if the fleeing felon could be reasonably apprehended soon thereafter.

6. Where the life of a felon is taken, by one who does not know or believe in his guilt, such slaying involves a criminal liability. If crime can readily be prevented, without injuring the criminal, every wanton injury is a trespass, and may become a crime. Neither law nor morality can tolerate the use of needless violence, even upon the worst criminals.

It is evident from the policy statement that deadly force may be used by police officers in self-defense or defense of others. Officers also may use it to effect the arrest of persons the officer knows with virtual certainty to have committed one of the enumerated forcible felonies (i.e., murder, robbery, rape, felonious breaking and

entering, assault resulting in serious injury, and arson) if:

1. all other reasonable means of effecting the arrest have been exhausted;
2. lesser force is not possible; and
3. the fleeing felon cannot be apprehended "soon thereafter."

Excluding firearms training at the police academy, police officers of the department receive two hours of training annually which consists of classroom "shoot-don't shoot" instruction and combat shooting. It is in combat shooting tests and minor written examinations that the officer's performance is largely evaluated and a marksmanship grade (Expert, Sharpshooter, Marksman, Qualified, or Failed) is awarded.

Board of Review

A Board of Review is an internal organizational body consisting of three executive members of the police department and is convened in all instances when the police use of deadly force resulted in the death of a civilian or a member of the department and in some cases (at the discretion of a

deputy chief) when such force resulted in serious bodily injury. In either case, the entire formal review process is activated by the notification of immediate and command level supervision.

The first supervisor on the scene of the shooting incident generally secures the scene and the evidence and--after hostilities have ceased--conveys department members involved in the incident to the Homicide Section. The Homicide Section's Special Assignment Squad is designated to investigate the incident and the scene of occurrence, to secure witnesses and all evidence for a formal report to the Board of Review, and to present its findings to the prosecutor's office. Its case is reviewed and approved by the Board prior to its submission to the prosecutor.

The Board is responsible for the co-ordination of the entire investigation of the incident and recommends disciplinary action when it discerns violations of departmental rules and regulations. In all cases where a Board of Review is established, officers under its investigation are required to undergo psychiatric evaluation by the Medical Section within one week of the fatal or critical injury shooting incident. Moreover, while the officer is under investigation he or she is relieved of regular duty, "with

pay and without prejudice," and assigned to appropriate non-street duty. Officers are not returned to regular duty until such time as the Board and the Medical Section recommend such actions. In cases where policy or regulations have been violated, the Board, with the consultation of the Disciplinary Administration Section, drafts the appropriate charges and specifications and makes immediate recommendations to the Chief of Police through official channels regarding suspensions (with or without pay), terminations, or criminal prosecution.

Departmental Disposition of Shootings

The last variable, considered by some as an appropriate departmental rather than incident characteristic, is the organizational disposition of the deadly force incident. As previous research has indicated, disposition rates of police-officer shooting incidents as "justified" (i.e., within department policy) appear to be quite high. Recall that these rates ranged from 70% (Fyfe, 1978) to 92% (Milton et al., 1977) of all such incidents.

The results disclosed in Table 7 reveal that our findings were no exception. Of the 325 cases about which we obtained disposition data, 83% of all known cases were considered within departmental guidelines, 7.4% as unjustified,

TABLE 7

Departmental Disposition of Shooting Incidents

Departmental Disposition	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Ruled "Justified"	290	83.1	89.2
Ruled "Unjustified"	24	6.9	7.4
Still Pending	11	3.1	3.4
Missing	24	6.9	Missing
TOTAL	349	100.0	100.0

and 3.4% still pending final disposition at the time of the data collection. Of those 7.4% ruled "unjustified" (24 cases), five cases involved duty-transfers of the officers involved, 15 involved disciplining and/or retraining of the officers, and four resulted in criminal charges against the officers. Of those four cases, one led to the conviction of the officer.

Incident Characteristics

As was indicated in the previous chapter, this research undertook an investigation of three types of incidents involving intentional discharges of police firearms: those involving shootings which resulted in civilian fatalities, those resulting in nonfatal civilian injuries, and last, those in which the officers fired at civilians but missed their intended targets. Table 8 displays the number and proportion by type for all 349 incidents examined in our study.

We should point out here, as in the previous chapter, that the entire population of both fatal and injury shooting incidents are included in these findings. Incidents involving missed shots, on the other hand, were systematically sampled over the same time period (N = 101 of a total

TABLE 8

Frequency Distribution of Shooting Incident Types

Incident Type	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Fatal Only	79	22.6	22.6
Injury Only	159	45.6	45.6
Missed Shot	101	28.9	28.9
Fatal and Injury	2	.6	.6
Fatal and Miss	1	.3	.3
Injury and Miss	7	2.0	2.0
TOTAL	349	100.0	100.0

of 682 "missed shot" incidents or a sample of 15%). In a further note, we found that 97.7% (or 339) of all shooting incidents investigated could be clearly identified as strictly fatal, nonfatal injury, or missed shots; only two involved both a fatal and an injury, one a fatal and a miss, and seven an injury and a miss.

Of the 349 incidents, 273 (78.2%) involved only one civilian suspect, 44 (12.6%) involved two, 20 (5.7%) had 3 suspects and 11 incidents had four suspects yielding a total of 465 suspects and a mean of 1.33 suspects per incident. In addition, 70% (246) of all shooting incidents involved only one officer, 19.5% (68), 2 officers, 5.7% (20) 3 officers, 3.4% four officers, and .9% (3) involved five officers for a total of 505 officers and an average of 1.45 officers per incident. The average number of officers on the scene prior to or during the shooting incident (both those who did and those who did not discharge their weapons) was 2.6 officers. The maximum number of officers at a single incident was 20 (though we only coded data on a maximum of 5 for any incident), the minimum, 1. There was an average of 2.44 civilian eyewitnesses (those not involved directly in the incident) per incident with a maximum of 60 at a single event and a minimum of none in others.

Table 9 indicates that 42% and 57% of all police shootings in our sample occurred in the last four and six months respectively of the calendar year for our five-year period, thus indicating some seasonal variation in occurrence. In terms of the day of occurrence, we also found that 40% (139) of all police shooting incidents occurred in the last eleven days of the month.

A breakdown by years in which the shootings occurred is displayed in Table 10. While the trend in shootings for our five-year period appears uneven at best, we do note a slight and continuing decline over the last two and one-half years of the study. Moreover, a contrast of the last four months of 1976 against the first eight months of 1981 indicate a comparable number of incidents (38 and 35 respectively), thereby lending some evidence to a general overall decline for the five years studied.

Table 11, which shows selected incident characteristics, discloses that 74% of all the incidents occurred between the hours of 6:00 P.M. and 8:00 A.M. with 53% taking place between 6:00 P.M. and midnight. Given that the location of our study was a large metropolitan area and that 97.4% of all the shootings occurred within the police department jurisdiction, it was not unexpected to find that virtually all of

TABLE 9

Frequency Distribution of Shooting Incidents by Month

Month	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Cumulative Frequency (%)
January	25	7.2	7.2	7.2
February	23	6.6	6.6	13.8
March	29	8.3	8.3	22.1
April	23	6.6	6.6	28.7
May	31	8.9	8.9	37.5
June	21	6.0	6.0	43.6
July	20	5.7	5.7	49.3
August	31	8.9	8.9	58.2
September	44	12.6	12.6	70.8
October	39	11.2	11.2	81.9
November	30	8.6	8.6	90.5
December	33	9.5	9.5	100.0
TOTAL	349	100.0	100.0	

TABLE 10

Frequency Distribution of Shooting Incidents
by Year: 1976 - 1981

Year	Absolute Frequency	Relative Frequency (%)
1976 *	38	10.9
1977	76	21.8
1978	70	20.1
1979	71	20.3
1980	59	16.9
1981 **	35	10.0
TOTAL	349	100.0

* September 1 through December 1
** January 1 through August 31

TABLE 11

Selected Shooting Incident Characteristics: Time, Location, Call Initiation, Suspect Weapon Possession, and Type of Felony

Time of Incident Occurrence	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Eight AM to Noon	26	7.4	7.5
Noon to Six P.M.	64	18.3	18.6
Six to Midnight	136	39.0	39.4
Midnight to Eight A.M.	119	34.1	34.5
	4	1.1	MISSING
TOTAL	349	100.0	100.0
Location of Incidents (Neighborhood v. Other)			
Neighborhood	188	53.9	56.3
Business	138	39.5	41.3
Industrial	4	1.1	1.2
Other	4	1.1	1.2
Missing Cases	15	4.3	MISSING
TOTAL	349	100.0	100.0
Location of Incident (Inside-Outside)			
Inside	44	12.6	17.7
Outside	205	58.7	82.3
Missing	100	28.7	MISSING
TOTAL	349	100.0	100.0
Location of Incidents (Private-Public)			
Private	104	29.8	30.0
Public	242	69.3	70.0
Missing	3	.9	MISSING
TOTAL	349	100.0	100.0

TABLE 11 (continued)

Call Initiation	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Dispatch	135	38.7	39.0
Police Officer	148	42.4	42.8
Citizen	52	14.9	15.0
Other	11	3.2	3.2
Missing Cases	3	.9	MISSING
TOTAL	349	100.0	100.0
Suspect Weapon Possession			
Armed	210	60.2	0.0
Unarmed	139	39.8	0.0
Missing	0	0	0
TOTAL	349	100.0	0.0
Type of Felony			
Felony Assault	113	32.4	35.1
Burglary	87	24.9	26.9
Assault	51	14.6	15.8
Robbery	37	10.6	11.5
Auto Theft	9	2.6	2.8
Homicide	4	1.1	1.2
Attempted Homicide	4	1.1	1.2
Concealed Weapon	3	.9	.9
Rape	2	.6	.6
Larceny	1	.3	.3
Drugs	1	.3	.3
Other	11	3.1	3.4
Missing Cases	26	7.5	MISSING
TOTAL	349	100.0	100.0

the incidents (99% or 343 of 349) took place in a city as opposed to a rural environment. In addition, well over half of them (53%) occurred in a neighborhood as opposed to a business or industrial setting. Further, of the 249 incidents in which it was know, 82% (205) occurred outdoors and almost 70% (242) took place in a public area as opposed to a private domicile.

Also of interest was the question of who initiated the call that led ultimately to the police officer's discharge of a weapon at a suspect. We discovered, as is shown in Table 11, that 43% (148) of the police shooting incidents were initiated by an officer at or near the location of the suspect. A comparable share of the calls came from the dispatcher (39%) and the remainder came primarily from citizens at or near the scene of the situation that precipitated the shooting.

One of the major points of interest in our investigation was the type of criminal activity (if any) perpetrated by the suspect prior to or during the incident that could reasonably be ascertained as one of the factors precipitating the officer's use of a firearm. We discovered that of all incidents in which we were able to obtain this information, 93% involved instances of felonious activity on the

part of the suspect. (Of course, it should be noted here that many cases involved suspects committing multiple felonies. In these instances we simply reported the most serious.) Of these, the most frequently perpetrated criminal act was felonious assault (113 or 32%) followed by the crimes of burglary (87 or 25%), simple assault (51 or 15%) and robbery (37 or 11%).

Though the results are not tabled, we found that officers, upon arriving at the scene in 307 or 88% of the incidents were reported to have advised the suspects to halt or to cease their present activities. In 224 or 64% of the cases, the suspect fled or attempted to flee the scene; in well over half of the incidents (198 or 57%), the suspects were reported to have openly resisted apprehensions by officers. At least 60% (210) of the cases involved suspects with weapons. In addition, 61% (214) of all shooting instances involved suspect assaults on officers and 37% (131), assaults on third parties immediately prior to or during the incident.

For all incidents involving armed first or primary suspects (210 of 349 or 60%), the most commonly reported weapon was the handgun, comprising 49.8% of all weapons carried, followed by the long gun at 20.4% (45). Knives

TABLE 12

Frequency Distribution of Type of Weapon Carried by Armed Suspects Involved in Police Shooting Incidents

Type of Weapon *	Frequency	Relative Frequency
Vehicle	28	12.7
Handgun	110	49.8
Long Gun	45	20.4
Knife	34	15.3
Blunt Instrument	4	1.8
TOTAL	221	100.0 %

* Of the 210 suspects who used or possessed a weapon during the incident

were used by 15.3% and vehicles by 12.7% of all armed primary suspects. Eleven suspects carried two weapons.

Though not tabled here, we found that of those cases involving suspects with firearms, 58% (144) and 35% (86) of the suspects pointed their weapons at police officers and third parties respectively. Of those pointing firearms, 90 suspects actually fired at officers and/or third parties; however, no officers and only three third parties were killed by police shooting suspects during the five-year period of our investigation.

Suspect Characteristics

As with previous studies on the police use of deadly force, the vast majority of all police shooting victims or suspects were male. Of primary suspects, 97% (338 of 349) were male; second suspects, 95% (70 of 75) male; third suspects, 90% (27 of 30), and fourth suspects, 91% (10 of 11).

As Table 13 shows, blacks comprise 86.6% (296) of all first suspects, 90.6% (68) of second suspects, 90% (27) of third suspects, and 90.9% (10) of all fourth suspects. For all police shooting suspects combined, 87.5% were black, and 12.5% were white.

TABLE 13

Frequency Distribution of Race of Suspects
Involved in Shooting Incidents

Race	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Primary Suspect			
Black	296	85.8	86.6
White	46	13.3	13.4
Missing Cases	3	.9	MISSING
TOTAL	345	100.0	100.0
Second Suspect			
Black	68	90.6	--
White	7	9.4	--
TOTAL	75	100.0	
Third Suspect			
Black	27	90.0	--
White	3	10.0	--
TOTAL	30	100.0	
Fourth Suspect			
Black	10	90.9	--
White	1	9.1	--
TOTAL	11	100.0	
All Suspects Combined			
Black	401	87.0	87.5
White	57	12.4	12.5
Missing	3	.6	MISSING
TOTAL	461	100.0	100.0

Regarding suspect age for cases in which we were able to acquire the data, the average age of the primary or first suspects (342) was 26.4 years; second suspects (74) 22.6 years, third suspects (26) 21.0 years; and fourth suspects (9), 23.2 years. The combined average age was 24.9 years, with ages varying from 13 to 79 years.

A final characteristic of interest, and one not previously investigated with a sample as large as ours, was the criminal history of the suspects. Because our sample of second, third, and fourth suspects was small, their criminal histories will not be discussed. It was also the case that criminal history data were missing for many first suspects; therefore, we caution against making any more (or less) of our findings than is appropriate.

A further explanatory note should also be referenced here regarding missing criminal history data. An essential ingredient in obtaining criminal history records from the state-wide computer system was detailed identifiers on each shooting victim. The search usually required the suspect's full name, aliases, date of birth, race, sex and last address. In many cases we were unable to locate either some or most of this information from the available reports. Consequently, the computer search often failed to indicate a

record for a particular suspect. Of course, this does not imply that particular shooting suspects for which we could not acquire criminal histories had prior criminal records but nor does it mean that they did not. We, of necessity, treated such situations as missing data and proceeded to describe only these cases in which we had this information. Thus, the data we obtained were not randomly selected.

For the following discussion the reader is referred to Tables 14 through 16. Table 14 indicates primary suspect arrest and conviction records prior to the shooting incident and as it shows, the average number of misdemeanor arrests per suspect for 49% (176) of all suspects (176) was 1.1 and for misdemeanor convictions, .98 with a range from 0 to 32 for both. For almost half of primary suspects, the data on whether suspects had felony arrests and convictions (property and/or personal offenses) were known to us. We found that the average number of felony arrests per suspect was 2.63 -- more than double the number of misdemeanor arrests. Convictions for felony property offenses averaged 1.3 per suspect while the average number of felony convictions for crimes against persons equaled .57.

Table 15 displays findings pertaining to the arrest and conviction record of first suspects from after the time of the shooting incident through the duration of our study

TABLE 14

Criminal History of Suspects Prior to Involvement in Shooting Incidents

Criminal History	Mean	Standard Deviation	Minimum	Maximum	Valid Cases*	Total Cases
Number of Misdemeanor Arrests	1.10	3.58	0	32	173	349
Number of Misdemeanor Convictions	.98	3.30	0	32	170	349
Number of Felony Arrests	2.63	4.02	0	30	174	349
Number of Felony Convictions (Property)	1.30	2.27	0	18	165	349
Number of Felony Convictions (Personal)	.57	1.68	0	14	167	349

* The number of valid cases actually equals the number of suspects since we are dealing with only primary suspects of which each case has exactly one.

period. (There was a substantially fewer number of valid cases for post-shooting criminal history owing primarily to the fact that fatal victims of police shootings were not counted.) As Table 15 indicates, even though the average number of post-shooting felony arrests per suspect is comparable to preshooting figures (2.27 to 2.63), both post-shooting misdemeanor arrests and convictions averages are substantially lower (.10 to 1.10 and .18 to .98 respectively); moreover, the range of misdemeanor arrests and convictions (0 to 2 arrests and 0 to 2 convictions) was considerably smaller. Pre-shooting felony conviction averages for property offenses are almost double the post-shooting averages (1.30 to .78). However, the contrary appears to be the case for personal or violent felony convictions, that is, post-shooting suspects averaged .9 convictions to .57 for pre-shooting suspects.

Our analysis of suspect incarceration records disclosed that of 131 primary suspects (43% of all primary suspects) about whom we were able to obtain these data, 86 or 66% of them had served at least one jail term. A slightly higher figure was shown for suspect prison terms: Of the 142 primary suspects on whom we had the information (41% of all such suspects), 80 or 56% had also served at least one prison term.

TABLE 15

Criminal History of Suspects After Involvement in Shooting Incidents

Criminal History	Mean	Standard Deviation	Minimum	Maximum	Valid Cases*	Total Cases
Number of Misdemeanor Arrests	.10	.374	0	2	115	349
Number of Misdemeanor Convictions	.18	.472	0	2	83	349
Number of Felony Arrests	2.27	1.77	0	10	117	349
Number of Felony Convictions (Property)	.78	1.02	0	4	88	349
Number of Felony Convictions (Personal)	.90	1.22	0	4	87	349

* The number of valid cases actually equals the number of suspects since we are dealing with only one primary or first suspects of which each case has exactly one.

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Table 16 displays incarceration data, specifically our findings regarding the number of jail and prison terms served by primary suspects prior to and following the shooting incidents in which they were involved. The number of primary suspects about whom we were able to obtain these data was comparably less for both post-shooting jail and prison terms than pre-shooting jail and prison terms: 87 (25%) and 77 (22%) for pre-shooting terms; 77 (22%) and 52 (15%) for post-shooting terms. In addition, the average number of jail terms per suspect decreased after the police shooting occurred (from 1.92 to 1.36) while the average number of prison sentences more than doubled (from .94 to 2.10).

A last question of interest relating to the suspect's criminal history was whether he or she was on parole during the time of the shooting incident. We were able to collect this information on 151 or 43% of all primary suspects. Though we have not tabled these data, we found that 24 or 16% were in fact on parole during the time of the shooting.

Officer Characteristics

Our investigation involved the collection and analysis of data on those officers intentionally firing their weapons

TABLE 16

Suspect Incarceration Record:
Number of Suspect Jail and Prison Terms
Prior to and Following Involvement
in Shooting Incidents

Incarceration Record	Mean	Standard Deviation	Minimum	Maximum	Valid Cases
Number Pre-Shooting Jail Terms	1.92	2.49	0	17	87
Number Post-Shooting Jail Terms	.937	1.10	0	4	48
Number Pre-Shooting Prison Sentences	1.36	1.77	0	8	77
Number Post-Shooting Prison Sentences	2.10	1.56	0	6	52

at civilians. As noted earlier, we collected and coded data on each officer involved in a shooting incident up to a maximum of five per incident (an insignificantly small number of incidents involved more than five). A total of 505 such officers participated in the 349 shooting incidents investigated for an average of 1.45 officers per incident. All 349 incidents involved at least one officer (first officers); 103 (30%) two officers (second officers); 35 (10%) 3 officers (third officers); 15 (4%) 4 officers (fourth officers); and 3 (1%) involved 5 officers (fifth officers). As indicated in Table 17, 45% of all the incidents involved at least two or more police officers.

Table 18 presents findings pertaining to the race of all of the officers; as shown, 60% (303) were white; blacks constituted 39% (196) and Hispanics and Orientals the remaining 1%. These findings compare favorably with the racial composition of first-officers only of which 58% were white and 42% were black.

Our results regarding officer sex, displayed in Table 19, show that, of the 505 officers, 96% (486) were male and 4% (19) were female. This finding coincides with the sexual composition of first officers in which males constituted 96% (336) of those 349 officers (not tabled).

TABLE 17

Number of Officers Involved
in Shooting Incidents

Incidents with:	Number of Officers	% Incidents Involved	Total Number of Incidents
First Officers	349	100.0	349
Second Officers	103	30.0	
Third Officers	35	10.0	
Fourth Officers	15	4.0	
Fifth Officers	3	1.0	
TOTAL	505	45.0%	

TABLE 18

Frequency Distribution of Race of
Officers Involved in Shooting Incidents

Race of Officer	Relative Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Cumulative Frequency (%)
Black	196	38.8	39.0	39.0
White	303	60.0	60.4	99.4
Hispanic	2	.4	.4	99.8
Oriental	1	.2	.2	100.0
Missing	3	.6	Missing	
TOTAL	505	100.0	100.0	

TABLE 19

Frequency Distribution of Sex of
Officers Involved in Shooting Incidents

	Relative Frequency	Relative Frequency (%)	Cumulative Frequency (%)
Male	486	96.2	96.2
Female	19	3.8	100.0
TOTAL	505	100.0	

In our investigation we were also able to obtain information on officer age, length of departmental service at the time of the shooting incident, and level of education at the time of appointment. Table 20 below presents these data. As can be seen, the average (mean) ages of all officers (from primary to fifth) varied only slightly (30.4, 31.2, 30.7, 29.4, and 31.0 years respectively). There was a wide range in age however; the youngest officer was 21 years old; the oldest, 57. The average length of service for first, second, and third officers varied only slightly (77.4, 78.3 and 77.7 months respectively). This was not the case for fourth and fifth officers however, who averaged 51.4 and 90.7 months of service, respectively; these results, however, were based on a sample of only 18 cases and thus are not very meaningful. Finally, we note that the range of service for all officers combined extended from 2 to 366 months.

While it may have been more meaningful to report officers' educational level at the time of the incident, we were unable to do so. However, as a surrogate measure, we did collect and analyze data pertaining to the officers' educational level at the time of their appointment to the department. The most obvious deficiency of this measure is

TABLE 20

Selected Officer Characteristics:
Age, Length of Departmental Service, and
Education at Time of Shooting

Selected Characteristics	Mean	Standard Deviation	Mini-mum	Maxi-mum	Valid Cases
Officer Age at Incident (Years)					
First Officer	30.4	5.28	21.0	57.0	349 of 349
Second Officer	31.2	4.23	22.0	45.0	100 of 103
Third Officer	30.7	5.03	21.0	44.0	35 of 35
Fourth Officer	29.4	4.72	24.0	43.0	14 of 15
Fifth Officer	31.0	3.61	27.0	34.0	3 of 3
Officer Length of Departmental Service (Months)					
First Officer	77.4	52.9	2.0	366.0	345 of 349
Second Officer	78.3	49.8	2.0	306.0	100 of 103
Third Officer	77.7	60.6	7.0	286.0	35 of 35
Fourth Officer	51.4	32.6	7.0	124.0	15 of 15
Fifth Officer	90.7	30.0	56.0	108.0	3 of 3
Officer Education at Time of Appointment (Years)					
First Officer	12.8	1.54	12.0	20.0	347 of 349
Second Officer	12.7	1.79	11.0	17.0	100 of 103
Third Officer	12.5	.98	11.0	16.0	35 of 35
Fourth Officer	13.1	1.59	12.0	17.0	14 of 15
Fifth Officer	13.7	2.08	12.0	16.0	3 of 3

that it does not allow for information on those officers who continued or were continuing their education between the time of appointment and the shooting incident.

With 12 years representing high school graduation, 13 and 14 years, an associate level of education, and 15 and 16 years, a baccelaureate education, we found that the average level of attainment at appointment was between 12 and 13 years of formal education. Educational levels for fourth and fifth officers were slightly higher: 13.1 and 13.7 years respectively. This, again, is a finding based on a relatively small sample.

In terms of officer rank at the time of the shooting, shown in Table 21, officers of the lowest rank--that of patrol--comprised 94% (474) of all officers and 93% (325) of first officers. Sergeants comprised the next largest group for both primary and all officer-shooters at 5%.

Results in Table 21 also disclosed that the vast majority of officers involved in deadly force incidents were assigned to patrol at the time of the shooting (77%) or 387 officers. Tactical services personnel and "other" assignments comprised 18% (93) while narcotics officers represented only 3% (14) of all officers involved in shooting incidents, a finding sharply divergent from that of Fyfe

TABLE 21

Selected Officer Characteristics:
Rank, Assignment, Duty Status, Uniform
Status, and Marksmanship at time
of Shooting Incident

Selected Characteristics	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Officer Rank at Incident			
Patrol Officer	474	93.9	
Corporal	1	.2	
Detective	2	.3	
Sergeant	23	4.6	
Lieutenant	3	.6	
Inspector	1	.2	
Commander	1	.2	
TOTAL	505	100.0	
Officer Assignment at Incident			
Patrol	387	76.6	77.2
Narcotics	14	2.8	2.8
Tactical Services	30	5.9	6.0
Organized Crime	2	.4	.4
Traffic	5	1.0	1.0
Other	63	12.5	12.6
Missing	4	.8	----
TOTAL	505	100.0	100.0
Officer Duty Status at Incident			
On Duty	415	82.2	84.3
Off-Duty	77	15.2	15.7
Missing	13	2.6	----
TOTAL	505	100.0	100.0

TABLE 21 (continued)

Selected Characteristics	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Uniform Status at Incident			
Uniform	319	63.2	63.5
Plainclothes	183	36.2	36.5
Missing	3	.6	----
TOTAL	505	100.0	100.0
Officer Marksmanship at Incident			
Expert	78	15.5	16.1
Sharpshooter	136	26.9	28.1
Marksman	172	34.1	35.5
Qualified	93	18.4	19.2
Failed	5	1.0	1.1
Missing	21	4.1	----
TOTAL	505	100.0	100.0

(1978). Generally, our results regarding assignment for all officers is comparable to those of first officers. Of the latter category (349 cases), 75% were assigned to patrol, 20% to Tactical Services and "Other," and 3% to narcotics squads.

The duty and uniform status of officers participating in shooting incidents has been a point of interest for much of the previous empirical research as was indicated in Chapter 2. Our results, as disclosed in Table 21, show that 16% (77) were off-duty during the incident.

Table 21 also depicts the results of our investigation of the officer's uniform status during the deadly force incident. Of the 502 oficers about which we had this information, 63.5% (319) were in uniform while the remaining 36.5% (183) were in plainclothes during the shooting. With respect to first officers only, 210 (60%) were in uniform; the remainder in plainclothes.

Our research effort also undertook examination of individual officer marksmanship which is evaluated by the department on an annual basis. Department policy requires each officer to receive two hours of training annually, consisting of combat, "shoot - don't shoot," and classroom instruction. Bullseye target shooting is not used by the

department as a basis for grading marksmanship; this assessment is contingent on the officer's performance scores in combat shooting tests. As Table 21 shows, we found that experts, the highest skill level, constituted only 16% (78) of all officers involved in deadly force incidents. Marksmen comprised the largest contingent at 35.5%, followed by Qualifieds at 19%. Five officers in shooting incidents (1%) had failed to qualify with their weapons as required by department policy.

Also of interest was the number of shots fired by police officers at civilians during the incident. Table 22 discloses that first officers averaged 2.45 shots per incident, the least number of shots fired by a primary officer being one, the maximum, 15. Second officers fired, on the average, three shots per incident; third officers 3.7 shots; fourth officers, 4 shots; and fifth officers, of which there were only 3 valid cases, 2.5 shots.

In many shooting incidents, the officer intentionally discharged a firearm at the suspect's vehicle as well (when one was involved in the incident) reportedly to disable it and thus, effect the arrest of the suspect. As Table 22 indicates, 96 officers were reported to have fired at the suspect's vehicle: first officers (57) averaging .9 shots;

TABLE 22

Number of Shots Fired at Suspects, Suspect Vehicle, and Shots Hitting Intended Targets by Police Involved in Shooting Incidents

	Mean	Standard Deviation	Minimum	Maximum	Valid Cases
Number of Shots Fired at Suspect					
First Officer	2.45	2.18	1	15	345
Second Officer	3.01	2.16	1	11	98
Third Officer	3.70	3.12	1	12	33
Fourth Officer	4.0	2.35	1	7	2
Fifth Officer	2.5	2.12	1	4	2
Number of Shots Fired at Suspect Vehicle					
First Officer	.91	1.85	1	8	57
Second Officer	1.2	1.99	1	6	27
Third Officer	1.43	1.62	1	4	7
Fourth Officer	2.6	3.21	1	7	3
Number of Shots Hitting Intended Targets					
First Officer	1.0	1.16	0	8	297
Second Officer	.68	1.08	0	5	66
Third Officer	.42	.61	0	2	19
Fourth Officer	.43	.56	0	7	5

second officers (27), 1.2 shots; third officers (7), 1.4 discharges; and fourth officers (5), 2.6 shots.

Our staff also collected data on officers' accuracy in hitting the intended targets. As Table 22 shows, with intended targets being suspects and/or vehicles, first officers averaged one hit per incident with a minimum of 0 and a maximum of 8 hits. Second, third and fourth officers all faired less well with averages of .68, .42, and .43 hits respectively. Another officer characteristic investigated in this study, and one not previously examined in other research was the prior military service of the officer. Of interest was whether there were differences between shooters and nonshooters in terms of their military background. Table 23 appears to indicate that police officers with prior military experience appear with virtually equal frequency among the ranks of shooters and nonshooters alike. That is, 51.3% of all shooters had prior or concurrent military service, whereas 55.7% of the entire department's officers had such background.

Descriptive results pertaining to officer shooting history are presented in Table 24. This Table displays the average number of shooting incidents per officer for periods from 1970 to 1975 and 1976 to 1981.

TABLE 23

Frequency Distribution of Officers with Military Service: Officers Involved in Shooting Incidents; All Department Officers

	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Officer-Shooter Prior Military Service			
Prior Service	259	51.3	52.0
No Service	239	47.3	48.0
Missing	7	1.4	----
TOTAL	505	100.0	100.0
Officer Prior Military Service* (Entire Department)			
Prior Service	3,601	55.7	----
No Prior Service	2,867	44.3	----
TOTAL	6,468	100.0	----

* Figures include both those personnel employed and those separated during the study period

TABLE 24

Shooting History of Officers Involved
in Shooting Incidents Between 1976 and 1981
(Number of Shooting Incidents): 1970-1975, 1976-1981

Number of Shooting Incidents	Mean	Standard Deviation	Mini-mum	Maxi-mum	Valid Cases
(1970-1975)					
First Officer	.63	1.05	0	7	338
Second Officer	.65	1.09	0	5	96
Third Officer	.42	.71	0	2	33
Fourth Officer	.14	.36	0	1	14
(1976-1981)					
First Officer	1.83	1.07	0	4	349
Second Officer	1.58	.90	0	4	102
Third Officer	1.69	.96	0	4	35
Fourth Officer	1.57	.94	0	3	14

On average, first officers in our study period (1976-1981) had been involved in .63 shooting incidents in the preceding five years. At least one officer had been involved in seven previous incidents, others in none. First officers for our study period averaged involvement in 1.83 shootings with at least one having participated in four. Second officers averaged .65 incidents in the previous five-year period and 1.58 in the study period; third and fourth officers participated in an average of .42 and .14 shooting incidents in the previous five year period and 1.69 and 1.57 incidents for the time of the study. While 505 officers were involved in the 349 shooting incidents investigated in this study, 58 officers either participated in or acted alone in 137 of these. In other words, 58 officers or 11% accounted for almost 40% of all shooting incidents from September 1, 1976 to August 31, 1981.

Summary of the Descriptive Findings for All Incidents

In this section descriptive findings for five groups of variables that were potentially influential on the police use of deadly force against civilians were reported: community, departmental, incident, suspect, and officer characteristics. The community in which the police department had

legal jurisdiction had experienced a rather significant shift in its racial composition over the five-year period of the investigation. In 1976, blacks constituted 56% of the city population, whites 43%; by 1981, blacks comprised 63% and whites 35% of the community. Using arrest rates as a measure of civilian criminal activity, blacks comprised 84% of those arrested for Part I offenses, 85% for property crimes, and 84% for violent crimes or crimes against persons. Of property crimes, 63% of the arrests for arson, 89% for motor vehicle theft, 80% for burglary and 85% of those arrested for larceny were black. The arrest rates for blacks for violent felonies were comparable: blacks comprised 89% of those arrested for homicide, 85% of the arrests for rape, 91% of all robbery arrests, and 79% of all those arrested for assault.

With respect to departmental characteristics, whites comprised an average of 71% of all sworn personnel over the five-year period of the study as well as for the last year (1981); black officers constituted the remaining 29% for both periods. Concerning disposition rates, 83% or 270 of the shootings were ruled by the department as within existing policy guidelines.

Of the incidents, 23% of those investigated resulted in civilian fatalities, 46% in nonfatal civilian injuries, and 29% in missed shootings. It must be recalled however, that unlike fatal and injury shootings, the missed shootings in our study were a 15% sample of a universe of 682 such incidents. Consequently, for the five-year period, missed shot incidents comprised 73.3% of all shootings, injury shootings 17.9% and fatal incidents, 8.8% of all police deadly force incidents involving intentional firearms discharges at civilians.

An overall decline in the number of incidents over the five years of the study period was shown, with 1979 being the peak year. We also found some apparent seasonal variation in that police shootings were slightly more likely to occur in the last four months of the calendar year than for any other similar period. Furthermore, shooting incidents occurred more frequently during the hours of six P.M. to midnight (40%) than for other periods with 74% occurring between the hours of six P.M. and eight A.M.. In terms of location, most incidents (53%) transpired in neighborhood areas, in places legally accessible to the public (70%), out-of-doors (82%), and involved civilians reportedly committing a felonious act (93%). Of felonious acts, the most

common was felony assault (32%), followed by burglary (25%), simple assault (15%), and robbery (11%).

With regard to suspect characteristics, three of every five primary suspects were armed, approximately half (48%) with handguns; 47% of all second suspects were armed, over half (53%) with handguns. Of all 465 suspects (1.33 per incident), the average age ranged from 26.4 years for first suspects to 23.2 years for fourth suspects; approximately 95% of all suspects were male. In terms of race, 85% of first, 91% of second, 90% of third, and 91% of fourth suspects were black. For all suspects combined, 86% were black, 12% white, and the remaining 1%, "other" minorities. Primary suspects averaged 1.1 misdemeanor arrests, 1.0 misdemeanor convictions, 2.6 felony arrests, 1.3 felony property convictions and .6 violent crime convictions prior to the time of the shooting. After the shooting, for all nonfatal injury and missed shot suspects, the average number of misdemeanor arrests and convictions and felony property convictions fell sharply to .1, .2, and .8 per suspect respectively. The average number of felony arrests remained roughly the same at 2.3 per suspect while the number of convictions for violent crime convictions rose to .9 per opponent. Last, suspects averaged 1.9 jail terms and 1.4 prison

terms prior to the shooting incident. After the incident, the average number of jail terms fell to .9 per suspect while the number of prison terms rose to an average of 2.1 per suspect.

A total of 505 officers participated in the 349 incidents investigated for an average of 1.45 officers per incident. Of these, 60% were white, 39% black, and 96% were male. The average age ranged from 29.4 to 31.0 years with mean length of department service ranging from 77.4 to 78.3 months at the time of the shooting. The average level of formal education (measured at the time of appointment to the department) ranged from 12.5 to 13.7 years per officer. In addition, at the time of the shooting, 94% of the officers were of the rank of patrol officer, 84% were on duty, 64% were in uniform, and 77% were assigned to patrol duty. Of those officers involved in shooting incidents, 36% were marksmen, 28% sharpshooters, 19% qualified, 16% experts, and 1% failed (not qualified). While 52% of all officers involved in shootings had prior military service, 55% of the entire department had such experience. Finally, in terms of officer-shooting history, primary officers averaged involvement in 1.8 incidents during the period of the study and .6 deadly force incidents in the five years preceding the period of the study.

Part II: Descriptive Findings: Comparisons Between Fatal, Injury, and Missed Shot Incidents

This section presents the primary findings and notes the major similarities and differences among fatal, injury, and missed shot incidents--the three incident types investigated in this study. Incident characteristics on which we report our findings include the number of suspects, officers, and eyewitnesses by incident type. Also reported by incident type were findings with respect to the month, year, time of day, and location of incident occurrence, suspect criminal activity, and suspect-officer interaction during the incident. The effort here was to determine whether the shooting outcome may have been differentially related to any of these factors. In keeping with the format of the previous section, we report our findings in the order of incident, suspect, and finally officer characteristics in each of the three incident types.

Incident Characteristics By Incident Type

While the focus in this section concerns police shootings that can be distinguished purely as fatal, injury

and missed shot incidents, we of course discovered some incidents which were a combination of these three. Table 8, in the previous section, indicated the various combinations, their frequency of occurrence, and their respective proportions to the total number of shootings investigated. Because the first three types constituted 97% of the incidents and because we wished to simplify the presentation, the six combinations in this table were reaggregated as strictly fatal, injury, and missed shot incidents in accordance with Table 25.

It should be recalled that while the fatal and nonfatal injury shooting incidents (N=82 and N=166, respectively) comprise the entire population of those types for the five-year period of the study, the missed shot incidents (N=101) are in fact a 15% systematic sample. As shown in Table 25, which displays the universe of shooting types, missed shots constituted 73% of all shootings for the period of the study.

Table 26 indicates the number of shooting incidents, by type, by number of suspects involved. Table 27 displays the number of suspects in shooting incidents by incident type. For example, 42 missed shot incidents involved 1 suspect only, 31 had 2 suspects, 20 had 3 suspects, and 8 had 4

TABLE 25

Frequency Distribution of Shooting Incidents by Type

	Absolute Frequency	Relative Frequency (%)
The Sample		
Fatal	82	23.5
Injury	166	47.6
Missed Shot	101	28.9
TOTAL	349	100.0
The Population		
Fatal	82	8.8
Injury	166	17.9
Missed Shot	682	73.3
TOTAL	930	100.0

TABLE 26

Number of Incidents by Type
by Number of Suspects

Incident Type	Number of Incidents With: 1 Suspect	2 Suspects	3 Suspects	4 Suspects	Total Incidents
Fatal	78	4	--	--	82
Injury	153	9	4	--	166
Miss	42	31	20	8	101
TOTAL	273	44	24	8	349

TABLE 27

Frequency Distribution of Suspects
in Incidents by Incident Type

Incident type	1 Suspect	2-4 Suspects	Total	(%)
Fatal	82	4	86	18.5
Injury	166	17	183	39.4
Miss	101	95	196	42.1
TOTAL	349 (75.1)	116 (24.9)	465	100.0

suspects, yielding a total of 196 suspects for 101 incidents or an average of 1.9 suspects per shooting incident (Table 30). Fatal incidents involved 78 incidents with 1 suspect only and 8 incidents with 2 suspects for an average of 1.1 suspects per case. Injury incidents were comprised of 153 with 1 suspect, 18 with 2 and 12 with 3 suspects, also for an average of 1.1 suspects per incident.

Tables 28 and 29, referencing the officer number and number of officers by incident type, are organized in the same fashion. For example, 51 incidents involved 1 officer, 20 with 2, 8 with 3, 2 with 4, and 1 with 5 constituted the sum of the 82 fatal shooting incidents and a total of 128 officers for 82 cases or an average of 1.6 officer-shooters per incident (Table 30). Injury incidents involved 243 officers or 1.5 officers per incident. Last, 134 officers participated in 101 missed shot incidents, averaging 1.4 officers per case.

Table 30 discloses findings comparing the average number of officers (officers using deadly force), officers present, suspects involved, and eyewitnesses present at the incident by incident type. With three exceptions, very little information in these tables distinguish the incident types. The average number of officers in fatal incidents, including

TABLE 28

Number of Incidents by Type
by Number of Officers

Incident Type	1 Officer	2 Officers	3 Officers	4 Officers	5 Officers	Total
Fatal	51	20	8	2	1	82
Injury	119	29	8	8	2	166
Miss	76	19	4	2	0	101
TOTAL	246	68	20	12	3	349

TABLE 29

Frequency Distribution of Officers
in Incident by Incident Type

Incident Type	1 Officer	2-5 Officers	Total	(%)
Fatal	82	46	128	25.4
Injury	166	77	243	48.1
Miss	101	33	134	26.5
TOTAL	349 (69.1)	156 (30.9)	505	100.0

TABLE 30

Selected Incident Characteristics
by Incident Type

Incident Type	Mean	Standard Deviation	Mini-mum	Maxi-Mum	Valid Cases
Number of Officers Using Deadly Force					
Fatal (N=82)	1.6	1.03	1	5	82
Injury (N=166)	1.5	.89	1	5	166
Miss (N=101)	1.4	.66	1	4	101
Number Officers At Scene					
Fatal (N=82)	3.3	3.24	1	20	82
Injury (N=166)	2.4	1.46	1	10	166
Miss (N=101)	2.4	1.55	1	10	100
Number of Suspects					
Fatal (N=82)	1.1	.22	1	2	82
Injury (N=166)	1.1	.46	1	4	166
Miss (N=101)	1.9	.97	1	4	101
Number of Eyewitnesses					
Fatal (N=82)	4.0	7.21	0	60	81
Injury (N=166)	2.2	2.87	0	15	156
Miss (N=101)	1.4	3.32	0	20	66

nonshooters, was .9 officers higher than for either injury or missed shot incidents. In addition, fatal and injury shootings involved a higher average number of eyewitnesses than missed shootings (4.0 2.2 and 1.4 respectively). This may have been due to the greater gravity of the shooting consequence and the subsequent and more intensive search for witnesses in the event of a review hearing for injury and fatal incidents.

Last, missed shot incidents involved an average of .8 more suspects per incident than either fatal or injury shootings. Why this was the case is not clear. We can only speculate that this difference might be an artifact of the data collection process whereby we counted, recorded, and collected data on all of those suspects at whom the officer reportedly shot. It was not rare that missed shot suspects escaped apprehension altogether, in which case we relied on the account and description of the officer. With fatal and injury shootings this was not the case, however, since those shot generally remained at the scene. Furthermore, police reports were more easily corroborated in fatal and injury incidents by both witness, and--in the latter case--suspect testimony, particularly with regard to the number of suspects involved.

TABLE 31

Distribution of Incidents by Month by Incident Type

Month	Relative Frequency (%) Fatal (N=82)	Injury (N=166)	Miss (N=101)	Cumulative Frequency (%) Fatal	Injury	Miss
January	4.9	5.3	11.9	4.9	5.3	11.9
February	9.7	5.3	5.9	14.6	10.6	17.8
March	11.0	7.1	7.9	25.6	17.7	25.7
April	6.1	7.1	5.9	31.7	24.8	31.6
May	9.8	9.5	6.9	41.5	34.3	38.5
June	6.1	6.0	5.9	47.6	40.3	44.4
July	7.3	6.0	4.1	54.9	46.3	48.5
August	6.1	11.7	7.9	61.0	58.0	56.4
September	9.7	14.4	11.9	70.7	72.4	68.3
October	13.4	10.2	10.9	84.1	82.6	79.2
November	9.8	7.8	8.9	93.9	90.4	88.1
December	6.1	9.6	11.9	100.0	100.0	100.0
TOTAL	100.0	100.0	100.0			

Seasonal differences in the frequency of police shooting incidents has also been the subject of some previous research. As Table 31 shows, there appears to be little difference in the relative frequencies by month of occurrence between fatal, injury, and missed shot incidents. Fatal incidents occurred more frequently in the six months of February, March, April, and September through November; these months accounted for almost two thirds of all such incidents. The three months of August to October inclusive accounted for 36.3% of all injury incidents; the months of September, October, December and January comprised almost half of all missed shot incidents (46.6%). Generally, for all incident types, the likelihood of incident occurrence seemed to favor the last few months of the calendar year.

In terms of year of occurrence, displayed in Table 32, the peak period for fatal and missed shot incidents was 1977; for injury incidents, 1978 and 1979. For each type, however, there is the suggestion of an overall decline from the beginning to the end of the period of study. A comparison between the last four months of 1976 to the first eight months of 1981 across all shooting types appears to bear this out: The frequency in occurrence of police shooting incidents was roughly the same for all types over both time frames.

TABLE 32

Distribution of Incidents by Year
by Incident Type (1976-1981)

	Absolute and Relative Frequency (%)						Cumulative Frequency (%)		
Year	Fatal		Injury		Miss		Fatal	Injury	Miss
1976*	10	12.2	18	10.8	10	9.9	12.2	10.8	9.9
1977	19	23.2	32	19.3	25	24.8	35.4	30.1	34.7
1978	17	20.7	35	21.1	18	17.8	56.1	51.2	52.5
1979	17	20.7	36	21.7	18	17.8	76.8	72.9	70.3
1980	11	13.4	28	16.9	20	19.8	90.2	89.8	90.1
1981 **	8	9.8	17	10.2	10	9.9	100.0	100.0	100.0
TOTAL	82	100.0	166	100.0	101	100.0			

* September 1 to December 31
** January 1 to August 31

As with month of occurrence, the time of day the shooting occurred, shown in Table 33, is roughly comparable across the three incident types and we will note only the slight variations among them here. While the peak time for fatal and injury shootings was the six P.M. to midnight category (41% and 39% respectively), the most common time of occurrence for missed shots was from midnight to eight A.M. (44%). In addition, and unlike injury and missed shot incidents, slightly more fatals occurred from noon to six P.M. than from midnight to eight A.M.. Combining the two time slots which accounted for the most shooting incidents during the day, 68% of all fatals occurred between noon and midnight (as opposed to 65% from six P.M. to midnight); 73% of all injury and 82% of all missed shot incidents occur between six P.M. and eight A.M..

Also shown in Table 33 are data collected on three incident locations--business/neighborhood, inside/outside, and private/public--by incident type. These results indicate that while almost three-fourths of all fatal incidents occurred in a neighborhood area, both injury and missed shot incidents were fairly evenly divided between neighborhood and business locations.

There were also slight variations among incident types in terms of whether the incident occurred inside or

TABLE 33

Frequency Distribution of Times and Locations of Incidents by Incident Type

	Absolute Frequencies			Adjusted Frequencies (%)		
	Fatal	Injury	Miss	Fatal	Injury	Miss
Time						
Eight A.M. to Noon	7	14	5	8.7	8.5	5.0
Noon to Six P.M.	21	30	13	26.2	18.2	13.0
Six P.M. to Midnight	33	65	38	41.3	39.4	38.0
Midnight to Eight A.M.	19	56	44	23.8	33.9	44.0
Missing	2	1	1	----	----	----
TOTAL	82	166	101	100.0	100.0	100.0
Location						
Neighborhood	60	82	46	74.0	51.9	48.4
Business	19	73	46	23.5	46.2	48.4
Industrial	2	3	3	2.5	1.9	3.2
Missing	1	8	6	----	----	----
TOTAL	82	166	101	100.0	100.0	100.0
Location						
Inside	19	19	6	26.0	15.7	10.9
Outside	54	102	49	74.0	84.3	89.1
Missing	9	45	46	----	----	----
TOTAL	82	166	101	100.0	100.0	100.0
Location						
Private	32	49	23	39.0	29.5	23.2
Public	49	117	76	61.0	70.5	76.8
Missing	1	0	2	----	----	----
TOTAL	82	166	99	100.0	100.0	100.0

out-of-doors: 74% of the fatal, 84% of the injury and 89% of the missed shot incidents transpired outside. However, due to large amounts of missing data, this conclusion is dubious at best. This variation was slightly less across the three incident types with regard to whether the shootings occurred in a private or public area: 61% of the fatals, 70.5% of the injuries, and over 76.8% of the missed shots occurred in areas legally accessible to the public.

The last group of incident characteristics by type of incident concerned the suspect's activity immediately prior to or during the incident. Table 34 shows our findings indicating the extent of felonious activity on the part of the suspects fired upon by the police. Of the 82 incidents involving a suspect fatality, 73 or 89% involved citizens committing a felony of some kind; 93% and 98% of the injury and missed shot incidents, respectively, involved suspects allegedly perpetrating a felony crime.

Table 35 indicates the type of suspect felony activity by incident type. Aggravated assault or assault with the intent to cause serious bodily injury or death was the most frequently reported offense for missed shot incidents (46.5%) whereas it was the second most commonly reported offense for fatal and injury shootings (26.4% and 31.6%

TABLE 34

Frequency Distribution of Suspects' Involvement in Felonious Activity by Incident Type

	Absolute Frequencies			Relative Frequencies (%)		
Suspect Involved in Felony	Fatal (N=82)	Injury (N=163)	Miss (N=101)	Fatal	Injury	Miss
YES	73	153	99	89.0	92.2	98.0
NO	9	10	2	11.0	7.8	2.0
MISSING	0	3	0	----	----	----
TOTAL	82	166	101	100.0	100.0	100.0

TABLE 35

Frequency Distribution of Types of Suspect Felonious Activity by Incident Type

Felony	Absolute Frequencies			Relative Frequencies (%)		
	Fatal (N=72)	Injury (N=152)	Miss (N=99)	Fatal	Injury	Miss
Larceny		1			.7	30.3
Burglary	8	49	30	11.1	32.2	3.0
Auto Theft	2	4	3	2.8	2.6	11.1
Robbery	7	19	11	9.7	12.5	2.1
Simple Assault	28	21	2	38.9	13.8	1.0
Rape		1	1		.7	1.0
Homicide		3	1		2.0	
Drugs	1			1.4		
Carrying Concealed Weapon	2		1	2.8		1.0
Other	5	4	2	6.9	2.6	2.0
Attempted Homicide		2	2		1.3	2.0
Aggravated Assault	19	48	46	26.4	31.6	46.5
Missing	1	1	2	----	----	----
TOTAL	73	152	99	100.0	100.0	100.0

respectively). Simple felony assault was the leading suspect crime for fatal incidents. The striking dissimilarity among the three incident types concerns the crime of burglary (felonious breaking and entering) for which officers in the department were allowed to use deadly force as a last resort to effect an arrest. Incidents involving burglary suspects comprised 32.2% and 30.3% of all injury and missed shot incidents, whereas only 11.1% of all fatal incidents involved suspected burglars.

In an effort to describe empirically the type of officer-suspect interaction that immediately preceded or occurred during the shooting incident by incident type, we collected and analyzed data on a series of points of interest revealed in Table 36 (e.g., whether the suspect fled, resisted, was armed, threatened the use of a weapon or used a firearm when the police arrived and whether the officer reportedly ordered the suspect to halt). It is in these findings that striking differences among the three incident types were most evident. First, while roughly 35.4% of the fatal incidents involved fleeing suspects, 63.3% and 89% of the injury and missed shot incidents involved suspects in flight. In short, those suspects who fled fared better in terms of the shooting outcome than

TABLE 36

Description of Officer-Suspect Interaction
by Incident Type (Primary Officers/Primary Suspects)

Officer-Suspect Interaction	Fatal Frequencies Absolute (N=82)	Fatal Frequencies Relative (%)	Injury Frequencies Absolute (N=166)	Injury Frequencies Relative (%)	Miss Frequencies Absolute (N=101)	Miss Frequencies Relavite (%)	Total Frequencies Absolute (N=349)	Total Frequencies Relative (%)
Halt Order Given by Officer	57	69.5	154	92.8	96	95.0	307	88.0
Fled	29	35.4	105	63.3	90	89.1	224	64.2
Resisted	37	45.1	93	56.0	68	67.3	198	56.7
Armed	65	79.3	95	57.2	59	58.4	207	59.3
Threatened Use of Weapon	59	72.0	94	56.6	58	57.4	211	60.5
Displayed Weapon	59	72.0	94	56.6	60	59.4	213	61.0
Suspect Appeared to Reach for Weapon	11	13.4	42	25.3	37	36.6	90	25.8
Assaulted Officer	62	75.6	101	60.8	51	50.5	214	61.3
Assaulted Third Party	43	52.4	52	31.3	36	35.6	131	37.5
Pointed Fire-arm at Police	42	51.2	65	39.2	37	36.6	144	41.3
Pointed Fire-arm at Third Party	27	32.9	32	19.3	27	26.7	86	24.6

TABLE 36 continued

Description of Officer-Suspect Interaction
by Incident Type (Primary Officers/Primary Suspects)

Officer-Suspect Interaction	Fatal Frequencies Absolute (N=82)	Fatal Frequencies Relative (%)	Injury Frequencies Absolute (N=166)	Injury Frequencies Relative (%)	Miss Frequencies Absolute (N=101)	Miss Frequencies Relavite (%)	Total Frequencies Absolute (N=349)	Total Frequencies Relative (%)
Discharged Firearm at Police	17	20.7	26	15.7	14	13.9	57	16.3
Discharged Firearm at Third Party	13	15.9	10	6.0	10	9.9	33	9.5

those who did not. Second, a halt order was given by the police in only 70% of the fatal incidents as compared to 93% of the injury and 95% of the missed shootings. Third, 45% or 37 fatal incidents involved suspects who resisted arrest either by ignoring the order to halt or by deciding to confront the officer as compared to 56% of the injury and 67% of the missed shot suspects.

Fourth, while almost 80% of the fatal shootings involved allegedly armed suspects, 57% and 58% of the injury and missed shot incidents respectively involved suspects with weapons. Moreover, 72% of the fatal shootings involved suspects reportedly threatening the use of a weapon, compared to 57% of the injury and 57% of the missed shot suspects. Conversely, a higher proportion of missed shot and injury incidents involved suspects who appeared to have been reaching for weapons at the time than for fatal incidents (25% and 37% to 22%).

Finally, a higher proportion of fatal shooting incidents involved suspects assaulting, pointing firearms at, and actually shooting at police or third parties than either missed shot or injury incidents. Of the fatal incidents, 76% involved assaults on officers; 52%, assaults on third parties; 51%, pointing firearms at officers; 33%, pointing

firearms at third parties; 21%, firearms discharges at officers; and 16%, firearms discharges at third parties.

For injury incidents, 61% involved suspects assaulting officers and 31% assaulting third parties; for missed shot incidents, these figures were 51% and 36% respectively. Thirty-nine percent and 19% of the injury incidents involved suspects allegedly pointing firearms at police officers and third parties; the figures for missed shot incidents were 37% and 27%. With respect to actual firearms discharges against police and third parties, 16% of the injury incidents involved suspects firing guns at police, 6% at third parties. Fourteen percent of missed shot incidents involved suspect firearms discharges at police and 10% at third parties. It appears reasonable to conclude that those suspects with extensive weapons involvement, that is, more likely to be in possession of a weapon, using, or threatening its use during the incident, were more likely to be killed by the police than those who were not.

Suspect Characteristics By Incident Type

The presentation and discussion of the descriptive findings in this section are limited to a review of the results as they pertain to primary suspects only, unless otherwise

noted. This analysis involves 349 or 75% of all shooting suspects counted in this research and for purposes of economy and facilitation of the presentation of results, omits the remaining 116 second, third and fourth suspects scattered across the three incident types.

In this section, we will be primarily concerned with a discussion of the results pertaining to suspect characteristics by incident type including suspect race, age, sex, weapon possession, and criminal history. A significant difference by type of shooting incident with regard to certain suspect characteristics is evidenced in Table 37. It was found that fatal suspects were, on the average, 4.6 years older than injury suspects, who, in turn were 2.8 years older than those who were targets of police missed shots. The average age for fatal victims was 30.7 years, 26.1 years for injured opponents, and 23.3 years for missed shot suspects. The difference in age might well be explained by the type of felonious activity perpetrated by the suspect.

Little difference, however, is apparent in the sex of the suspect by type of incident, as is displayed in Table 38. Of the 82 fatal opponents 98% were male, as were those who were targets of police missed shot incidents; similarly, 97% of injury suspects were male.

TABLE 37

Age of Suspects in Years
by Incident Type (Primary Suspects)

Incident Type	Mean	Standard Deviation	Minimum Age	Maximum Age	Valid Cases
Fatal (N=82)	30.7	11.97	15	79	82
Injury (N=166)	26.1	11.27	13	75	163
Miss (N=101)	23.3	7.63	14	63	97

TABLE 38

Frequency Distribution of Sex of Suspects
by Incident Type (Primary Suspects)

Sex	Fatal		Injury		Miss	
	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)
Male	80	97.6	161	97.0	99	98.0
Female	2	2.4	5	3.0	2	2.0
TOTAL	82	100.0	166	100.0	101	100.0
Missing						

TABLE 39

Frequency Distribution of Race of Suspects
by Incident Type (All Suspects)

	Fatal		Injury		Miss		Total	
	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)
Black	72	83.7	156	86.2	173	88.7	401	86.2
White	11	12.8	24	13.3	22	11.3	57	12.3
Hispanic	3	3.5	2	.5				
Missing	---	-----	---	-----	1	-----	3	.6
TOTAL	86	100.0	183	100.0	196	100.0	465	100.0

As with age and sex, suspect race across fatal, injury, and missed shot incidents was comparable. As Table 39 shows, for all 465 targets of police shootings, 84% of the fatal opponents were black; 86% and 89% of all injured and missed shot victims were also black.

Another significant difference, however, in suspects across incident types concerns weapon possession. Table 40 displays findings regarding the proportion of suspects possessing weapons by type of shooting incident. In fatal incidents, a total of 65 suspects (79.3%) were armed with a total of 66 weapons; in addition, over 58% of the fatal suspects were armed with handguns and/or long guns, compared to 38% for injured suspects and 35% for missed shot opponents. Moreover, the proportions of both injured and missed opponents that were armed (57% and 58% respectively) were considerably smaller than the percentage of fatal suspects.

The findings of the last suspect characteristic of interest examined by incident type, criminal history, are found in Tables 41 through 48. As Table 41 indicates, on all first suspects about whom we were able to obtain criminal history information, 31% of the fatal victims as compared to 23% of both injured and missed shot opponents, had served at least one jail term. The proportion of suspects

TABLE 40

Types of Weapons Possessed by Suspects
by Incident Type (Primary Suspects)

Type of Weapon	Fatal (N=82) Absolute Frequency	Fatal (N=82) Relative Frequency (%)	Injury (N=166) Absolute Frequency	Injury (N=166) Relative Frequency (%)	Miss (N=101) Absolute Frequency	Miss (N=101) Relative Frequency (%)
Number of Armed Suspects	65	79.3	95	57.2	59	58.4
Type of Weapon						
Vehicle	2	2.4	18	10.8	8	7.9
Handgun	33	40.2	45	27.1	23	22.8
Long gun	15	18.3	18	10.8	12	11.9
Knife	15	18.3	18	10.8	3	3.0
Blunt Instrument	1	1.2	8	4.8	4	4.0
Total Number Weapons	66		107		50	

TABLE 41

Number of Jail and Prison Terms
of Suspects by Incident Type (Primary Suspects)

	Fatal (N=82)		Injury (N=166)		Miss (N=101)	
Terms	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)
Jail	25	30.5	38	22.9	23	22.8
Prison	18	22.0	39	23.5	23	22.8

serving at least one prison term was virtually the same for all incident types: 22% of fatal, 23.5% of injury, and 22.8% of missed shot suspects.

Tables 42 through 44 show some differences in terms of the average number of arrests, convictions, and incarceration terms prior to the shooting by incident type. Again, for all primary suspects about whom we were able to obtain this data, fatal victims averaged a significantly higher number of prior misdemeanor arrests, misdemeanor convictions, felony arrests, felony convictions, prison terms, and jail terms than either injured or missed shot suspects. Table 45 indicates the substantial magnitude of these differences.

For example, fatal suspects averaged 3.1 prior misdemeanor arrests as compared to .4 and .3 arrests for injury and missed shot opponents. With respect to misdemeanor convictions, fatal suspects averaged 2.7, injury suspects .3 and missed shot suspects .2 convictions. Fatal opponents averaged almost twice the number of prior felony arrests than did injury and missed shot suspects (4.1 arrests for fatals; 2.1 and 2.2 arrests for injury and missed shot opponents respectively). Fatal suspects also averaged a higher number of felony convictions for crimes against property as

TABLE 42

Number of Suspects' Pre-Incident Arrests/Convictions/Incarcerations: Fatal Incidents (Primary Suspects)

(N=82)	Mean	Standard Deviation	Minimum	Maximum	Valid Cases
Misdemeanor Arrests	3.1	6.36	0	32	47
Misdemeanor Convictions	2.7	5.75	0	32	49
Felony Arrests	4.1	5.60	0	30	46
Felony Convictions (crimes against property)	1.9	3.35	0	18	42
Felony Convictions (crimes against person)	1.4	2.75	0	14	44
Prison Terms	2.2	1.83	0	6	16
Jail Terms	3.5	3.59	0	16	26

TABLE 43

Number of Suspects' Pre-Incident
Arrests/Convictions/Incarcerations:
Injury Incidents (Primary Suspects)

(N=166)	Mean	Standard Deviation	Minimum	Maximum	Valid Cases
Misdemeanor Arrests	.4	.84	0	4	83
Misdemeanor Convictions	.3	.74	0	4	81
Felony Arrests	2.1	3.23	0	14	85
Felony Convictions (crimes against property)	1.0	1.71	0	9	82
Felony Convictions (crimes against person)	.2	.52	0	2	82
Prison Terms	.9	1.50	0	5	39
Jail Terms	1.2	1.36	0	6	38

TABLE 44

Number of Suspects' Pre-Incident
Arrests/Convictions/Incarcerations:
Missed Shot Incidents (Primary Suspects)

(N=101)	Mean	Standard Deviation	Minimum	Maximum	Valid Cases
Misdemeanor Arrests	.3	.83	0	4	43
Misdemeanor Convictions	.2	.53	0	2	40
Felony Arrests	2.2	2.95	0	12	43
Felony Convictions (crimes against property)	1.3	1.79	0	6	41
Felony Convictions (crimes against person)	.4	1.43	0	9	41
Prison Terms	1.5	1.99	0	8	22
Jail Terms	---	----	-	-	--

well as for crimes against persons (fatal victims, 1.9 and 1.1; injury opponents, 1.0 and .2; missed shot suspects, 1.3 and .4). Last, fatal suspects averaged 2.2 prior prison terms and 3.5 prior jail terms as compared to .9 prison and .2 jail terms for injury suspects and 1.5 prison terms for missed shot opponents (Data on the number of prior jail terms served by missed shot suspects were missing).

As in the case of suspect weapons involvement, it is reasonable to conclude that fatally shot suspects had more extensive prior criminal records than either injury or missed shot opponents in terms of the number of prior arrests, convictions, and terms of incarceration.

As we remarked earlier in this chapter, we were able to collect and analyze data pertaining to the arrest, conviction and incarceration records of the suspects during the time after the shooting occurred to the conclusion of the study period. Tables 46 and 47 disclose these findings for injury and missed shot opponents (For obvious reasons, such data were not collected on fatal victims).

Between injury and missed shot suspects we found similarities in the average number of misdemeanor arrests (.1 to .05), misdemeanor convictions (.2 to .2), post-shooting felony arrests (2.2 to 2.4), violent crime convictions (.9

TABLE 45

Average Number of Suspects' Pre-Incident Arrests/Convictions/Incarcerations by Incident Type (Primary Suspects)

Average Number of:	Fatal Suspects	Injury Suspects	Missed Shot Suspects
Misdemeanor Arrests	3.1	.4	.3
Misdemeanor Convictions	2.7	.3	.2
Felony Arrests	4.1	2.1	2.2
Felony Convictions (crimes against property)	1.9	1.0	1.3
Felony Convictions (violent crimes)	1.1	.2	.4
Prison terms	2.2	.9	1.5
Jail terms	3.5	1.2	Missing

TABLE 45

Average Number of Suspects' Pre-Incident
Arrests/Convictions/Incarcerations
by Incident Type (Primary Suspects)

Average Number of:	Fatal Suspects	Injury Suspects	Missed Shot Suspects
Misdemeanor Arrests	3.1	.4	.3
Misdemeanor Convictions	2.7	.3	.2
Felony Arrests	4.1	2.1	2.2
Felony Convictions (crimes against property)	1.9	1.0	1.3
Felony Convictions (violent crimes)	1.1	.2	.4
Prison terms	2.2	.9	1.5
Jail terms	3.5	1.2	Missing

to .8), prison terms (2.2 to 2.0), and jail terms (.9 to 1.0). (Because we have compared post-shooting arrests, convictions, and terms of incarceration between injury and missed shot suspects, we point out that the time after the shooting--that is, the time frame from which these data were collected--varied as a function of the time of the shooting occurrence). The average number property crime convictions for missed shot suspects was double that of injured suspects (1.2 to .6).

Table 48 reveals the proportion of suspects on parole at the time of the shooting. In keeping with our other findings on criminal history, fatal suspects were more frequently on parole when shot than either injury or missed victims (12.2% to 4.2% and 6.9% respectively).

Officer Characteristics By Incident Type

Like the previous section and for the reasons of economy and facility of presentation, the discussion of our findings regarding officer characteristics by incident type are limited primarily to an analysis of first officers only (N=349) unless otherwise noted. Variables of primary interest in this part included officer age, race, sex, length of department service, educational level, rank,

TABLE 46

Number Suspects' Post-Incident
Arrests/Convictions/Incarcerations:
Injury Incidents (Primary Suspects)

(N=166)	Mean	Standard Deviation	Minimum	Maximum	Valid Cases
Misdemeanor Arrests	.1	.45	0	2	71
Misdemeanor Convictions	.2	.46	0	2	62
Felony Arrests	2.2	1.90	0	10	73
Felony Convictions (crimes against property)	.6	.98	0	4	60
Felony Convictions (crimes against person)	.9	1.35	0	4	57
Prison Terms	2.2	1.73	0	6	33
Jail Terms	.9	.99	0	3	28

TABLE 47

Number of Suspects' Post-Incident
Arrests/Convictions/Incarcerations:
Missed Shot Incidents (Primary Suspects)

(N=101)	Mean	Standard Deviation	Minimum	Maximum	Valid Cases
Misdemeanor Arrests	.05	.21	0	1	44
Misdemeanor Convictions	.2	.51	0	2	21
Felony Arrests	2.4	1.51	0	8	44
Felony Convictions (crimes against property)	1.2	1.00	0	4	28
Felony Convictions (crimes against person)	.8	.94	0	4	30
Prison Terms	2.0	1.29	0	5	19
Jail Terms	1.0	1.26	0	4	20

TABLE 48

Number and Percentage of Suspects
on Parole During the Indicent
(Primary Suspects)

Incident Type	Absolute Frequency	Relative Frequency (%)
Fatal (N=82)	10	12.2
Injury (N=166)	7	4.2
Miss (N=101)	7	6.9

assignment, duty status, uniform status, firearms qualification, and shooting accuracy by incident type.

In terms of the age of officers participating in shooting incidents over the five-year period of the study, and as shown in Table 49, there was little difference in age by incident type. Officers participating in fatal incidents averaged 31.1 years, officers involved in injury shootings 30.3 years, and those in missed shot incidents, 30.1 years of age. Table 50 displays our findings with regard to officer race for all and first officers involved in shooting incidents: 36% of all officers involved in fatal shootings were black. Blacks also comprised 42% of all officers participating in injury incidents and 37% of all officers involved in missed shot incidents. For first officers only, blacks constituted 42% of the officers in fatal incidents, 43% in injury shootings and 39% in missed shot incidents. Again, only slight differences in officer race were noted by incident type. Though not tabled, we found that for all 505 officers in the 349 incidents, males comprised the vast majority of shooters across all three incident types (95% of the fatal and missed shot incidents and 98% of the injury shootings).

TABLE 49

Age of Officers in Years
by Incident Type (Primary Officers)

Incident Type	Mean	Standard Deviation	Minimum Age	Maximum Age	Valid Cases
Fatal (N=82)	31.1	6.1	21	52	82
Injury (N=166)	30.3	5.2	21	57	166
Miss (N=101)	30.1	4.6	22	45	101

Differences by incident type are noted, however, for first officers (N=349) regarding officer length of service with the department. As Table 51 shows, officers involved in fatal incidents averaged 85 months of departmental service as compared to 78 months for officers participating in injury shootings, and 71 months for officers involved in missed shot incidents.

Findings by incident type for primary officer educational level at appointment, as shown in Table 51, and officer rank at the time of the incident as depicted in Table 52, indicate little difference among officers. The average level of formal education for the three types was 12.7 years for fatal shooters and 12.8 years for officers in injury and missed shot incidents.

Table 52 displays findings pertaining to officer rank. For all officers at the time of the incident, 90.6%, 94.0%, and 95.5% of those involved in missed shot, fatal, and injury incidents respectively were at the rank of patrol. For primary officers 81.5%, 86.7%, and 89.1% of those in fatal, missed shot, and injury shootings were patrol officers.

Table 53 highlights our findings pertaining to officer assignment, uniform and duty status by incident type for

TABLE 50

Frequency Distribution of Race of Officers
by Incident Type (All Officers/Primary Officers)

	Fatal		Injury		Miss		Total	
	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)
Race - All Officers								
Black	46	35.9	101	41.7	49	37.1	196	39.0
White	81	63.3	140	57.9	82	62.3	303	60.4
Hispanic	1	.8	1	.4	1	.8	3	.6
Missing	0		1		2		3	
TOTAL	128	100.0	243	100.0	134	100.0	505	100.0
Race - Primary Officers								
Black	34	41.5	72	43.4	39	38.6	145	41.6
White	47	57.3	93	56.0	61	60.4	201	57.6
Hispanic	1	1.2	1	.6	1	1.0	3	.8
Missing	0		0		0		0	
TOTAL	82	100.0	166	100.0	101	100.0	349	100.0

TABLE 51

Selected Officer Characteristics
by Incident Type (Primary Officers):
Length of Service, Education

	Mean	Standard Deviation	Mini-mum	Maxi-mum	Valid Cases
Length of Department Service in Months					
Fatal (N=82)	84.5	60.88	9	366	80
Injury (N=166)	77.9	51.21	2	360	164
Miss (N=101)	70.9	48.50	9	288	101
Education in Years					
Fatal (N=82)	12.7	1.81	12	16	81
Injury (N=166)	12.8	1.49	10	20	165
Miss (N=101)	12.8	1.41	10	17	101

TABLE 52

Frequency Distribution of Rank of Officers
by Incident Type (All Officers/Primary Officers)

	Absolute Frequencies				Adjusted Relative Frequencies (%)			
	Fatal	Injury	Miss	Total	Fatal	Injury	Miss	Total
Rank All Officers								
Patrol	110	214	116	440	94.0	95.5	90.6	93.8
Sergeant	4	9	9	22	3.4	4.0	7.0	4.7
Detective	1	0	1	2	.8	---	.8	.4
Lieutenant	1	1	1	3	.9	.5	.8	.7
Inspector	0	0	1	1	---	---	.8	.2
Commander	1	0	0	1	.9	---	---	.2
Missing	11	19	0	36	---	---	---	---
TOTAL	128	243	134	505	100.0	100.0	100.0	100.0
Rank Primary Officers								
Patrol	66	147	85	298	81.5	89.1	86.7	86.6
Sergeant	11	16	11	38	13.6	9.7	11.2	11.0
Detective	0	1	0	1	----	.6	----	.3
Lieutenant	3	1	1	5	3.7	.6	1.0	1.5
Inspector	0	0	1	1	----	----	1.0	.3
Commander	1	0	0	1	1.2	----	----	.3
Missing	1	1	3	5	----	----	----	----
TOTAL	82	166	101	349	100.0	100.0	100.0	100.0

TABLE 53

Frequency Distribution of Assignment, Uniform, and Duty Status of Officers by Incident Type (All Officers/Primary Officers)

	Fatal		Injury		Miss		Total	
	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)
Officer Assignment (All Officers								
Patrol	98	87.5	158	70.5	101	78.9	357	77.7
Other	14	12.5	66	29.5	27	21.1	107	22.3
Missing	16	----	24	----	6	----	46	----
TOTAL	128	100.0	243	100.0	134	100.0	505	100.0
Uniform Status (All Officers)								
Patrol	88	70.4	140	58.1	91	67.9	319	63.8
Plain-clothes	37	29.6	101	41.9	43	32.1	181	36.2
Missing	3	----	2	----	0	----	5	----
TOTAL	128	100.0	243	100.0	134	100.0	505	100.0

TABLE 53 continued

Frequency Distribution of Assignment, Uniform, and Duty Status of Officers by Incident Type (All Officers/Primary Officers)

	Fatal		Injury		Miss		Total	
	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)
Uniform Status (Primary Officers)								
Uniform	52	64.2	91	54.8	67	66.3	210	60.3
Plain-clothes	29	35.8	75	45.2	34	33.7	138	39.7
Missing	1	----	0	----	0	----	1	----
TOTAL	82	100.0	166	100.0	101	100.0	349	100.0
Duty Status (All Officers)								
On Duty	108	87.1	199	83.3	112	84.2	419	84.5
Off-Duty	16	12.9	40	16.7	21	15.8	77	15.5
Missing	4	----	4	----	1	----	9	----
TOTAL	128	100.0	243	100.0	134	100.0	505	100.0

TABLE 53 continued

Frequency Distribution of Assignment, Uniform, and Duty Status of Officers by Incident Type (All Officers/Primary Officers)

	Fatal		Injury		Miss		Total	
	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)
Duty Status (Primary Officers)								
On Duty	64	80.0	123	75.9	81	81.0	268	78.4
Off-Duty	16	20.0	39	24.1	19	19.0	74	21.6
Missing	2	----	4	----	1	----	7	----
TOTAL	82	100.0	166	100.0	101	100.0	349	100.0

both all and primary officers. Differences among all officers in fatal, injury, and missed shot incidents were slightly more pronounced in terms of assignment at the time of the shooting. Of the fatal officers, 88% were on regular patrol, whereas 79% and 71% of those officers in missed shot and injury shootings respectively had that same assignment.

Similarly, variance in uniform status (plainclothes or uniform) at the time of the shooting incident was evident, but only moderately so, for all officers as well as primary officers by incident type. For all officers, 70% of those involved in fatal shootings were in uniform, followed by 68% of those in missed shootings and 58% of those participating in injury incidents. Of primary officers, 66% of the missed shot participants were in uniform followed by fatal shooters with 64% uniformed and injury shooters with 55% wearing uniforms.

With respect to officer duty status (on- or off-duty), for primary as well as all officers, there was little difference in the proportions of those off-duty across incident types. For all officers, of those participating in fatal shootings, 13% were off-duty as compared to 17% for injury shooters and 16% for those involved in missed shot incidents. For primary officers, the comparable proportions for

off-duty officers were both slightly and consistently higher by incident type. Twenty percent of the officers involved in fatal shootings were off-duty as compared to 24% of the injury officers and 19% of those in missed shot incidents.

Officer firearms qualification was of interest in our investigation particularly by incident type, and as Tables 54 and 55 indicate, little difference across incident types was found. For all 505 officers, 45% of those participating in fatal incidents were either Experts or Sharpshooters compared to 43% and 46% for injury and missed shot participants respectively. However, those officers having only Qualified ratings or failed altogether were proportionately more common in the ranks of the fatal shooters than for either injury or missed shooters (27% to 19% and 17% respectively). Also, officers shooters with the grade of Marksman were proportionately more common in the ranks of injury and missed shooters than for fatal shooters (38% and 37% to 28%).

For primary or first officers only (N=349), the results pertaining to marksmanship qualification as shown in Table 55 were at slight variance with those for all officers combined as shown in Table 54. Here, 52% of all fatal shooters had either of the top two qualification grades (i.e., Expert

TABLE 54

Frequency Distribution of Firearms Qualification
of Officers During Incident
by Incident Type (All Officers)

Qualification	Fatal Absolute Frequency	Fatal Relative Frequency (%)	Injury Absolute Frequency	Injury Relative Frequency (%)	Miss Absolute Frequency	Miss Relative Frequency (%)	Total Absolute Frequency	Total Relative Frequency (%)
Expert	20	18.2	37	15.4	21	16.4	78	16.3
Sharp-shooter	29	26.4	67	27.8	38	29.7	134	28.0
Marksman	31	28.2	91	37.8	47	36.7	169	35.3
Qualified	28	25.5	44	18.3	21	16.4	93	19.4
Failed	2	1.7	2	.7	1	.8	5	1.0
Missing	18	----	2	----	6	----	26	----
TOTAL	128	100.0	243	100.0	134	100.0	505	100.0

TABLE 55

Frequency Distribution of Firearms Qualification of Officers During Incident by Incident Type (Primary Officers)

Qualification	Fatal Absolute Frequency	Fatal Relative Frequency (%)	Injury Absolute Frequency	Injury Relative Frequency (%)	Miss Absolute Frequency	Miss Relative Frequency (%)	Total Absolute Frequency	Total Relative Frequency (%)
Expert	15	20.5	25	15.1	14	13.9	54	15.9
Sharp-shooter	23	31.5	46	27.7	32	31.7	101	29.7
Marksman	20	27.5	63	38.0	37	36.6	120	35.3
Qualified	15	20.5	31	18.7	17	16.8	63	18.5
Failed	0	----	1	.5	1	1.0	2	.6
Missing	9	----	0	----	0	----	9	----
TOTAL	82	100.0	166	100.0	101	100.0	349	100.0

and Sharpshooter) compared to 43% for those participating in injury shootings and 46% for officers involved in missed shot incidents. However, the tendency of those with the inferior marksmanship grades to more frequently populate the ranks of fatal shooters is still preserved in this analysis, though only slightly so (i.e., 21% of the fatal shooters as compared to 19% of injury shooters and 18% of those in missed shot incidents included Qualifieds and those who failed).

The last variable of interest was primary officer shooting ratios at the time of the incident as measured by the number of shots fired at and the number of shots hitting the intended targets. Table 56 shows these data. Tautologically, officers participating in missed shot incidents, of course, had the lowest accuracy measures averaging 2.0 shots at suspects, .1 shots at the suspect's vehicle and 0 shots hitting the intended targets for an average of 2.0 misses per officer. Fatal and injury shooters had, by definition, substantially better scores, but even here there were slight differences between the two groups. Both groups averaged approximately the same number of shots at the suspect (2.6 and 2.7 shots per officer), yet, fatal shooters had a slightly higher "hit" average (1.8 to 1.3 hits per

TABLE 56

Shooting Ratios of Primary Officers
During Incident by Incident Type

	Mean	Standard Deviation	Minimum	Maximum	Valid Cases
Fatal					
Number Shots Fired at Suspect	2.7	2.09	0	10	81
Number Shots Fired at Vehicle	.3	.78	0	2	12
Number Shots Hitting Targets	1.8	1.49	0	8	73
Number Shots Missing Targets	.9	1.34	0	6	72
Injury					
Number Shots Fired at Suspect	2.6	2.36	0	15	164
Number Shots Fired at Vehicle	2.1	2.54	0	8	22
Number Shots Hitting Targets	1.3	.82	0	6	125
Number Shots Missing Targets	1.2	1.84	0	11	113
Miss					
Number Shots Fired at Suspect	2.0	1.85	0	12	100
Number Shots Fired at Vehicle	.1	.46	0	2	23
Number Shots Hitting Targets	---	----	0	2	99
Number Shots Missing Targets	2.0	1.86	0	12	100

officer) and slightly fewer misses (.9 to 1.2 misses per officer) as compared to injury shooters. An explanation for this difference, however, is beyond the scope of this research.

Summary of Descriptive Findings By Incident Type

Based on the review of the descriptive findings regarding several incident, suspect, and officer characteristics by incident type, we found an apparently substantial degree of similarity among fatal, injury and missed shot deadly force incidents. For example, it was reported that the shooting incidents by all types occurred in roughly the latter part of the calendar year and that there had been a gradual, overall decline for all incidents over the five-year period of the study. In addition, while there was some dissimilarity in terms of the hours of the day in which these incidents normally transpired, and the location of occurrence as neighborhood-versus-business, the largest proportion of each type occurred in a public location and out-of-doors. Further, the vast majority of each type involved suspects perpetrating a felony crime.

The suspects by incident type were also similar across several measures. Over 95% of all shooting victims were

male and roughly 86% were black in all three incident types; furthermore, about the same proportion of opponents (23%) for all incidents had served at least one prison sentence and the proportion of those having served at least one jail term ranged from 23% for missed shot opponents to 31% for fatal suspects. We also discerned similarities between injured and missed shot suspects regarding the average number of post-shooting misdemeanor arrests and convictions, felony arrests, violent crime convictions, and prison and jail terms. Findings with regard to the relative frequency of those suspects on parole at the time of the shooting incident were similar by incident type.

Regardless of the type of incident in which the officers participated, results across several officer characteristics were comparable. For instance, officers averaged 30.5 years of age, were primarily white (63%), and predominately male (95%) across all three incident types. The vast majority (94%) were of the rank of patrol officer and assigned to patrol duty at the time of the shooting. The levels of educational attainment were almost identical for all three incident types (12.8 years), as were the proportions by type of incident of those on-duty when the shooting occurred.

That there is a marked degree of similarity among fatal, injury, and missed shot incidents does not, on the other hand, imply complete homogeneity across all police shooting incidents. First, there were twice as many injury as fatal incidents, and in turn, four times as many missed shot as injury incidents. Fatal incidents averaged a higher number of nonshooting officers and eyewitnesses at the scene than either of the other types; missed shot incidents had a higher average number of suspects per shooting than the other two. In addition, fatal incidents occurred with greater frequency between the hours of noon to midnight, whereas both injury and missed shot incidents were more common between the hours of six P.M. to eight A.M.. In terms of location, fatal incidents were much more likely to occur in neighborhood than business areas whereas injury and missed shootings appeared to occur with almost equal frequency in both areas.

There were also differences in the type of felony crimes being perpetrating by the suspect at the time of the shooting, the major one being that proportionately more suspected burglars were involved in missed shot and injury than fatal incidents. In fatal incidents, on the other hand, suspects were less likely to be fleeing the scene and

more likely to be armed with a firearm, displaying a weapon, assaulting officers and third parties, and pointing and discharging firearms at the police and third parties than suspects in either of the other two incident types.

Differences in suspect characteristics by incident type were also evident. Suspects in fatal incidents were older and possessed more extensive criminal histories, averaging a greater number of misdemeanor arrests and convictions, felony arrests, felony convictions for both property and violent crimes, and prison and jail terms.

Finally, there were major differences by incident type in terms of officer characteristics. Officers involved in fatal shootings averaged seven more months of departmental service than injury shooters, who in turn averaged a similarly longer period than those involved in missed shot incidents. Though shooters of all types were almost equally likely to be on-duty at the time of the shooting, injury shooters were slightly less likely to be in uniform at the time. In terms of shooting qualification, it was found that the proportion of Experts and Sharpshooters were equally distributed by incident type though smaller proportions of Qualified and Faileds were in the ranks of the injury and missed shot participants than in those of fatal shooters.

The last difference by incident type noted in this section was that officers involved in fatal shootings had higher ratio scores as measured by the number of shots fired at and the number of shots hitting intended targets than injury shooters. Officers involved in missed shot incidents had, by definition, the poorest ratio scores.

Part III: Relational Findings

In this section we present our findings with respect to certain, specified relationships between variables of interest. First, however, univariate analysis was used, and these findings presented in this section, to describe the jurisdictional population, arrests, and police shooting suspects by racial composition as well as the racial composition of the police department and those officers participating in deadly force incidents. Crosstabulational analysis was then used to investigate the relationships of primary officer and primary suspect race to several variables considered influential in the police use of deadly force.

The focus of this section was on the relationship of race to these other variables. As pointed out in Chapter 1, some research has purported to show that police officers base their decisions to fire at civilians upon the criterion of suspect race, specifically that police are racially discriminatory in the use of deadly force. The effort in this section, given the constraints of the research design, methodology, and level of analyses, was to determine whether

such evidence existed which would suggest that police officers treat individuals of different races dissimilarly in similar circumstances in terms of shooting incidents.

Fundamentally, we considered three types of data for crosstabulational analysis: data for the entire population of fatal and injury incidents, data which were systematically sampled from all incidents combined, and nonprobability samples (e.g., criminal history data). Chi-square (X^2) tests of statistical significance were computed for each crosstabulation; for those relationships found to be statistically significant (p=.05), measures of association were calculated (i.e., phi for two-way and contingency coefficients for larger tables).

The use of X^2 tests of statistical significance to data that represent an entire population or to data drawn from a nonprobability sample requires some explanation. With respect to the former case, we acknowledge the claim that X^2 tests do not legitimately apply to relationships representing the total population. The argument, of course, is that because all fatal and injury incidents are examined, there is no chance that relationships found could be due to sampling error (Babbie, 1975). That is, the associations observed are precisely the associations found in the population. We maintain, however, as do others, that tests of

significance on entire populations are merited insofar as they indicate "the probability that a relationship is a general one over time" -- that it describes fatal and injury incidents over time and not just at the time of this study (Babbie, 1975:428). Others maintain that a particular population researched may be seen as a subuniverse (Galtung, 1967). That is, tests of significance can facilitate the generalization of findings "to other units of the same kind" -- in our case, other cities and police departments homogeneous with the one studied here. We have already noted in Chapter 1, however, that the use of cross tabulational analysis is not suitable for cross-site comparisons. Assumptions concerning the homogeneity of municipalities and police departments are, at best, speculative. Consequently, we have not attempted to generalize statistically significant findings to other cities and departments except on a strictly comparative basis with previous research.

Regarding the use of X^2 tests to nonprobability samples (specifically, criminal history data), we maintain that, even though the assumption of random sampling has not been met, the tests serve as a useful device in screening for results that are potentially interesting and thus worthy of further exploration (Gold, 1969). It was in this spirit

that these tests for significance were performed on criminal history data.

Univariate Analysis: Population, Arrest Rates, and Shootings by Race

Table 57 presents our findings comparing jurisdiction, population, arrest rates, and police shooting opponents by race. For the years beginning and ending the study, blacks comprised 56% and 63% respectively of the general population in the jurisdiction served by the department under investigation. Concurrently, blacks constituted 84% of those arrested for all Part I crimes for 1980, 85% of violent crime arrestees, 84% of those arrested for property crimes, and 86% of those fired upon by police. Whites on the other hand, represented 43% and 35% of the jurisdictional population for years 1976 and 1981 respectively. During that time, whites comprised 16% of Part I crime arrests (1980), 15% of violent crime arrests, 16% of those arrested for property crimes, and 12% of those involved in police shooting incidents.

Table 58 disagregates Part I arrest data by race to specific crime classifications for year 1980. As can be seen, blacks, who comprised 63% of the general population in 1981,

TABLE 57

Jurisdiction Population, Arrests, and Police Shooting Suspects by Race (All Suspects)

Race	Population (1976) N=1,314,000 (%)	Population (1981) N=1,203,000 (%)	Part I Arrests (1980) N=23,816 (%)	Violent Crime Arrests (1980) N=9,106 (%)	Property Crime Arrests (1980) N=14,710 (%)	Police Shooting Opponents (1976-1981) N=465 (%)
Black	56.0	63.0	84.0	85.0	84.0	86.2
White	43.0	35.0	16.0	15.0	16.0	12.3
Other*	1.0	2.0	0.0	0.0	0.0	1.5

* Participation in arrest rates was less than 1% and were thus omitted in subsequent analyses in this section

were overrepresented by offense type with the single exception of arson. Of violent crimes, blacks constituted 89% of those arrested for homicide, 85% of all rape arrests, 91% of robbery arrests, and 79% of all those arrested for assault. In terms of crimes against property, 63% of those arrested for arson, 89% of all motor vehicle theft arrestees, 80% of burglary arrestees, and 85% of those arrested for larceny were black.

From these results it seems apparent that blacks are overly represented in Part I, violent, and property crime arrests as well as in their relative frequency as targets of police shootings in terms of general population racial composition. Moreover, this disproportionality in arrest rates for Part I, violent, and property crimes is quite comparable to black citizen overrepresentation in police shooting incidents.

Departmental Racial Composition and Race of Officers Involved in Shooting Incidents

Previous research by Fyfe (1978, 1979) and Geller and Karales (1981) has shown that in terms of department racial composition, black officers tend to be overly represented in incidents involving police firearms discharges at civilians. Fyfe (1978), for example, found that black officers in New

Table 58

Shooting Suspects and Specified
Crime Arrests by Race (All Suspects)

Race	Shooting Suspects (N=465)	Murder (1980) (N=819)	Rape (1980) (N=1061)	Robbery (1980) (N=3109)	Assault (1980) (N=4117)	Arson (1980) (N=286)	Motor Vehicle Theft (1980) (N=1947)	Burglary (1980) (N=4965)	Larceny (1980) (N=7512)
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Black	86.2	89.0	85.0	91.0	79.0	63.0	89.0	80.0	85.0
White	12.3	11.0	15.0	9.0	21.0	37.0	11.0	20.0	15.0

York City participated in shooting incidents at a rate of 207 per 1,000 black officers in the department to 114 per 1,000 white officers, or 1.8 times more often. In Chicago, Geller and Karales (1981) reported that black officers were involved in 10.2 incidents per 1,000 black officers, whites in 6.2 incidents per 1,000 white officers, indicating black officers as 1.6 times more likely than their white counterparts to become involved in shooting civilians. Our research appears to comport with previous findings indicating black officer overrepresentation in shooting incidents.

As Table 59 shows, of the 505 shooters in our research, 39% (196) were black, 60% (303) were white, for an average of 135.6 black officers, per 1,000 black officers and 86.6 white officers per 1,000 white officers in the department. Like Chicago, even though 60% of the officers in our study were white, black officers were 1.6 times more likely than white officers to become involved in shooting incidents involving civilians when controlling for the racial composition of the department.

Table 59

Departmental Racial Composition and
Race of Officers Involved in Shooting Incidents

Race	Department (1976-1981) (N=4945) (%)	Officer-Shooters (1976-1981) (N=505) (%)
Black	29.0 (1434)	38.8 (196)
White	71.0 (3511)	60.0 (303)
Other	0*	1.2 (6)

*Less than 1%

Crosstabulational Analysis: Race with Other Variables

Thirty-three relationships were examined in this section; of these, only nine were found to be statistically significant at the .05 level or better. The remaining 24 relationships which were tested were statistically insignificant at levels ranging from .11 to .90. We have presented the insignificant findings first simply for the reader's perusal. (Approximate levels of significance were calculated for these tables as well).

As Table 60 indicates (p=.60), no relationship was found between the race of the suspects and the type of shooting incidents in which the suspects were involved. In effect, race appears not to have been a factor in whether the suspect was killed, nonfatally wounded, or fired upon and missed by the police.

Table 61 (p=.75) shows that the number of officers using deadly force in an incident was not related to the race of the suspect fired upon. In effect, blacks and whites were proportionately as likely to be involved in multiple-officer incidents as single-officer incidents.

Tables 62 through 73 display our findings with respect to the relationship of race to other variables that typify

Table 60

Suspect Race by Type of
Shooting Incident (Primary Suspects)

Suspect Race	Type of Incident: Fatal	Injury	Miss	Row Total
Black:				
Frequency	68	139	89	296
Row %	23.0	47.0	30.0	86.6
Column %	86.1	85.8	88.1	
Total %	19.9	40.6	26.0	
White:				
Frequency	11	23	12	46
Row %	23.9	50.0	26.1	13.4
Column %	13.9	14.2	11.9	
Total %	3.3	6.7	3.5	
Column Total	79	162	101	342
	23.1	47.4	29.5	100.0

$X^2 = .303$
d.f. = 2
$p < .60$
Missing Cases = 7

Table 61

Suspect Race by Number of Officers Using Deadly Force (Primary Suspects)

Suspect Race	Number of Officers Using Deadly Force: One	More Than One	Row Total
Black:			
Frequency	205	91	296
Row %	69.3	30.7	86.5
Column %	86.1	87.5	
Total %	59.9	26.6	
White:			
Frequency	33	13	46
Row %	71.7	28.3	13.5
Column %	13.9	12.5	
Total %	9.7	3.8	
Column Total	238	104	342
	69.6	30.4	100.0

$X^2 = .117$
d.f. = 1
$p < .75$
Missing Cases = 7

the actions of the suspect prior to and during the shooting incident. Friedrich (1980: 94), for example, examined the suspected offender's behavior toward the arresting officer in terms of his or her "manner toward the police," "general state," and "sobriety" with the use of multivariate analysis. We chose instead to specify, in as much detail as possible, the interaction of the officer and the alleged offender in the hope of capturing a fuller account of those actions which reportedly transpired and which, in turn, may reasonably be seen as contributing to or precipitating the actual shooting by the officer(s). Further, we wished to ascertain whether these interactions differed in terms of the race of the suspect fired upon by the police officer. Characteristics in which we were interested and on which we were able to collect data included, suspect race by 1) weapon possession, 2) threatened use of a weapon, 3) whether the suspect was involved in felonious activity, 4) whether the suspect attempted to flee the scene, 5) whether the suspect assaulted police or third parties, 6) whether the suspect actually discharged a firearm at police or third parties, and 7) the officers' reason(s) for using deadly force.

Table 62 ($p=.60$) shows that the variables of suspect race and whether the suspect was armed prior to or during

the shooting were statistically independent. In short, blacks and whites were equally likely to be armed during the incident. We also tested this relationship in terms of fatal incidents (Table 63; p=.20), injury incidents (Table 64; p=.85), and missed shot incidents, (Table 66; p=.90) separately. Because the entire population of fatal and injury incidents were sampled, we know, in fact, that whites were more likely to be armed than blacks in fatal incidents (91% to 77%). In contrast, we found that whites and blacks were almost equally likely to possess weapons in injury incidents (59% to 62%, respectively). However, because the actual populations of fatal and injury incidents constituted relatively small sample groups (N=79 and 154, respectively) we obtained statistically insignificant results and thus were prevented from generalizing these findings over time. The number of missed shot incidents (N=89), while constituting a systematic sample from 730 such incidents, was also quite small. Had the sample been substantially larger, it is doubtful whether statistical significance would have been achieved. We have concluded therefore that for all incidents combined and for incidents by type, whether a suspect was armed prior to or during the incident was not a factor of race. In effect, blacks and whites were equally likely to be armed.

Table 62

Suspect Race by Suspect Weapon Possession (Primary Suspects)

Suspect Race	Weapon Possession: Armed	Unarmed	Row Total
Black:			
Frequency	175	104	279
Row %	62.7	37.3	86.6
Column %	85.8	88.1	
Total %	54.4	32.3	
White:			
Frequency	29	14	43
Row %	67.4	32.6	13.4
Column %	14.2	11.9	
Total %	9.0	4.3	
Column Total	204	118	322
	63.4	36.6	100.0

$X^2 = .357$
d.f. = .1
$p < .60$
Missing Cases = 27

Suspect race as a factor of whether the suspect threatened the use of deadly force was also tested; Table 66 (p=.90) shows these results. As can be seen, the race of the suspect and whether the suspect threatened deadly force were found to be unrelated.

Table 67 (p=.85) shows that whether the suspect was involved in a felony immediately prior to or during the incident was not related to the suspect's race. At bottom, it appeared that blacks and whites were equally likely to have been committing a felony at the time of the shootings by police.

Whether the suspect fled upon the arrival of the police at the scene was crosstabulated with the race of the suspect. As Table 68 (p=.22) shows, suspect flight was unrelated to suspect race.

Tables 69 through 72 examined the relationships of suspect race to various degrees of assaultive behavior on the suspect. Table 69 (p=.70) shows that suspect race and whether the suspect assaulted the police officer prior to or during the incident were unrelated. The race of the suspect and whether the suspect reportedly assaulted third parties were also unrelated. (Table 70; p=.75).

Similarly, as Table 71 shows (p=.75), whether the suspect discharged a firearm at the police prior to or

Table 63

Suspect Race by Suspect Weapon Possession (Fatal Incidents) (Primary Suspects)

Suspect Race	Weapon Possession: Armed	Unarmed	Row Total
Black:			
Frequency	52	16	68
Row %	76.5	23.5	86.1
Column %	83.9	94.2	
Total %	65.8	20.3	
White:			
Frequency	10	1	11
Row %	90.9	9.1	13.9
Column %	16.1	5.8	
Total %	12.7	1.2	
Column Total	62	17	79
	78.5	21.5	100.0

$X^2 = 1.169$
d.f. = 1
$p < .20$
Missing Cases = 3

Table 64

Suspect Race by Suspect Weapon Possession (Injury Incidents) (Primary Suspects)

Suspect Race	Suspect Weapon Possession: Armed	Unarmed	Row Total
Black:			
Frequency	79	54	133
Row %	59.4	40.6	86.4
Column %	85.9	87.1	
Total %	51.3	35.1	
White:			
Frequency	13	8	21
Row %	61.9	38.1	13.6
Column %	14.1	12.9	
Total %	8.4	5.2	
Column Total	92	62	154
	59.7	40.3	

$X^2 = .049$
d.f. = 1
$p < .85$
Missing Cases = 12

Table 65

Suspect Race by Suspect Weapon Possession
(Missed Shot Incidents)
(Primary Suspects)

Suspect Race	Weapon Possession: Armed	Unarmed	Row Total
Black:			
Frequency	44	34	78
Row %	56.4	43.6	87.6
Column %	88.0	87.2	
Total %	49.4	38.2	
White:			
Frequency	6	5	11
Row %	54.5	45.5	12.4
Column %	12.0	12.8	
Total %	6.7	5.6	
Column Total	50	39	89
	56.2	43.8	100.0

$X^2 = .01362$
d.f. = 1
$p < .90$
Missing Cases = 12

Table 66

Suspect Race by Threatened Use
of Deadly Force
(Primary Suspects)

Suspect Race	Threatened Use of a Weapon: Yes	No	Row Total
Black:			
Frequency	178	106	284
Row %	62.7	37.3	86.6
Column %	86.4	86.9	
Total %	54.3	32.3	
White:			
Frequency	28	16	44
Row %	63.6	36.4	13.4
Column %	13.6	13.2	
Total %	8.5	4.9	
Column Total	206	122	328
	62.8	37.2	100.0

$X^2 = .015$
d.f. = 1
$p < .90$
Missing Cases = 21

Table 67

Suspect Race by Felonious
Involvement (Primary Suspects)

Suspect Race	Involved in Felony: Yes	No	Row Total
Black:			
Frequency	276	17	293
Row %	94.2	5.8	86.4
Column %	86.5	85.0	
Total %	81.4	5.0	
White:			
Frequency	43	3	46
Row %	93.5	6.5	13.6
Column %	13.5	15.0	
Total %	12.7	.9	
Column Total	319	20	339
	94.1	5.9	100.0

$X^2 = .037$
d.f. = 1
$p < .85$
Missing Cases = 10

Table 68

Suspect Race by Suspect Fleeing
(Primary Suspects)

Suspect Race	Fled: Yes	Fled: No	Row Total
Black:			
Frequency	197	98	295
Row %	66.8	33.2	86.5
Column %	88.0	83.8	
Total %	57.8	28.7	
White:			
Frequency	27	19	46
Row %	58.7	41.3	13.5
Column %	12.0	16.2	
Total %	7.9	5.6	
Column Total	224	117	341
	65.7	34.3	100.0

$X^2 = 1.15$
d.f. = 1
$p < .22$
Missing Cases = 8

Table 69

Suspect Race by Suspect
Assaulted Officer
(Primary Suspects)

Suspect Race	Assaulted Officer: Yes	Assaulted Officer: No	Row Total
Black:			
Frequency	181	106	287
Row %	63.1	36.9	86.5
Column %	87.0	85.5	
Total %	54.5	31.9	
White:			
Frequency	27	18	45
Row %	60.0	40.0	13.5
Column %	13.0	14.5	
Total %	8.1	5.5	
Column Total	208	124	332
	62.7	37.3	100.0

$X^2 = .1568$
d.f. = 1
$p < .70$
Missing Cases = 17

Table 70

Suspect Race by Suspect
Assaulted Third Party
(Primary Suspects)

Suspect Race	Assaulted Third Party: Yes	No	Row Total
Black:			
Frequency	112	177	289
Row %	38.8	61.2	86.8
Column %	87.5	86.3	
Total %	33.6	53.2	
White:			
Frequency	16	28	44
Row %	36.4	63.6	13.2
Column %	12.5	13.7	
Total %	4.8	8.4	
Column Total	128	205	333
	38.4	61.6	100.0

$X^2 = .092$
d.f. = 1
$p < .75$
Missing Cases = 16

Table 71

Suspect Race by Suspect
Shot at Police
(Primary Suspects)

Suspect Race	Shot at Police: Yes	Shot at Police: No	Row Total
Black:			
Frequency	48	137	185
Row %	26.9	74.1	86.9
Column %	85.7	87.3	
Total %	22.5	64.3	
White:			
Frequency	8	20	28
Row %	28.6	71.4	13.1
Column %	14.3	12.7	
Total %	3.8	9.4	
Column Total	56	157	213
	26.3	73.7	100.0

$X^2 = .087$
d.f. = 1
$p < .75$
Missing Cases = 136

during the incident was unrelated to the suspect's race as was whether the suspect fired a weapon at third parties. However, as Table 72 shows, a significance level of .11 was reached with respect to the last relationship just mentioned. Note should be taken also that the sample sizes in Tables 71 (N=213) and 72 (N=214) were virtually identical, yet values for X^2 were .087 and 2.923 respectively. Consequently, a larger sample for Table 72 may have yielded statistically significant results (i.e., p=.05). Had that been the case, we would have reported that white suspects were proportionately more likely to shoot at third parties than were their black counterparts during the incident.

Another relationship of interest was whether the race of the suspect was associated with the shooting officer's stated or inferred reason for using deadly force. As Table 73 (p=.60) shows, however, whether an officer claimed self-defense or some other reason was independent of the race of the suspect.

Two other relationships tested in this study concerned whether the disposition of the shooting incident was associated with either the race of the officers or the race of the suspects involved. Table 74 (p=.13) shows that the race of the officer involved in the shooting was not associated

with whether the shooting was ruled "justified" by the police department. Nor does it appear that the race of the suspect was related to the department's adjudication of the incident (Table 75; p=.50). Table 76 (p=.70) shows no relationship between the race of the officer and the officer's assignment at the time of the incident; that is, black and white officers were equally likely (or unlikely) to have been assigned to patrol duties when they became involved in shooting incidents.

Another group of relationships of interest in our analysis was the relationship between suspect race and the possession and extent of a prior criminal history. In terms of race, we were specifically interested in whether the suspect had any prior misdemeanor or felony arrests, misdemeanor convictions, felony convictions for crimes against property or persons, or whether the suspect had ever served terms in jail or prison. It should be recalled that the cases in these analyses were not randomly selected, but constituted only those suspects on which we were able to obtain criminal histories.

Tables 77 through 83 display these findings, none of which were statistically significant. In sum, the race of the suspects involved in shooting incidents appeared not to

Table 72

Suspect Race by Suspect
Shot at Third Party
(Primary Suspects)

Suspect Race	Shot at Third Party: Yes	No	Row Total
Black:			
Frequency	25	162	187
Row %	13.4	86.6	87.4
Column %	78.1	89.0	
Total %	11.7	75.7	
White:			
Frequency	7	20	27
Row %	25.9	74.1	12.8
Column %	21.9	11.0	
Total %	3.3	9.3	
Column Total	32	182	214
	15.0	85.0	100.0

$X^2 = 2.923$
d.f. = 1
$p < .11$
Missing Cases = 135

Table 73

Suspect Race by Officer's Reason
for Use of Deadly Force
(Primary Suspects)

Suspect Race	Reason: Self-Defense	Reason: All Other	Row Total
Black:			
Frequency	199	95	294
Row %	67.7	32.3	86.5
Column %	87.3	84.8	
Total %	58.5	28.0	
White:			
Frequency	29	17	46
Row %	63.0	37.0	13.5
Column %	12.7	15.2	
Total %	8.5	5.0	
Column Total	228	112	340
	67.1	32.9	

$X^2 = .3883$
d.f. = 1
$p < .60$
Missing Cases = 9

Table 74

Officer Race by Ruled Justifiable
(Primary Officers)

Suspect Race	Justified: Yes	Justified: No	Row Total
Black:			
Frequency	109	13	122
Row %	89.3	10.7	39.2
Column %	38.0	54.2	
Total %	35.1	4.2	
White:			
Frequency	178	11	189
Row %	94.2	5.8	60.8
Column %	62.0	45.8	
Total %	57.2	3.5	
Column Total	287	24	311
	92.3	7.7	100.0

$X^2 = 2.413$
d.f. = 1
$p < .13$
Missing Cases = 38

be a factor in whether the suspect had been previously arrested or convicted of a misdemeanor (Table 77; p=.85; Table 79; p=.85), arrested for a felony (Table 78; p=.65), convicted of a felony property crime (Table 80; p=.60), convicted of a crime against persons (Table 81; p=.65), had ever served a jail term (Table 82; p=.70), or ever served a prison term (Table 83; p=.12). We should point out, however, that even though the tested relationship mentioned above (i.e., suspect race by ever served in prison) did not achieve statistical significance at the .05 level, it did, in fact, closely approach it. Of the 18 whites in the sample, 61% had never served a prison term. In comparison, 59% of the 123 black suspects in the sample had. However, due to the low level of significance and the fact that Table 83, as well as Tables 77 through 82, are based on nonprobability samples, we have not generalized these findings either over time or to other similarly constructed populations.

Though the remaining tables in this section show relationships that were statistically significant at the .05 level, none of these associations were found to be very strong. For the reader's convenience we have indicated at the bottom of each table the exact level of significance and measure of association for each relationship tested.

Table 75

Suspect Race by Ruled Justifiable
(Primary Suspects)

Suspect Race	Justified: Yes	Justified: No	Row Total
Black:			
Frequency	246	22	268
Row %	91.8	8.2	86.7
Column %	86.3	91.7	
Total %	79.6	7.1	
White:			
Frequency	39	2	41
Row %	95.1	4.9	13.3
Column %	13.7	8.3	
Total %	12.6	.7	
Column Total	285	24	309
	92.2	7.8	100.0

$X^2 = .5508$
d.f. = 1
$p < .50$
Missing Cases = 40

Table 76

Officer Race by Officer Assignment
(Primary Officers)

Suspect Race	Assignment: Patrol	Assignment: All Other	Row Total
Black:			
Frequency	110	34	144
Row %	76.4	23.6	41.9
Column %	42.5	40.0	
Total %	32.0	9.9	
White:			
Frequency	149	51	200
Row %	74.5	25.5	58.1
Column %	57.5	60.0	
Total %	43.3	14.8	
Column Total	259	85	344
	75.3	24.7	100.0

$X^2 = .16$
d.f. = 1
$p < .70$
Missing Cases = 5

Table 77

Suspect Race by Misdemeanor Arrests
(Primary Suspects)

Suspect Race	Misdemeanor Arrests: None	One or More	Row Total
Black:			
Frequency	101	51	152
Row %	66.4	33.6	88.9
Column %	88.6	89.5	
Total %	59.1	29.8	
White:			
Frequency	13	6	19
Row %	68.4	31.6	11.1
Column %	11.4	10.5	
Total %	7.6	3.5	
Column Total	114	57	171
	66.7	33.3	100.0

$X^2 = .0297$
d.f. = 1
$p < .85$
Missing Cases = 178

Table 78

Suspect Race by Felony Arrests
(Primary Suspects)

Suspect Race	Felony Arrests: None	One or More	Row Total
Black:			
Frequency	61	92	153
Row %	39.9	60.1	89.0
Column %	88.4	89.3	
Total %	35.4	53.5	
White:			
Frequency	8	11	19
Row %	42.1	57.9	11.0
Column %	11.6	10.7	
Total %	4.7	6.4	
Column Total	69	103	172
	40.1	59.9	100.0

$X^2 = .0359$
d.f. = 1
$p < .85$
Missing Cases = 177

Table 79

Suspect Race by Misdemeanor Convictions
(Primary Suspects)

Suspect Race	Misdemeanor Convictions: None	One or More	Row Total
Black:			
Frequency	101	48	149
Row %	67.8	32.2	88.7
Column %	87.8	90.6	
Total %	60.1	28.6	
White:			
Frequency	14	5	19
Row %	73.7	26.3	11.3
Column %	12.2	9.4	
Total %	8.3	3.0	
Column Total	115	53	168
	68.5	31.5	100.0

$X^2 = .2716$
d.f. = 1
$p < .65$
Missing Cases = 181

Table 80

Suspect Race by Felony Property Convictions
(Primary Suspects)

Suspect Race	Property Convictions: None	One or More	Row Total
Black:			
Frequency	80	64	144
Row %	55.6	44.4	88.3
Column %	87.0	90.1	
Total %	49.1	39.3	
White:			
Frequency	12	7	19
Row %	63.2	36.8	11.7
Column %	13.0	9.9	
Total %	7.4	4.2	
Column Total	92	71	163
	56.4	43.6	100.0

$X^2 = .3816$
d.f. = 1
$p < .60$
Missing Cases = 186

Table 81

Suspect Race by Felony Convictions
Crimes Against Persons
(Primary Suspects)

Suspect Race	Convictions--Crimes Against Person None	One or More	Row Total
Black:			
Frequency	107	39	146
Row %	73.3	26.7	88.5
Column %	87.7	90.7	
Total %	64.9	23.6	
White:			
Frequency	15	4	19
Row %	78.9	21.1	11.5
Column %	12.3	9.3	
Total %	9.1	2.4	
Column Total	122	43	165
	73.9	26.1	100.0

$X^2 = .2710$
d.f. = 1
$p < .65$
Missing Cases = 184

Table 82

Suspect Race by Suspect
Ever in Jail
(Primary Suspects)

Suspect Race	Ever Jailed: Yes	Ever Jailed: No	Row Total
Black:			
Frequency	76	39	115
Row %	66.1	33.9	88.5
Column %	89.4	86.7	
Total %	58.5	30.0	
White:			
Frequency	9	6	15
Row %	60.0	40.0	11.5
Column %	10.6	13.3	
Total %	6.9	4.6	
Column Total	85	45	130
	65.4	34.6	100.0

$X^2 = .2172$
d.f. = 1
$p < .70$
Missing Cases = 219

Table 83

Suspect Race by Ever in Prison
(Primary Suspects)

Suspect Race	Ever Imprisoned: Yes	No	Row Total
Black:			
Frequency	73	50	123
Row %	59.3	40.7	87.2
Column %	91.3	82.0	
Total %	51.8	35.5	
White:			
Frequency	7	11	18
Row %	38.9	61.1	12.8
Column %	8.7	18.0	
Total %	4.9	7.8	
Column Total	80	61	141
	56.7	43.3	100.0

$X^2 = 2.664$
d.f. = 1
$p < .12$
Missing Cases = 208

The association between the race of the suspects and the race of the officers involved in shooting incidents is shown in Table 84 (p=.005, phi=.197). Though a relatively weak relationship, two of its aspects are worth noting. First, roughly 40% of all shootings involved black officers and black suspects, compared to 47% involving white officers and black suspects. More important, 94% of all black-officer civilian targets were black as compared to white-officer civilian targets, 81% of which were black. In addition, white suspects comprised only 6% of all black-officer targets as compared to white-officer targets of which 19% were white. Consequently, we have observed that black officers in our study were proportionately more likely than white officers to fire upon black suspects; white officers proportionately more likely than black officers to fire upon white suspects.

When fatal, injury, and missed shot incidents were examined separately, this relationship persisted even with the relatively small sample sizes for each incident type. Table 85 (p=.025, phi=.282) shows that 42% of all fatal incidents involved black officers and black suspects; 44% involved white officers and black suspects. Moreover, 97% of all black-officer civilian targets were black as compared to 77% of all white-officer targets.

Table 84

Suspect Race by Officer Race
(Primary Suspects/Primary Officers)

Suspect Race	Officer Race: Black	Officer Race: White	Row Total
Black			
Frequency	134	159	293
Row %	45.7	54.3	86.4
Column %	94.4	80.7	
Total %	39.5	45.9	
White:			
Frequency	8	38	46
Row %	17.4	82.6	13.6
Column %	5.6	19.3	
Total %	2.4	11.2	
Column Total	142	197	339
	41.9	58.1	100.0

$X^2 = 13.12$
d.f. = 1
p = .005
Phi = .197
Missing Cases = 10

Table 84

Suspect Race by Officer Race
(Primary Suspects/Primary Officers)

Suspect Race	Officer Race: Black	Officer Race: White	Row Total
Black			
Frequency	134	159	293
Row %	45.7	54.3	86.4
Column %	94.4	80.7	
Total %	39.5	45.9	
White:			
Frequency	8	38	46
Row %	17.4	82.6	13.6
Column %	5.6	19.3	
Total %	2.4	11.2	
Column Total	142	197	339
	41.9	58.1	100.0

$X^2 = 13.12$
d.f. = 1
p = .005
Phi = .197
Missing Cases = 10

Of injury incidents, depicted in Table 86 (p=.05, phi=.174), 40% involved black officers and black suspects while 46% involved white officers and black suspects. In addition, black civilians comprised 93% of all black-officer targets and 80% of all white-officer targets.

Table 87 (p=.05, phi=.202) shows the results of our analysis of suspect race by officer race for missed shot incidents. In these instances, 37% involved black officers and black suspects; white officers and black suspects comprised 51% of the sample. As with all incidents combined, fatal incidents, and injury incidents, the vast majority of black-officer civilian targets in missed shootings was black (94%). In comparison, 84% of all white-officer targets were black.

The relationship of officer race with duty status was also found to be statistically significant. Table 88 (p=.001, phi=.228), which depicts this relatively weak association, shows that black officers were proportionately more likely to have been off-duty at the time of the incident than were white officers (33% to 14%). This is reinforced by the finding that blacks comprised 63% of all off-duty officers involved in shooting incidents; conversely, white officers constituted 64% of all on-duty shooters.

Table 86

Suspect Race by Officer Race
(Injury Incidents)
(Primary Actors)

Suspect Race	Officer Race: Black	Officer Race: White	Row Total
Black:			
Frequency	64	74	138
Row %	46.4	53.6	85.7
Column %	92.8	80.4	
Total %	39.8	46.0	
White:			
Frequency	5	18	23
Row %	21.7	78.3	14.3
Column %	7.2	19.6	
Total %	3.1	11.1	
Column Total	69	92	161
	42.9	57.1	100.0

$X^2 = 4.886$
d.f. = 1
p = .05
Phi = .174
Missing Cases = 5

Table 87

Suspect Race by Officer Race
(Missed Shot Incidents)
(Primary Actors)

Suspect Race	Officer Race: Black	Officer Race: White	Row Total
Black:			
Frequency	37	51	88
Row %	42.0	58.0	88.0
Column %	94.9	83.6	
Total %	37.0	51.0	
White:			
Frequency	2	10	12
Row %	16.7	83.3	12.0
Column %	5.1	16.4	
Total %	2.0	10.0	
Column Total	39	61	100
	39.0	61.0	

$X^2 = 4.064$
d.f. = 1
p = .05
Phi = .202
Missing Cases = 1

In a related finding, as shown in Table 89 (p=.01, phi=.168), black officers were also more often found to be in plain clothes dress at the time of the incident than were white officers: 49% as compared to 32%. In addition, while black officers comprised only 36% of all uniformed officers involved in shooting incidents, 53% of all plain clothes officer-shooters were black. In sum, virtually one-half of all black officers were in plain clothes, when the shooting incident transpired. In contrast, two-thirds of all white officers were in uniform at the time of the incident.

We have already tested the relationship of the race of the suspects with the number of officers present at the shooting incidents and found the relationship to be statistically insignificant. This was not the case, however, with respect to the number of civilian eyewitnesses at the incident, as Table 90 (p=.03, C=.160) shows. Though a weak relationship, Table 90 indicates that when black suspects were fired upon by police officers, fewer eyewitnesses were present than when white suspects were shot at. For example, in 45% of the incidents involving black suspects, no civilian witnesses were present. The comparable figure for incidents involving white suspects was 24%.

Furthermore, of all incidents, only 16% of those involving black suspects had one eyewitness, 39% had two or

Table 88

Officer Race by Duty Status
(Primary Officers)

Suspect Race	Duty Status: On-Duty	Duty Status: Off-Duty	Row Total
Black:			
Frequency	95	46	141
Row %	67.4	32.6	41.6
Column %	35.7	63.0	
Total %	28.0	13.6	
White:			
Frequency	171	27	198
Row %	86.4	13.6	58.4
Column %	64.3	37.0	
Total %	50.4	8.0	
Column Total	266	73	339
	78.0	22.0	100.0

$X^2 = 17.573$
d.f. = 1
p = .001
Phi = .228
Missing Cases = 10

Table 89

Officer Race by Officer Uniform Status
(Primary Officers)

Suspect Race	Uniform Status: Uniform	Plain Clothes	Row Total
Black:			
Frequency	74	71	145
Row %	51.0	49.0	42.3
Column %	35.6	52.6	
Total %	21.6	10.7	
White:			
Frequency	134	64	198
Row %	67.7	32.3	57.7
Column %	64.4	47.7	
Total %	39.1	18.6	
Column Total	208	135	343
	60.6	39.4	100.0

$X^2 = 9.671$
d.f. = 1
p = .01
Phi = .168
Missing Cases = 6

Table 90

Suspect Race by Number of Civilian Eyewitnesses at Incident (Primary Suspects)

Suspect Race	Number Civilian Eyewitnesses 0	1	2 or more	Row Total
Black:				
Frequency	115	41	98	254
Row %	45.3	16.1	38.6	85.8
Column %	92.0	77.4	83.1	
Total %	38.9	13.9	33.0	
White:				
Frequency	10	12	20	42
Row %	23.8	28.6	47.6	14.2
Column %	8.0	22.6	16.9	
Total %	3.4	4.0	6.8	
Column Total	125	53	118	296
	42.2	17.9	39.9	100.0

$X^2 = 7.773$
d.f. = 2
p = .03
Phi = .160
Missing Cases = 53

more. For incidents involving white suspects, one eyewitness was present in 29% of the shootings; two or more were present in 48% of the incidents. It is interesting to note that the percentage for incidents involving black suspects where no witnesses were present (45%) approximates the percentage for incidents involving white suspects when two or more witnesses were present (48%). These data suggest that black suspects are more frequently fired upon when no or fewer witnesses are present than when white suspects are shot at by the police.

The test of whether the officer's race was related to whether he identified himself and ordered the suspect to halt prior to discharging the weapon was also conducted. As Table 91 shows (p=.03, phi=.126), the relationship was quite weak. In fact, very little difference was found between black and white officers in this regard. Black officers reportedly advised the suspect to halt before firing in 87% of those incidents in which they were involved; the figure involving white officers was 91%.

The last relationship examined in this section pertained to whether the officer's race was associated with his or her reasons for the use of deadly force. Though a fairly weak relationship, Table 92 (p=.001, phi=.208) shows that black

Table 91

Officer Race by Halt Order Given
(Primary Officers)

Suspect Race	Halt Order Given: Yes	Halt Order Given: No	Row Total
Black:			
Frequency	124	19	143
Row %	86.7	13.3	41.9
Column %	40.7	52.8	
Total %	36.4	5.6	
White:			
Frequency	181	17	198
Row %	91.4	8.6	58.1
Column %	59.3	47.2	
Total %	53.1	4.9	
Column Total	305	36	341
	89.4	10.6	100.0

$X^2 = 5.401$
d.f. = 1
p = .03
Phi = .126
Missing Cases = 8

Table 92

Officer Race by Officer's Reason
For Use of Deadly Force
(Primary Officers)

Suspect Race	Reason: Self-Defense	Reason: All Other	Row Total
Black:			
Frequency	114	30	144
Row %	79.2	20.8	41.9
Column %	48.9	27.0	
Total %	33.1	8.7	
White:			
Frequency	119	81	200
Row %	59.5	40.5	58.1
Column %	51.1	73.0	
Total %	34.6	23.6	
Column Total	233	111	344
	67.8	32.2	100.0

$X^2 = 14.814$
d.f. = 1
p = .001
Phi = .208
Missing Cases = 5

officers were reported to have fired proportionately more often in self-defense than did white officers (79% to 60%).

Summary of Univariate and Crosstabulational Findings

The analyses in this section undertook an examination of several univariate descriptions and more than 30 relationships which have been considered by much of the previous research as substantively significant in accounting for the police use of deadly force in the United States. With respect to univariate analyses, we found that blacks were overrepresented as victims of the police use of deadly force in terms of their proportion in the general, jurisdictional population. We also reported, however, that in terms of black participation in arrest rates for Part I, property, and violent crime offenses, this overrepresentation all but disappeared. In effect, blacks were fired upon by police officers in a proportion equal to their participation in all categories of arrest, with the exception of arson. For example, while blacks constituted 86% of all police shootings suspects, they concurrently comprised 84%, 84%, and 85% of all Part I, property, and violent crime arrests respectively. This finding, particularly as it pertains to violent crime arrests, comports with the vast majority of

the previous research (e.g., Harding and Fahey, 1973; Burnham, 1973; Milton et al., 1977; Fyfe, 1978; Meyer, 1980; Geller and Karales, 1981; and Matulia, 1982).

In terms of officer race, we disclosed that while black officers comprised 29% of the department's sworn personnel, they also constituted 39% of all officers involved in shooting incidents, indicating that black officers were 1.6 times more likely than their white counterparts to become involved in civilian shooting incidents. That black officers appear to be overly involved in shooting incidents has also been born out by the previous work of Fyfe (1978) in New York City and Geller and Karales (1981) in Chicago.

Using crosstabulational analysis, we found, moreover, that this disproportionately high involvement in shootings was also evidenced in both on- and off-duty shootings. Black officers in our investigation comprised 36% of all on-duty, 63% of all off-duty, and 42% of all primary shooters. This finding substantially agrees with that of Fyfe (1978) and differs from that of Geller and Karales (1981) only with respect to on-duty shootings. (They found no black officer overrepresentation in Chicago for on-duty incidents.) While Fyfe (1978) explains this on-duty, black-officer disproportionality as a product of assignment (i.e., black officers

in New York were assigned to more hazardous functions and were thus more likely to find themselves in situations necessitating the use of firearms), we were not able to do so in this report. We found, for example, that black and white officers were evenly assigned to patrol and all "other" duties alike. We must point out, however, that we did not examine assignment by neighborhoods in terms of their hazardous functional nature as Fyfe (1978) also did.

We also found, as did Fyfe (1978) and Geller and Karales (1981) that black officers were proportionately more likely to shoot at black suspects than were white officers. In addition, this relationship held true, as well, for fatal, injury, and missed shot incidents when separately tested. Of all primary suspects fired upon by primary black officers, 94% were black as compared to 81% fired upon by white officers; moreover, 40% of all shooting incidents involved a black, primary officer and a black, primary suspect. In addition to this finding, we reported black officers to be overly represented as plain clothes shooters with 49% of all black primary officers in plain clothes as compared to 32% of white, primary officers.

With regard to other analyses showing statistically significant relationships, we found the number of civilian

eyewitnesses present at the incident to be related, though weakly, to the race of the suspects involved in the shootings. We observed, for example, that black suspects were more frequently fired upon by police officers when few or no civilian eyewitnesses were present as compared to white suspects. In 45% of the incidents involving black suspects, no witnesses were present as compared to 24% for white suspects. In addition, we noted that this 45% closely approximated the percentage for incidents involving white suspects when two or more witnesses were present (i.e., 48%).

The last two statistically significant relationships indicated that white officers were slightly more likely to identify themselves and command the suspect to halt prior to discharging the police revolver (91% to 87%). Black officers, however, were proportionately and substantially more likely to have claimed self-defense as their justification for the use of deadly force than were their white counterparts (79% to 60%).

Several other relationships were tested pertaining to the race of the officer or the suspect with variables thought to be substantively significant in accounting for

the use of deadly force. These were found not to be significant at the .05 level. We found, for instance, that the race of the suspect was independent of:

1) the type of incident in which the suspect was involved;

2) the number of officers in the incident using deadly force;

3) whether the suspect was armed;

4) whether the suspect threatened the use of deadly force;

5) whether the suspect was involved in a felony immediately prior to or during the incident;

6) whether the suspect fled upon arrival of the police;

7) whether the suspect assaulted the police or third parties;

8) whether, if armed with a firearm, the suspect fired at police or third parties;

9) the officer's reason for the use of deadly force (self-defense or other reason); and

10) whether the shooting was ruled as within departmental policy and guidelines.

Related to the last-mentioned association, we reported that the race of the officer, as well, was not related to

whether the shooting was determined to have been within departmental policy.

A last set of relationships investigated in this section focused on the association of the race of the shooting suspect with whether the suspect possessed a prior criminal history. We found that the race of the suspects involved in police shooting incidents was unrelated to whether the suspect had been previously arrested or convicted of a misdemeanor, arrested or convicted of a felony, or incarcerated in a jail or prison.

CHAPTER 5

DISCUSSION

Introduction

To our knowledge this is one of only two investigations probing the police use of deadly force which attempted to describe and analyze the multiple types of intentional police firearms discharges: specifically those incidents resulting in civilian fatalities, civilian injuries, and shots fired at, but missing, civilians. Therefore, evaluation of these findings in the light of others in which the results were based on data collected from several jurisdictions, nation-wide samples, or only in certain types of incidents (e.g., fatalities and/or injuries) is undertaken best with a degree of caution. We make this point at the outset of our discussion to express our concern that the comparisons we draw in this chapter be interpreted with a discerning eye.

In this study we have described and analyzed the most salient features of deadly force incidents that occurred in a large Midwestern city during the period from September 1, 1976 through August 31, 1981. A summary and discussion of these findings in the light of the previous research efforts is captured below.

Incident Characteristics

There are apparently a number of groups and individuals who believe that deadly force is increasingly being used by law enforcement officers as a means of subduing suspected criminals. Our findings do not support this belief. As we indicated in the previous chapter, there is reason to believe that the use of deadly force by the police has decreased since 1979 in the jurisdiction we studied. In point of fact, fatal incidents (the most serious) and missed shot incidents (the most frequent) have evidenced a steady decline since 1977.

That the absolute number of incidents has declined in recent years, however, should not be perceived as serving to mitigate concern about the issue. We do not know, for instance, if, in absolute numbers, the incidents reported

(or that actually occurred) in the city during our study period exceeded that number in comparable jurisdictions. Nor do we have any reliable information about a number of other factors, e.g., geographical correlates of police shootings, the relationship between civilian and police violence, and so forth that contribute to the use of deadly force (Geller, 1982). Given these cautionary notes, we proceed to summarize in some detail the remainder of our findings pertaining to the characteristics of the incidents studied.

Of the 349 police shooting incidents investigated in our study, 78% and 70% involved only one suspect and one officer respectively and an average of 1.33 suspects, 1.45 officers, 2.44 civilian eyewitnesses, and 1.15 nonshooting officers per incident. By incident type we found that while missed shootings involved a higher average number of suspects (1.9) per case, fatal incidents occurred with a higher average number of eyewitnesses (4.0) and police officers discharging their weapons (1.6).

Across all incidents, almost three-fifths (57%) transpired in the last six months of the calendar year, suggesting some seasonal variation in occurrence. This finding, which substantially squares with that of Kobler (1975a), diverges from those of Fyfe (1978) and Geller and

Karales (1981). Fyfe found shooting incidents fairly evenly distributed by month; Geller and Karales observed that roughly three of every five shootings occurred in the first half of the calendar year. In addition, we found that the last 11 days of the month accounted for 40% of all shootings investigated in our study.

In terms of the time of day and location of shootings by police officers, our findings were not very dissimilar to those of previous researchers. We reported that 74% of the incidents in our study occurred between the hours of 6:00 P.M. and 8:00 A.M. with 53% of these, in turn, between the hours of 6:00 P.M. and midnight. Further, we observed that most shooting incidents occurred in a neighborhood area (53%), outside (82%), and in places legally accessible to the general public (70%). Kobler (1975b) and the California Bureau of Criminal Justice Statistics (1974) found that most shooting incidents occurred between 9:00 P.M. and 3:00 A.M. with one-third transpiring out-of-doors. Last, the findings of Geller and Karales (1981) most closely approximate those of our own; they disclosed that 72% of all Chicago police shootings occurred between 6:00 P.M. and 6:00 A.M., 68% outside. By incident type we noted differences in both the time and location of occurrence; 75% of all fatals occurred

in neighborhood settings as opposed to injury and missed shot incidents, both of which appeared to be evenly distributed between neighborhood and business areas. By location, approximately 75% of all fatal, 80% of all injury, and 90% of all missed shootings occurred outside; public locations accounted for about 60%, 70%, and 75% of all fatal, injury, and missed shot incidents respectively.

Our findings with respect to the alleged criminal activity of the suspect prior to or during the shooting incident also comport with much of the previous research. For example, we found that for all incidents combined, 93% involved suspects in the commission of a felony act(s); the most frequently alleged offense was aggravated assault (32%), followed by burglary (25%), simple assault (15%), and robbery (11%). Though Robin (1963), PILCOP (1975), Kobler (1975a), the California Bureau of Criminal Justice Statistics (1974), Milton et al. (1977) and Geller and Karales (1981) report roughly similar findings in their studies, the reader is cautioned that their results pertain to fatal and/or injury shootings only. In addition, definitions of offenses among most such studies--including our own--are most likely at variance. These factors of course impede attempts at comparison.

To the degree that comparisons may be possible, Robin (1963), PILCOP (1975), and Kobler (1975a) reported that 88%, 86% and 70% of all suspects were involved in criminal activity at the time of the police shooting. Further, Milton et al. (1977) disclosed that 32% of shooting incidents involved civil disturbances, 21% robberies, and 20% burglaries. Similarly, Geller and Karales (1981) reported that disturbance calls accounted for 39% of all Chicago police shootings followed by robbery (27%) and burglary (15%). Fyfe (1978), who examined fatal, injury, and missed shot incidents--as did we--reported robbery as the modal offense (39%), followed by disturbance calls (25%), traffic incidents (12%) and burglary (7%).

By type of shooting incident we observed some variance in terms of both the extent of felonious activity and the modal offense. For example, incidents resulting in fatalities were slightly less likely to have involved perpetrations of felonies (83% for fatals; 98% for injury and missed shootings). Second, while simple assault was the most frequently alleged suspect criminal activity in fatal and injury incidents, aggravated assault was the modal offense for incidents resulting in missed shootings. Last, while burglary comprised only 11.1% of those incidents

resulting in civilian fatalities, it was the second most frequently reported offense for both injury and missed shot incidents (30% and 32% respectively).

In addition to alleged criminal activity, we also examined other aspects of the suspect's behaviour that may have directly or indirectly precipitated the shooting incident. For example, even though 88% of the incidents we studied involved police officers reportedly identifying themselves as police and advising the suspects to halt their present activities, in 64% of the cases, the suspects chose to flee either prior to or during the incident. Further, 60% involved armed suspects, 60.5% intimated or threatened the use of a weapon, 61% assaults on the arresting officers, and 37% assaults on third parties. Of those incidents involving armed suspects, 69% (144 or 41% of all incidents) involved firearms. Of those with firearms, 58% pointed their weapons at the police, 35% at third parties. Over one-fourth of all incidents investigated (27%) actually entailed the discharge of a firearm by the suspect at the police or third parties.

Previous research has also indicated that a significantly large proportion of police shooting incidents involved armed suspects, the majority of these in possession of firearms: PILCOP (1975) reported 53%; Kobler (1975b)

75%, 50% with firearms; Milton et al. (1977), 57%, 45% with firearms; Geller and Karales (1981), 67%, 51% with guns.

Though not statistically significant because of small sample size, by incident type, we found that suspects of fatal shootings were much less likely to flee, to be advised of police presence, or to resist lawful arrest than those in injury shootings. The same relationship was also evident--though to a lesser degree--when comparing injury to missed shootings, suggesting an inverse association between the seriousness of the shooting outcome and whether police presence was verbally made known by the officers, whether the suspects fled, or whether the suspects resisted. On the other hand, that fatally shot suspects were much more likely to be armed (80%) than either injury or missed shot opponents (57% and 58% respectively), and further, more likely to be either threatening the use of a weapon (72%) or displaying a weapon (72%) than the other two types, suggests that the more extensive involvement in weapons possession and usage, the more likely the suspect would be killed by the police during the incident. Similarly, we found that fatally wounded opponents more frequently assaulted, pointed firearms, and discharged these firearms at both the police and third parties than did opponents in the other two incident types.

Suspect Characteristics

In summarizing the descriptive findings of our research with respect to certain characteristics of the suspect, we again found much which appeared to conform to previous studies. We observed, for example, that of the suspects investigated in this study, the vast majority were male (97%), black (86%), approximately 25 years old, with fairly extensive criminal records. (Because we wish to discuss the issues of race and criminal history in a separate section in this chapter, we will here forego any summation of our findings pertaining to them.)

In terms of the age and sex of police shooting opponents, a number of researchers have reported average ages ranging from 17 to 30 years with 97% of the suspects being male. Robin (1963) reported an average age of 27.6 and Kobler (1975a), 29 years. Knoohuizen et al. (1972) found that 62% of all victims of police homicide were under 25; Takagi (1974), in a nation-wide study of police fatal shootings, disclosed that 58% of all opponents ranged in age from 19 to 29 years. Last, Fyfe (1978) reported that those of 23 years and younger constituted slightly more than half of those civilians shot or shot at by New York City police.

While our findings by incident type revealed essentially no difference in sex among shooting opponents (males comprised 98%, 97% and 98% of fatal, injury, and missed shot suspects respectively), differences were noted regarding age. We found, for instance, that suspects of fatal shootings were, on the average, older (30.7 years) than injury opponents (26.1 years) who were, in turn, older than their missed shot counterparts (23.3 years) suggesting a relationship between age and the seriousness of the shooting, namely, the older the suspect, the more serious the shooting outcome.

Officer Characteristics

Our study also entailed an investigation of some of the more salient characteristics of those officers involved in shooting incidents from 1976 to 1981. Of the 505 officers investigated, 60% were white and 39% were black; of first or primary officers only (349), 58% were white, 42% were black. Like their shooting opponents, the vast majority (96%) were male; unlike, however, the suspects upon whom they fired, the average officer age at the time of shooting was 30 years--approximately five years older, on the average, than

their opponents. The average length of an officer's departmental service at the time of the shooting incident was 77.7 months or 6.5 years. By type of incident, officers involved in fatal shootings averaged 7 more months of service than those in injury shootings and 14 months more than those involved in missed shot incidents.

Whether for all incidents combined or incidents distinguished by type of shooting outcome, the vast majority of all officers involved in shooting incidents were of the rank of patrol officer at the time of the shooting event (94% of all officers; 93% of primary officers; 82% of all fatal and 89% of injury officers). Roughly 75% of both all and primary officers were assigned to routine patrol when the shooting incidents transpired. By incident type, however, some difference in assignment was noted in that fatal officers were more likely to have been on routine patrol (88%) than those officers involved in missed shot (79%) and injury incidents (71%).

Prior research has shown that a small but not insignificant proportion of police shooting incidents involved both plain clothes and off-duty officers and our findings were little different. We found, for example, that 16% of all and 22% of primary officers were off-duty at the time of the

incident. Comparably, Knoohuizen et al. (1972) reported 20%; PILCOP (1975), 19.5%; Milton et al. (1977), 17%; Fyfe (1978), 21.5%; and Geller and Karales (1981), 22.5%. In addition, that we found a slightly larger proportion of officers in plain clothes also comports with the findings of Milton et al. (1977), Fyfe (1978), and Geller and Karales (1981). By our account, 36.5% of all shooters and 40% of all primary officers, respectively, were out of uniform at the time of the shooting incident. Though we discerned little variation by incident type in terms of officer duty status (all were equally likely to be on-duty), we found a larger percentage of officers in fatal and injury shootings to be in uniform than those in missed shot incidents (70% and 68% to 58%).

Our findings pertaining to the prior military service, marksmanship classification, shooting ratio, and shooting history of officers involved in shootings show, for example, that officers with prior military service were no more frequently involved in shooting incidents than those without such experience: 51% of primary officer shooters, 52% of all officer shooters, and 55% of all departmental officers had prior or concurrent military service.

For the period of our study we found that Marksmen comprised the largest proportion of all shooters (36%)

followed by Sharpshooters (28%), Qualified's (19%), Experts (16%), and Failed's (1%). By incident type, a larger proportion of Experts and Sharpshooters (the highest grades) were in the ranks of fatal and injury shooters and, conversely, a higher percentage of Qualified's and Failed's (the lowest grades) were involved in missed shot incidents. This, however, was not the case for all 505 officers and was only partially true for the 349 primary officers. For instance, for all officers involved in shooting incidents, 45% of the fatal, 43% of the injury, and 46% of the missed shootings involved Experts and Sharpshooters; moreover, 27% of the fatal, 19% of the injury, and 17% of the missed shot incidents transpired by the participation of Qualified's and Failed's. For primary officers, it was the case that a slightly larger proportion of both Experts and Sharpshooters and Qualified's and Failed's participated in fatal than missed shootings. Further, the proportion of Experts and Sharpshooters involved in injury shootings was slightly smaller and the proportion of Qualified's and Failed's slightly larger than those involved in missed shot incidents. What these findings seem to suggest, at minimum, is the questionable utility of such shooting classifications and perhaps, moreover, the evaluation techniques used to assess these marksmanship grades.

The shooting ratios of the officers involved in deadly force incidents (their "hit rates") was also the subject of our investigation. Previous research in this area, conducted primarily by Geller and Karales (1981), suggested the low probability of a civilian involved in a police shooting of being injured or killed. Of the 1,145 incidents involving Chicago police firing at suspects in years 1975 through 1979 inclusive, 26.9% resulted in suspect injuries and deaths (Geller and Karales, 1981; 162). The "hit rate," or shooting ratio, for the department in our study was almost identical: Of the 930 police shootings occurring from September, 1976 through August, 1981, 248 or 26.6% resulted in the injury or death of the suspect. Those incidents resulting in fatalities and injuries comprised 8.8% and 17.8% respectively of all 930 shooting incidents. In short, the chances of a suspect involved in a police shooting of being "hit" for this period was roughly one in four; of being killed; less than one in ten. That accuracy scores are low (a circumstance considered as either fortunate or unfortunate, depending on one's point of view) would seem to have implications for the type and extent of firearms training received by the department's officers--one specifically being the need to reassess its purpose, its

effectiveness, and its value to the officers in the performance of their mandated functions to protect human life and maintain public order.

In terms of the number of shots fired and the number actually hitting the intended targets, primary officers averaged 2.45 shots and 1 hit per incident, a finding roughly comparable to that of Geller and Karales (1981:169). By incident type, officers involved in fatal incidents averaged 2.6 shots and 1.8 hits per incident as compared to 2.7 shots and 1.3 hits by officers in injury incidents. Officers participating in missed shot incidents averaged 2.0 shots and, of course, no hits per incident.

The last officer characteristic upon which we reported findings concerned officer shooting history. We found that officers involved in shooting incidents averaged 1.83 shooting incidents for the five-year period of our study, some participating in as many as four during that time. Furthermore, we reported that 58 officers, either alone or with colleagues, had participated in 137 or 39% of the shooting incidents investigated, suggesting that a significant portion of these shootings could be accounted for, at least in part, by experienced or repeat shooters. Primary officers involved in shooting incidents for the period of

the study also participated in an average of .63 such incidents in the preceding five years (i.e., 1971 through 1976).

That a significantly large proportion of incidents involved officers with fairly extensive shooting histories deserves further exploration. That the vast majority of police officers never fire a weapon in the line of duty during their careers, whereas a minority participate in as many as two to four shootings in five years, certainly cannot be explained from the data in our study. But just as certainly, this anomaly requires further attention if it is the hope of law enforcement executives to better understand and control the abuse of police firearms wherever and whenever it may exist.

Suspect Criminal History

In drawing together the conclusions of our study we wished to consider the phenomenon of the shooting suspect's criminal history separately because, with the single exception of Robin's early work (1963) which drew from a limited and narrow sample of fatal "victim-offenders" (N=32), this aspect of police shooting incidents has received little, if any, attention. (The inattention to this feature by others

in the research literature is, we speculate, a consequence of many factors including research objectives different from our own, time and funding constraints, and as likely, the difficulty in obtaining such data. Were it not for the gracious co-operation of the State Police, who allowed us access to this information, we too would have, of necessity, foregone any such investigation.) But because our findings are not derived from records which were randomly selected, but rather only from those we were able to obtain, we again caution the reader to make no more of these data than is appropriate.

Of all primary suspects, we were able to obtain criminal history data on approximately 40%. We observed that these suspects averaged 1.1 misdemeanor arrests, .98 misdemeanor convictions, 2.63 felony arrests, 1.3 felony property convictions, and .57 felony convictions for crimes against persons or violent crimes prior to the shooting incident in which they were involved. We also reported that, following the shooting through the end of the study period, the overall average number of misdemeanor arrests and convictions, felony arrests, and felony property convictions fell to .1, .18, 2.27, and .78 respectively, the only increase a near doubling in the average number of felony convictions

for violent crimes (.57 to .9). These dramatic decreases are probably due, in large measure, to the exclusion of fatally shot suspects in the post-shooting calculations and are thus a bit misleading.

For pre-shooting criminal histories by incident type, we found some interesting differences in terms of arrests and convictions in that fatal victims averaged a significantly higher average number of misdemeanor arrests, misdemeanor convictions, felony arrests and felony convictions than either injury or missed shot opponents. For post-shooting incidents by type of shooting outcome, with the exception of the average number of felony property convictions, we found little difference between injured and missed opponents across our indicators of criminal involvement. We disclosed, for suspects involved in injury and missed shootings respectively, an average of .1 and .05 misdemeanor arrests, .2 misdemeanor convictions, 2.2 and 2.4 felony arrests, and .9 and .8 felony convictions for violent crimes, and 1.2 and .6 felony property convictions.

In 41% and 43% of primary suspect cases, whether any had served jail terms and prison sentences was known to us. Of these, we disclosed that 66% and 56% had been incarcerated in jails and prisons respectively. In a further observation, we noted that the number of jail terms decreased

from a pre-shooting 1.96 average to a post-shooting average of 1.36 per suspect while, at the same time, the average number of prison sentences more than doubled from .94 to 2.10 sentences per suspect. By incident type we found that fatal suspects were more likely to have served time in jail, and though little difference was noted across the three incident types in terms of the likelihood of having ever served time in prison, we observed that the average number of prison and jail terms for fatal opponents was substantially higher than for those involved in injury and missed shot incidents. In conformity with this finding was the observation that fatal suspects were more frequently on parole at the time of the shooting incident.

What these criminal history data seem to suggest is that, like suspect weapons involvement, the more extensive the suspect's criminal record in terms of arrests, convictions, and periods of incarceration, the more likely the suspect, if involved in a police shooting, would be fatally wounded. An explanation for this apparent association, however, cannot be drawn from the data we have collecte.d Yet we speculate that such may be the case because those with prior criminal records more frequently populate the ranks of those civilians involved in and precipitating

police gunfire than those without criminal records. This likelihood, in turn, increases the accompanying risk in which such persons may be fatally shot by the police. Though we are not suggesting that police shoot at, injure, or mortally wound only habitual or career criminals (our data certainly do not support this notion), our data do imply that such people constitute a very large proportion of the police shooting population.

Race and Police Shootings

There is, perhaps, no topic more controversial and more important than the issue of racial representation in incidents in which police use deadly force. There is no question but that blacks in the jurisdiction investigated, as in many locations elsewhere, are disporportionately represented in deadly force incidents relative to their proportion in the general population. On the other hand, our data suggest to us that the disproportion of blacks in these incidents strongly corresponds to the proportionate representation of blacks in those kinds of events that culminate in the use of deadly force, whether by the police or other civilians (See Matulia, 1982). The correspondence between arrest statistics, particularly for violent index crimes,

and involvement in deadly force incidents is a striking finding and one that has been shown in research carried out in a variety of jurisdictions (e.g., Harding and Fahey, 1973, in Chicago Burham, 1973, in New York City; Milton et al., 1977, in seven U.S. cities; Fyfe, 1978, in New York City; Meyer, 1980, in Los Angeles; Geller and Karales, 1981, in Chicago; and Matulia, 1982, in 57 U.S. cities).

We found, for example, that while blacks comprised 86% of all police shooting opponents, they also constituted 84% of all index and violent crime arrestees and 84% of those arrested for property crimes. By specific index crimes, we noted that blacks comprised 89% of those arrested for homicide, 85% of all rape arrestees, 91% of robbery arrestees, 79% of those arrested for assault, 89% of all vehicle theft arrestees, 80% of those arrested for burglary, and 85% of those arrested for larceny. In addition we note, in passing, that Matulia (1982), in a study of 57 large U.S. cities found that while blacks comprised almost 60% of the victims of justifiable police homicide, they also comprised 63.7% of those arrested for violent offenses, 57.9% of those arrested for weapons violations, 73% of all robbery arrests, and, significantly, 73% of all victims of justificable homicide by civilians--an act usually perpetrated intra-racially.

There are those, of course, who--perhaps quite rightly--object to the use of arrest data to assess comparatively racial proportions in deadly force incidents. They point out, for example, that arrest statistics are inherently biased against minorities. Therefore, the disproportion of minorities, particularly blacks, in deadly force incidents is, on its face, indefensible and discriminatory. We have gathered no data, nor are there any of which we are aware, that can inpugn directly the integrity of that view. On the other hand, the mere showing of racial disporportionality in deadly force incidents, while a necessary condition, is not in and of itself a sufficient one to demonstrate that individual officers or police agencies act in a conscious, arbitrary fashion to the disadvantage of certain groups in society. Moreover, arrest statistics, though not perfect by any means, are perhaps the best measures now available of contact with police agencies.

In short, whatever institutionalized mechanisms account for the disproportionate effects in arrests or deadly force incidents must be presumed to be endemic to our society as a whole and not just in police institutions. In order to discern whether disproportionate effects exist, particularly with respect to instances which involve the police use of

deadly force, we analyzed several features of the shooting incidents in terms of race.

We found, for example, that black suspects were more likely than white suspects to be fired upon by the police when there were no or few eyewitnesses at the scene of the incident, as Friedrich (1980) has observed. However, we also found that the number of officers present or using deadly force appeared to be unrelated to whether the suspect fired upon was more likely to be black than white, a finding contrary to results of Friedrich's analysis.

In other analyses we reported that, by incident type, suspects were more likely to be armed in fatal shooting incidents, followed by injury shootings and missed shot incidents. However, when we crosstabulated the race of the suspects with whether the suspects were armed, we found these two variables to be statistically independent--a finding at odds with the research of Fyfe (1978) and Geller and Karales (1981). Moreover, we found no relationship when fatal, injury, and missed shot incidents were analyzed separately. On the other hand, Fyfe found that 61% of all black opponents as compared with 35% of all white opponents were armed; Geller and Karales found these proportions to be 55% and 37%, respectively.

In related analyses, we found no difference between white and black suspects with respect to whether deadly force was threatened, whether police and third parties were assaulted, or whether police and third parties were fired upon by those suspects with firearms.

In addition, no statiscally significant differences were found by race of the suspect in terms of felony involvement of the suspects or whether suspects fled or attempted to flee the scene upon the arrival of police. Nor was it found to be the case that the race of the suspect was related to whether the officer involved claimed the justification of self-defense as the reason for the use of deadly force or whether the shooting was ruled by the department as being within policy guidelines. Finally, no difference was observed by suspect race in terms of shooting outcome; that is, blacks and whites were found to be proportionately distributed over fatal, injury, and missed shot incidents.

The last set of relationships explored in an effort to ascertain racially disproportionate effects in police shooting incidents considered whether there was an association between the race of the shooting suspect and his or her possession of a criminal history. Our findings in this regard were statistically insignificant, suggesting little,

if any, difference between black and white suspects in terms of criminal history possession.

Another aspect of racial involvement in shooting incidents was the extent to which the race of the officer accounted for racially disproportionate effects in police shooting incidents. We found, for instance, that black officers were more likely to be involved in shooting incidents than their white colleagues. We disclosed that while black officers comprised 29% of the department's sworn personnel, they also constituted 39% of all officers involved in shooting incidents for a projection indicating black officers as 1.6 times more likely than their white counterparts to become involved in a civilian shootings. That black officers appear to be overly involved in shooting incidents is consistent with the reports of other researchers (e.g., Fyfe, 1978, in New York City; Geller and Karales, 1981, in Chicago).

Moreover, this disproportionately high involvement was also evidenced in both on- and off-duty shootings: Black officers in our investigation comprised 36% of all on-duty and 63% of all off-duty shooters. This finding substantially agrees with that of Fyfe (1978) and differs from that

of Geller and Karales (1981) but only with respect to on-duty shootings. (They found no black officer overrepresentation in Chicago for on-duty incidents.)

There are at least two possible explanations for our findings pertaining to on-duty shootings. First, it may well be, as has been shown elsewhere (Fyfe, 1978) that black officers--because of police agency responsiveness to societal demands--tend to be assigned to those areas with high proportions of black citizens--that is, in those areas where police shootings are more likely. Second, it may also be that relatively recent attempts to recruit black officers have led to their assignment to patrol duty--an assignment which brings those officers in proportionately greater contact with incidents in which the use of deadly force by either the officer or the civilian or both is likely to occur. Of course, these explanations are not independent of each other and some interaction is possible. Nevertheless, we have no data with which to determine which of these or other possibilities are more likely.

That blacks are disporportionately represented in off-duty shootings may be due to the residential patterns of the officers. As suggested by Fyfe (1978), it is likely that black officers live in predominantly black neighborhoods--that is, in those areas where shootings are more likely to

occur. But, as with on-duty shootings, we collected no data with which to determine whether this or other explanations are more plausible.

It was also reported that black officers shoot, or shoot at, black civilians proportionately more often than white officers. For example, for all primary suspects fired upon by primary black officers, 94% were black as compared to 79% fired upon by white officers; moreover, almost 4 of every 10 shooting incidents involved a black, primary officer and a black, primary suspect. This relationship was sustained, as well, for fatal, injury, and missed-shot incidents separately. In addition to these findings, we reported black officers to be overly represented as plain clothes shooters with 49% of all black primary officers in plain clothes as compared to 32% of white, primary officers. Possible explanations for these findings are beyond our data, yet we may speculate that these too may be explained in part by the departmental assignment practices of blacks as well as by officer residential patterns.

Another set of related findings showed that the proportion of officers claiming self-defense as the justification for firearms usage (68%) was comparable to that proportion of officers reporting assaults on them by the suspect. This

figure also compares quite well with the percentage of officers claiming self-defense in Fyfe's (1978) and Geller and Karales (1981) research (72% and 67%, respectively). In addition, black officers were proportionately more likely than white officers to claim the self-defense justification (79% to 60%). Last, as with suspect race, we found that the officer's race seem to have little bearing on whether the shooting was adjudicated by the department as within or outside department policy or guidelines.

As we have already stated, in absolute numbers black civilians were more frequently involved in deadly force incidents than whites in our research and in other studies. It has been expressed, therefore, that police officers have "one trigger finger for blacks and another for whites," a suggestion that police officers must be presumed to use race as a criterion in deciding whether to shoot civilians. We have no data available with which to test directly that hypothesis. If it were indeed true, however, it would be reasonable to expect that blacks, as opposed to whites, would be more likely to be killed or injured when involved in deadly force indicents. This explanation does not square with our findings. On the contrary, black and white civilians were equally likely to have been killed or injured by

police gunfire. This finding, in conjunction with others we have reported and those specified in other research efforts in similiar jurisdictions, on balance, does not conform with the contention that police officers systematically act in deadly force incidents out of racial prejudice.

Rather, when taken together, these findings seem to suggest that a police shooting is more likely the consequence of a police officer's perception of the high risk of danger to himself and those he is obliged to protect--regardless of the race of the officer or the opponent. Certainly, some of our most consistent findings were the relationships between the suspects's possession of a weapon, the use or threatened use of a weapon, and whether the suspect assaulted the police or others and whether he or she was killed or injured. Moreover, these findings remained unaltered when the race of the suspect was taken into account.

When viewed in this context, of course, the issue of deadly force is cast in a light considerably different from the course taken by much of the available empirical research. Most certainly we need to know much more than we do about the extent to which violence begets violence, about

community tolerance for violence, and about police and community perceptions of violent situations. Research in these areas is woefully inadequate at this time.

Conclusion

Geller (1982:158) succinctly describes the most common type of incident in which police and civilians shoot at each other as one involving

> an on-duty uniformed, white, male officer and an armed, black, male civilian between the ages of 17 and 30... (which) occurs at night in a public location within a high crime precinct, in connection with a suspected armed robbery or a man with a gun call.

With minor modifications and a few additional specifications, this description essentially comports with the findings fleshed out in this study. We conclude this study with a brief description of the "typical" or modal police shooting drawn from the major findings in our research.

The typical incident in which a police officer discharges a firearm at a civilian in the Midwestern municipality under study is one involving a white, on-duty, uniformed, male patrol officer who is approximately 30 years of

age, with roughly six and one-half years of service with the department. He is quite likely to have less than a college education and to have the shooting qualification of a Marksman; it is almost an even bet that he has prior military experience. With the exception of the slight chance that he has been previously involved in a shooting incident, he probably typifies the vast majority of the officers in the department.

The suspect, a lone, black male of approximately 25 years is likely to be armed, and if so, with a firearm. The chances are good that he has a criminal record; if so, it is likely that the record consists of at least one misdemeanor arrest, a misdemeanor conviction, two or three felony arrests, and one or two felony convictions. If the suspect survives the shooting--and the chances are better than nine in ten that he will, seven in ten of sustaining no injury at all--it is probable that he will continue his involvement in criminal activity at a later date. In addition, while it is a better than even bet that he has served some time in a jail or prison or both, it is unlikely that he is on parole at the time of the shooting.

Immediately prior to or during the incident the suspect is extremely likely to be involved in an (alleged) felonious act, typically an aggravated assault, burglary, or robbery.

Upon the arrival of the officer at the scene, the suspect resists arrests, takes flight, or both. The chances are better than even that he assaults the officer, somewhat less so for third parties if they are involved. If the suspect is armed with a firearm, the chances are better than even that he will point it in the direction of the officer, though it is substantially less likely (about one chance in four) that he can or will actually discharge the weapon. Moreover, the probability of the officer being seriously injured or killed is quite low. Regardless of the shooting outcome, the officer fires between two and three rounds at the suspect. The likelihood of the shooting being considered within departmental policy guidelines is extremely high (approximately 90%). Last, the shooting occurs at night, in or around a business or neighborhood area, out-of-doors, and in a "public" location, usually in the presence of two to three eyewitnesses and one non-shooting police officer.

It appears to be the case that our findings have facilitated the development of a fuller descriptive account of the deadly force incident--at least for the jurisdiction investigated--and further, have enabled us to discern significant factors that distinguish incidents by shooting

outcome. Yet it is also the case that our research dealt only with the characteristics of those situations in which police officers actually found it necessary to resort to the use of deadly force. We have collected no data, nor are there any now available of which we are aware, that would show how often or under what circumstances police officers resolve violent or potentially violent situations without resorting to deadly force. Such "averted shootings" might well be very frequent, and of course, might depend to a considerable degree on the quality and quantity of training regimen for police officers, community and incident characteristics, selection and recruitment practices within individual agencies, and a host of other factors as suggested by Geller (1982).

It may be the case, for example, that the characteristics of "averted shooting" incidents and their participants are incredibly similar to the shooting incidents examined here with the exception of some factor(s) which, as of yet, have gone unobserved. This, in itself, suggests fertile ground for further research because, and until, research comparing these types of police-citizen encounters is undertaken, we will know little more than we presently do concerning the probability of whether and what types of

encounters--and under what circumstances--may devolve to explosive, potentially deadly confrontations.

APPENDICES

APPENDIX A, PART I

INCIDENT CHARACTERISTICS

MICHIGAN STATE UNIVERSITY SCHOOL OF CRIMINAL JUSTICE

DEADLY FORCE VARIABLE LIST

AGENCY _____ CODER INITIALS _____

CASE ID NUMBER IN AGENCY _____ DATE _____

INCIDENT CHARACTERISTICS

1. Date of incident occurrence:
   month _____ _____
   day _____ _____
   year _____ _____

2. Temperature on day which shooting occurred.
   ( ) (1)
   ( ) Not Available (77)
   ( ) DNA (88)
   ( ) UNK (99)

3. Time of day incident occurred.
   ( ) 0801-1200 hours (1)
   ( ) 1201-1800 hours (2)
   ( ) 1801-2400 hours (3)
   ( ) 0001-0800 hours (4)
   ( ) Not Available (77)
   ( ) DNA (88)
   ( ) UNK (99)

4. Weather conditions at time of incident.

( ) clear (1)
( ) fog (2)
( ) rain (3)
( ) snow (4)
( ) other _____ (5)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

5. Location of incident

( ) rural (1)
( ) city (2)
( ) other _____ (3)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

6. Location of incident

( ) neighborhood (1)
( ) business (2)
( ) industrial (3)
( ) other _____ (4)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

7. Location of incident

( ) within department jurisdiction (1)
( ) outside department jurisdiction (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

8. Location of incident

( ) inside dwelling (1)
( ) outside dwelling (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

9. If incident occurred inside, lighting conditions were:
( ) Dark/no light (1)
( ) Poor artificial light (2)
( ) Good artificial light (3)
( ) Flashlight (4)
( ) Other _____ (5)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

10. If incident occurred outside, lighting conditions were:
( ) Dawn (1)
( ) Daylight (2)
( ) Dusk (3)
( ) Night (4)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

11. Location of incident
( ) Private (1)
( ) Public (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

12. Total number of officers on scene prior to or during incident.
( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

13. Number of officers at scene using deadly force.
( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

14. Type of situation/circumstance at the scene precipitating officer use of force.

( ) Traffic incident (1)
( ) Hostage(s) (2)
( ) Domestic Dispute (3)
( ) Robbery (4)
( ) Burglary/B & E (5)
( ) Fleeing Felon (6)
( ) Escaping inmate (7)
( ) Other _____ (8)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

15. Number of civilian witnesses at scene of incident.

( ) Raw number (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

16. Highest ranking officer at scene prior to or during the use of deadly force.

( ) Police Officer/ Patrol (1)
( ) Corporal (2)
( ) Detective (3)
( ) Sergeant (4)
( ) Lieutenant (5)
( ) Captain (6)
( ) Inspector (7)
( ) Commander (8)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

17. Length of time the situation/circumstances at the scene led to the use of deadly force by police (in minutes).

( ) Raw minutes ____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

18. Length of time between police arrival on scene and use of force by victim.

( ) Raw minutes ____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

19. Officer's reason(s) for use of deadly force.

( ) Self defense (1)
( ) Defense of others (2)
( ) Prevention/termination of crime (3)
( ) Prevent escape (4)
( ) Other _____ (5)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

ADJUDICATION OF INCIDENCE

20. Officer was referred to psychological counseling.

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

21. Shooting was ruled justifiable.

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

22. Officer was retrained.

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

23. Officer was disciplined.

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

24.	Officer was transferred.	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
25.	Officer was criminally charged.	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
26.	Officer was dismissed from the Department.	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
27.	Case still pending.	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
28.	If officer was charged with a crime, was he/she:	( ) Acquitted	(1)
		( ) Convicted	(2)
		( ) Warrant denied	(3)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
29.	Who initiated call that led to the incident in which deadly force was used by the officer.	( ) Dispatcher	(1)
		( ) Police Officer	(2)
		( ) Citizen	(3)
		( ) Other _____	(4)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)

30. Prior to or during the incident, had the victim been consuming alcohol?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

31. If known, what was the alcohol content of victim's blood at time or immediately after shooting?

( ) None (1)
( ) 0 - .05 (2)
( ) .05 - .09 (3)
( ) .10 (4)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

32. If known, at the time of incident, was victim in possession of any illegal drugs?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

33. Had victim been under the influence of drugs other than alcohol at or prior to the incident?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

Prior to or during the incident was:

34. Victim fleeing

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

35.	Victim ordered to halt	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
36.	Victim resisting arrest	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
37.	Prior to or during incident, was victim using a weapon?	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
38.	Prior to or during incident, was victim threatening to use a weapon?	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
39.	Prior to or during incident, victim displayed weapon.	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
40.	Prior to or during incident, victim was assaulting officer.	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)

41. Prior to or during incident, victim was assaulting third party.

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

42. Prior to or during incident, victim was appearing to reach for weapon.

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

43. Did victim point firearm at officer?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

44. Did victim point firearm at a third party?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

45. Did victim attempt to fire weapon?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

46. Did victim successfully fire the firearm?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

47.	Did victim shoot at police?	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
48.	Did victim/suspect shoot at third party?	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
49.	Was any police officer actually hit by victim/ suspect?	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
50.	Were any third parties hit by victim/suspect?	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
51.	Was any police officer killed?	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
52.	Was any third party killed?	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
53.	Where was victim hit?	( ) Neck/head	(1)
		( ) Torso	(2)
		( ) Hips/legs/feet	(3)
		( ) More than one of the above	(4)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)

54. Immediately prior to or during incident, was victim involved in criminal activity?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

55. If answer is YES to Question #54 and if felony, indicate type of felony (report only the most serious if more than one involved)

( ) Larceny (1)
( ) Burglary (2)
( ) Auto Theft (3)
( ) Robbery (4)
( ) Assault (5)
( ) Rape (6)
( ) Homicide (7)
( ) Drug involvement (8)
( ) Possession of illegal weapon (9)
( ) arson (10)
( ) Other_____ (11)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

56. In answer is YES to Question #54, was criminal activity a misdemeanor?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

57. Did officer have knowledge of a criminal warrant on victim prior to the shooting?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

58. Did officer attempt other type of resolution short of deadly force prior to shooting?

( ) Yes	(1)
( ) No	(2)
( ) Not Available	(77)
( ) DNA	(88)
( ) UNK	(99)

APPENDIX A, PART 2

SUSPECT CHARACTERISTICS

MICHIGAN STATE UNIVERSITY SCHOOL OF CRIMINAL JUSTICE

DEADLY FORCE VARIABLE LIST

AGENCY _____ CODER INITIALS _____

CASE ID NUMBER IN AGENCY _____ DATE _____ _____

VICTIM (SUSPECT) CHARACTERISTICS

1.	Victim date of birth:	month _____ _____	
		day _____ _____	
		year _____ _____	
2.	Sex of victim	( ) Male	(1)
		( ) Female	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
3.	Age of victim	( ) Raw years _____	(1)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
4.	Race of victim	( ) Black	(1)
		( ) White	(2)
		( ) Hispanic	(3)
		( ) Oriental	(4)
		( ) American Indian	(5)
		( ) Other _____	(6)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)

5. Marital status at time of incident.

( ) Married (1)
( ) Separated (2)
( ) Single (3)
( ) Divorced (4)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

6. As a result of the shooting, victim

( ) was injured only (1)
( ) died (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

7. Was victim in possession of a weapon during the time of the incident?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

8. If answer is YES to Question #7, was the weapon a motor vehicle?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

9. If answer is YES to Question #7, was the victim's weapon a handgun?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

10. If answer is YES to Question #7, was the weapon a long gun (e.g. shotgun, rifle)?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

11. If answer is YES to Question #7, was the weapon a knife, blade or other similar instrument?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

12. If answer is YES to Question #7, was the weapon a blunt or other similar type of instrument potentially useful in bludgeoning or battery?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

13. Number of prior felony convictions--crimes against person.

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

14. Number of felony convictions --crimes against property.

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

15. Number of prior misdemeanor convictions of victim

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

16. Number of prior felony arrests of victim

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

17. Number of prior misdemeanor arrests of victim

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

18. Occupational status of the victim at time of incident

( ) Unemployed (1)
( ) Blue collar (2)
( ) White collar (3)
( ) Other _____ (4)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

19. Was victim on parole at time of incident?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

20. Was victim on probation at time of incident?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

21. Was victim ever at a community corrections center?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

22. Was victim sentenced to a community corrections center at time of shooting?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

23. Had victim ever served a prison sentence?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

24. If answer is YES to Question #23, number of sentences served.

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

25. Had victim ever served jail term?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

26. If answer is YES to Question #25, number of jail terms served.

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

27. Was victim ever adjudicated as juvenile delinquent?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

28. Had victim ever been incarcerated in a mental or other similar facility?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

29. If answer is YES to Question #28, was commitment voluntary or involuntary?

( ) Voluntary (1)
( ) Involuntary (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

30. Victim's residence: Was victim a resident of the city or township in which incident occurred?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

31. If answer is NO to Question #30, was victim a resident of the county in which incident occurred?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

32. If answer is NO to Question #31, was victim a resident of the state in which incident occurred?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

33. If answer is NO to Question #32, specify state and country (if not U.S.A.) of victim's residence.

State:_____ (1)
Country:_____ (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

34. Victim's height

( ) Raw inches_____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

35. Victim's weight

( ) Raw pounds_____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

APPENDIX A, PART 3

OFFICER CHARACTERISTICS

MICHIGAN STATE UNIVERSITY SCHOOL OF CRIMINAL JUSTICE

DEADLY FORCE VARIABLE LIST

AGENCY _____ CODER INITIALS _____

CASE ID NUMBER IN AGENCY _____ DATE _____

POLICE OFFICER CHARACTERISTICS

Date of Incident:			Officer Date of Birth:		
Month	____	____	Month	____	____
Day	____	____	Day	____	____
Year	____	____	Year	____	____

1. Rank at time of incident

( ) Police Officer/ Patrol (1)
( ) Corporal (2)
( ) Detective (3)
( ) Sergeant (4)
( ) Lieutenant (5)
( ) Captain (6)
( ) Inspector (7)
( ) Commander (8)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

2. Assignment at time of incident

( ) Patrol (1)
( ) Narcotics (2)
( ) Tactical Service Section (3)
( ) Organized Crime (4)
( ) Traffic Enforcement (5)
( ) Robbery Unit (6)
( ) Other _____ (7)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

3. Is officer currently employed with Department?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

4. If answer is NO to Question #3, list type of discharge.

( ) Non-duty disability (retired) (1)
( ) Duty disability (retired) (2)
( ) Retired (3)
( ) Laid Off (4)
( ) Dismissed (5)
( ) Health (6)
( ) Resignation (7)
( ) Other _____ (8)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

5. Officer's current assignment	( ) Patrol	(1)
	( ) Narcotics	(2)
	( ) Tactical Service Section	(3)
	( ) Organized Crime	(4)
	( ) Traffic Enforcement	(5)
	( ) Robbery Unit	(6)
	( ) Other _____	(7)
	( ) Not Available	(77)
	( ) DNA	(88)
	( ) UNK	(99)
6. Current rank of officer	( ) Police Officer/ Patrol	(1)
	( ) Corporal	(2)
	( ) Detective	(3)
	( ) Sergeant	(4)
	( ) Lieutenant	(5)
	( ) Captain	(6)
	( ) Inspector	(7)
	( ) Commander	(8)
	( ) Not Available	(77)
	( ) DNA	(88)
	( ) UNK	(99)
7. Officer's length of service with the Department at time of incident.	( ) Raw number of months _____	(1)
	( ) Not Available	(77)
	( ) DNA	(88)
	( ) UNK	(99)
8. Race of officer.	( ) Black	(1)
	( ) White	(2)
	( ) Hispanic	(3)
	( ) Oriental	(4)
	( ) American Indian	(5)
	( ) Other _____	(6)
	( ) Not Available	(77)
	( ) DNA	(88)
	( ) UNK	(99)

9.	Sex of officer	( ) Male	(1)
		( ) Female	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
10.	Age of officer at time of shooting	( ) Raw years _____	(1)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
11.	Marital status at time of appointment to Department	( ) Married	(1)
		( ) Separated	(2)
		( ) Single	(3)
		( ) Divorced	(4)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
12.	Marital status at time of incident	( ) Married	(1)
		( ) Separated	(2)
		( ) Single	(3)
		( ) Divorced	(4)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
13.	Current marital status	( ) Married	(1)
		( ) Separated	(2)
		( ) Single	(3)
		( ) Divorced	(4)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
14.	Officer's level of education at time of appointment to Department	( ) Number of years completed _____	(1)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)

15. Officer's level of education at time of incident

( ) Number of years completed _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

16. Did officer have prior military service?

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

17. If answer is YES to Question #16, length of service

( ) Raw months _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

18. Military rank

(see code: 01 - 90)

( ) _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

19. If answer is YES to Question #16, indicate branch of service.

( ) Army (1)
( ) Navy (2)
( ) Air Force (3)
( ) Marines (4)
( ) Coast Guard (5)
( ) Air Guard (6)
( ) Merchant Marines (7)
( ) National Guard (8)
( ) Other (9)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

20. If answer is YES to Question #16, indicate type of assignment in military

( ) Military Police (1)
( ) Demolition (2)
( ) Intelligence (3)
( ) Infantry (4)
( ) Artillery (5)
( ) Other _____ (6)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

21. At time of shooting, was officer

( ) on duty (1)
( ) off duty (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

22. At time of shooting, officer was in

( ) Uniform (1)
( ) Plain clothes (2)
( ) Other _____ (3)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

23. Type of weapon used by officer during shooting was a handgun.

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

24. Type of weapon used by officer during incident was a handgun (department issue)

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

25.	Type of weapon used by officer during incident was a handgun (personal)	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
26.	Type of weapon used by officer during incident was a long gun (e.g., shotgun, rifle).	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
27.	Did officer use weapon other than firearm during incident (sap, baton, etc.)?	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
28.	If answer is YES to Question #27, was weapon a sap?	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
29.	If answer is YES to Question #27, was weapon a baton?	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
30.	If answer is YES to Question #27, was weapon a flashlight or other instrument?	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)

31. If type of firearm was used by the officer, indicate caliber.

( ) 38 (1)
( ) 9mm (2)
( ) 357 (3)
( ) 44 (4)
( ) 45 (5)
( ) 22 (6)
( ) 25 (7)
( ) 10 gauge (8)
( ) 12 gauge (9)
( ) 16 gauge (10)
( ) 30.06 (11)
( ) Other _____ (12)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

If firearm used by officer during incident, give:

32. Number of shots fired at victim

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

33. Number of shots fired at victim's vehicle

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

34. Number of shots hitting intended targets

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

35. Number of missed shots

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

36. Number of warning shots

( ) Raw number (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

37. Number of fatal shots

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

Shooting history of officer with Department; number of prior incidents of officer by type:

38. Fatal

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

39. Missed shots

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

40. Warning shots

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

41. Number of hours of firearms training/practice received by officer within the year preceding the incident.

( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

Specify type of training received by officer:

42. Combat

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

43. Bullseye

( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

44.	Classroom	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
45.	Shoot/Don't shoot	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
46.	Officer's firearms qualification	( ) Expert	(1)
		( ) Sharpshooter	(2)
		( ) Marksman	(3)
		( ) Qualified	(4)
		( ) Failed	(5)
		( ) Other _____	(6)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
47.	Was officer drinking alcohol immediately prior to incident?	( ) Yes	(1)
		( ) No	(2)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
48.	Officer's height	( ) Raw inches _____	(1)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
49.	Officer's weight	( ) Raw pounds _____	(1)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)
50.	Number of citizen complaints against officer prior to the incident (for none, enter 0 in raw number column)	( ) Raw number _____	(1)
		( ) Not Available	(77)
		( ) DNA	(88)
		( ) UNK	(99)

51. Number of citizen complaints (if any) by type
( ) Involved use of force (1)
( ) Other _____ (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

52. Number of official, formal departmental reprimands or disciplinary actions against the officer prior to incident
( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

53. Number of official citizen commendations for the officer prior to incident involving his/her use of deadly force.
( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

54. Number of official departmental commendations and/or other awards received by the officer prior to incident.
( ) Raw number _____ (1)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

55. Officer wounded in incident
( ) Yes (1)
( ) No (2)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

56. If answer is YES to Question #55, was officer's wound:
( ) fatal (1)
( ) critical (2)
( ) superficial (3)
( ) other _____ (4)
( ) Not Available (77)
( ) DNA (88)
( ) UNK (99)

APPENDIX B

SHOTS FIRED REPORT

_____ POLICE DEPARTMENT

==========

(In Case of Multiple Subjects, Use Top Portion of Report For One Subject Only, and Use Narrative For Others)

==========

Officer's Name _____ Badge No. _____
Last First M.I.

Years in Dept. _____ Command _____ Rank _____

Status (____on-duty _____ off-duty) Uniform (___yes ___no)

Officer's Qualification (_____Expert _____ Sharpshooter

_____Marksman _____ Qualified _____ Failed)

Firing Type (__ __ Accidental _____Intentional _____Att.

Suicide _____ Suicide)

Date Fired _____ Military Time (Nearest Hour) _____hundred

Location (_____indoors _____alley _____wooded area

_____automobile _____street _____yard _____field

_____other)

Lighting Conditions (_____daylight _____dusk _____dawn

_____flashlight _____dark-no light _____good art. light

_____poor art. light _____ other)

Offense (Code) _____ Number of Arrests _____

Supervisors at Scene (_____yes _____no) Number Officers at Scene _____

Number of Subjects _____ Who Fired First (____Subject _____Officer)

Complete Description of Officers Weapon (Code) _____

Location of Officer's Weapon on Initial Contact (____in hand _____in holster _____other)

Officer's Position (_____standing _____kneeling _____prone _____running _____moving vehicle _____barricaded _____other)

Officer's Protection (_____furniture _____tree _____wall _____car _____none _____other)

Number of Officer's Shots (_____single action _____double action)

Directions Fired (____E ____W ____N ____S ____in ground ____in air)

Distance (in feet) (____first shot ____last shot)

Complete Description of Subject's Weapon (Code) _____

Location of Subject's Weapon on Initial Contact (_____in hand or in view _____ no weapon seen _____none _____other)

Subject's Position (_____standing _____kneeling _____prone _____running _____moving vehicle _____barricaded _____ other)

Subject's Protection (_____furniture _____tree _____wall
_____car _____none _____other)

Number of Subject's Shots _____

Subject's Wound (_____fatal _____critical _____superficial
_____self-inflicted _____unknown _____none)

Officer's Wound (_____fatal _____critical _____superficial
_____self-inflicted _____unknown _____none)

Self Defense (_____yes _____no _____pending)

Recomendation (_____No further action _____re-training
_____disciplinary action _____pending)

==========

Supervisor's Investigation -- Explain Incident in Detail and Attach a Copy of the Incident Report

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REFERENCES

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