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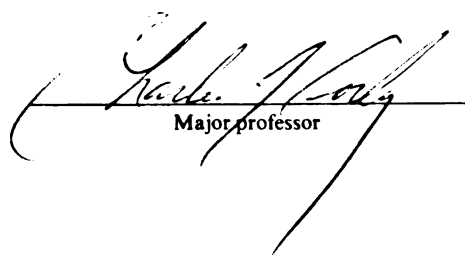
THEORETICAL AND CONTEXTUAL ISSUES IN POLICE PURSUIT:  
Describing Various Levels of Policy Restrictiveness

presented by

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has been accepted towards fulfillment  
of the requirements for

Ph.D. degree in Criminal Justice


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**THEORETICAL AND CONTEXTUAL ISSUES IN POLICE PURSUIT:  
Describing Various Levels of Policy Restrictiveness**

**By**

**Victor W. Bumphus**

**AN ABSTRACT OF A DISSERTATION**

**Submitted to  
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## ABSTRACT

### THEORETICAL AND CONTEXTUAL ISSUES IN POLICE PURSUIT: Describing Various Levels of Policy Restrictiveness

By

Victor W. Bumphus

This dissertation examines vehicular police pursuit as an issue of lethal force used by law enforcement officers in the United States. The research utilizes secondary data analysis to observe perceptual and formal characteristics of police pursuit policy. A random probability sample of 214 municipal police agencies was utilized. Additionally, a content analysis of 183 randomly selected police pursuit policies was conducted. The major purpose of the analysis was to examine police pursuit through a probability sampling approach and within a theoretical context. The focal concern of the major analysis was an examination of perceptual and formal pursuit policy restrictiveness. A modified restrictiveness scale was developed which revealed that most of the sampled policies were somewhat restrictive. The perceptual analysis also indicated a normative level of restrictiveness. Years of pursuit policy existence emerged as the most important factor related to formal and perceived restrictiveness in that older policies were viewed and categorized as more discretionary. The conclusion places police pursuit policy changes within a theoretical context of dissipative structures.

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## DEDICATION

To my family who has always supported and encouraged me.

## ACKNOWLEDGMENTS

I would like to thank all my friends and colleagues for their support, help, and encouragement. Though there are too many people to thank individually, I must acknowledge a number of key persons.

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## CHAPTER ONE:

### Introduction

Recent scholarship has focused needed attention on the area of police vehicular pursuit, and as a result, a substantial body of scientific research has emerged. The use of pursuit by law enforcement officials is as old as formalized policing and has involved almost every type of transport known to man, from covered wagons to sophisticated motorized vehicles. Anecdotal, media-based accounts of outlaws being pursued by lawmen on horses envision the pursuit as more important than the capture. The incorporation of automobiles into policing portrays similar perceptions depicted in popular television shows and motion pictures such as the *Dukes of Hazard*, *Smokey and the Bandit*, and the *Fugitive*. Granted scientific verification of police pursuit during the first half of the twentieth century is not available, various anecdotal accounts provide some limited information as to these occurrences.

Within the last decade or so, the emergent body of literature in this area has questioned the appropriateness of police vehicular pursuit under various contexts. One important concentration area has considered safety issues as they relate to police pursuit. In this sense, pursuit-related deaths and injuries have been the focal concern of various scholars. A second area of contemporary research considers legalistic factors that examine police liability as well as civil rights

violations. Third, more specific-oriented research has focused on pursuit policies and procedures in an effort to provide comprehensive information on the nature of vehicular pursuit. These policy-oriented inquiries have observed operational, environmental, termination, and initiation factors as well as discretionary and restrictive features of formal and informal policy. Fourth, research has concentrated on the prevalence and incidence of police vehicular pursuit. The majority of the research observing prevalence and incidence has rarely provided systematic, reliable data. Lastly, there has been a recent tendency for police scholars to conceptualize police vehicular pursuit as use of deadly force by law enforcement (see Barker 1984; Alpert & Anderson 1986; Alpert & Fridell 1992; Whetsel & Bennett 1992).

Traditionally, scholars have conceptualized police use of force in the context of deadly and non deadly forms of force. The non deadly category covers a wide range of tactics and strategies (such as the use of handcuffs, batons, chemical agents, and unarmed self-defense) aimed at the apprehension of those suspected of law violations. Deadly forms of force used by the police include tactics and strategies that carry substantial potential to cause death or serious bodily injury. For the most part, firearms, rifles, and shotguns have been placed in this more serious category. While other strategies, such as the use of knives and vehicular pursuit to effect apprehension, have substantial potential to inflict death or serious bodily injury, rarely have these instruments been

conceptualized as deadly force. The rarity of police use of blunt instruments such as knives and batonettes to aid in apprehension explains the neglect to discuss this method of deadly force. However, until quite recently, police use of vehicular pursuit has been considered an anomaly to traditional characterizations of police use of force.

In the 1960's and early 1970's, American police scholars began to focus attention on the use of deadly force (primarily the use of firearms) to apprehend suspected offenders. The central question revolved around the appropriateness of utilizing deadly force in police decision-making. This new area of inquiry challenged conventional perceptions of what was to be considered reasonable or excessive force in various situations. The more recent scholarship devoted to the use of police vehicular pursuit is conceptually, practically, and philosophically analogous to the use of force literature in general.

Relatively speaking, both police use of firearms and vehicular pursuits are rare events, but carry tremendous potential for lethal outcomes, especially in situations where negligence, incompetence, or mere ignorance of procedures are evident. There are various conceptual rationales for categorizing police vehicular pursuit as use of deadly force.

Deadly force, as compared to non-deadly force, can logically be differentiated by the capacity of such force to inflict death or serious bodily injury. In the broadest sense, almost any exercise of force utilized, in the optimal context, can seriously injure or kill. Non deadly exercises

of force used in policing, such as restraints, chemical agents, batons, flashlights, physical constraints, or handcuffs, rarely lead to death. The use of firearms directed at offenders presents a different problem. By their very nature, firearms are designed to inflict serious bodily injury that can often result in death. Whether firearms are used by police appropriately or negligently, such use carries great potential for human destruction. The inappropriate or negligent use of police vehicular pursuit carries similar potential to inflict great harm or death. In fact, a speeding, motorized vehicle may potentially cause more irreparable damage to a greater number of individuals, including law enforcement officers themselves.

Because various forms of force are potentially more lethal and others less so, this research will utilize the terms lethal and less-than-lethal recognizing the continuum that exists in the utilization of police force. Additionally, this research places police vehicular pursuit in the lethal force category for the rationale aforementioned. This writing considers an analysis of police vehicular pursuit in the United States as one form of lethal force used by law enforcement officers. Specifically, the research examines population density and diversity issues relative to police pursuit policy. Moreover, organizational factors such as size, centrality, and environmental concerns are considered in relation to the conceptualization, implementation, and operationalization of police pursuit policy.

It is important to differentiate between police force and authority with regard to this research. The authority and legitimacy of the police as a social institution is conceptually separate from the authority of the police to use force in the legitimate performance of their duties, though there may be some functional overlapping between the two. The former derives from the consent of the people having its origins in the social contract theory. In its more contemporary context, it can be said to depend primarily upon public perceptions of the consistency or lack thereof of the role of the police safeguarding societal interests, expectations, and needs. These perceptions vary from time to time. There may be times when the authority and legitimacy of the police are seriously called into question because of the public perception that the police role has become more destructive, rather than protective. In essence, the barometer for measuring police authority is tied to public perception and confidence.

However, the authority of the police to use force in maintaining law and order as a strategy in crime prevention is of more restricted dimension. In the strict sense, it is constrained by administrative, constitutional, and legal limitations. Police use of force as legitimate authority is not exclusively dependent upon conformity or lack thereof to administratively laid down criteria and/or legally declared standards. In this sense, there cannot logically be authority to use unauthorized force.

This research recognizes the authority of the police to use force but

observes the various contexts in which force is applied and observes the reasonableness of police use of vehicular pursuit under these various contexts. In this sense the potential for vehicular use of force (in pursuing) to cause serious bodily or death, logically relates to policy formulated measures to control the exercise of vehicular pursuit by police officers in the performance of their official duties.

### Research Purpose and Objectives

The major objective of the proposed research is to provide a national, descriptive, probability-based analysis of substantive and perceptual factors related to police pursuit policy. Though there has been a substantial body of scholarly attention given to police pursuit in the last decade and a half, few studies have utilized probability sampling frames. The norm has been the use of case studies or jurisdictional specific samples, such as analysis of one state or region. Additionally, many approaches have simply utilized judgmental or purposive sampling frames. These various methodological approaches limit the level at which generalizations can be made.

To the extent that probability sampling allows for greater generalization and precision, the research has five additional objectives. One primary objective will be to provide an understanding of the various contexts in which police pursuits take place. These contexts include organizational (i.e., level of centralization, size), administrative (i.e.,

presence of policies and procedures), and operational variables (i.e., specific environmental and procedural factors). A second objective of the proposed research is to understand policy restrictiveness in relation to various demographic, organizational, and contextual variables. In essence, the research examines the nature to which these variables influence formal and informal dimensions of perceived restrictiveness.

One major concern of past research considers the extent to which police organizations have placed limitations upon discretionary decisions to pursue. For the most part, research in this area has concentrated on policies (broad postulates that inform procedures) and procedures (specific statements that relate to process). However, there is a growing body of research that concentrates on the restrictions (or prohibitions) contained in police pursuit policy. The third research objective will consider the validity of the restrictiveness scale developed by Kennedy, Homant, and Kennedy (1992). This procedure will compare perceived restrictiveness, policy content, and specific restrictions addressed in policy. Related to scale validation, the fourth objective will be to consider the reliability of organizational research by comparing informal perceptual analysis with formal policy and other organizational variables (i.e., agency size, years of policy existence, and sworn officer size).

To date, the scholarly attention given to police vehicular pursuit has been void of a theoretical context. The majority of research has been almost exclusively policy-driven and applied. The last objective of the



research is to place this substantive area within a theoretical or conceptual context. Toward this purpose, general organizational and specific organizational perspectives will be utilized that deal with formalization, centralization, complex systems theory, and dissipative structures. Additionally, the research will be placed in a larger context of lethal force, permitting theoretical and conceptual comparisons between lethal force traditionally (utilization of firearms, shotguns, and rifles), and contemporarily (which would include the use of vehicular police pursuit as a lethal force issue).

### Significance of the Problem

As noted, the research in the area of police vehicular pursuit has grown substantially in recent years; however, there are various methodological as well conceptual problems with much of this new information. The two main shortcomings have been the failure to utilize appropriate sampling frames and the largely atheoretical context in which various studies have been conducted.

This proposed research uses a probability sampling frame capable of providing a basis for generalization. The sample, appropriately, represents a random selection of diverse municipal and consolidated (municipal and county) police organizations. The primary use of judgmental or other forms of non probability sampling in this area has limited the validity of the information obtained. Additionally, the use of

more precise sampling techniques allows for more appropriate statistical analyses, while simultaneously increasing the reliability of the research.

Most research on police vehicular pursuit has been conducted using an organizational survey procedure, a content analysis approach, or analysis of existing data. Some researchers have utilized multiple methodologies to strengthen the research design. Though much of this research has been carried out at the organizational level, very seldom have scholars incorporated appropriate theoretical and/or conceptual frameworks. This research utilizes organizational theory in general and dissipative structures theory in specific to place the research in a theoretical context capable of illuminating past practices and future developments.

Compared to research on lethal force as police use of firearms, rifles, or shotguns, similar research on police pursuit as force is less robust. As information began to emerge that police vehicular pursuit often ended in serious injury or death to those involved—officers as well as citizens, police practitioners and scholars began to rethink control and accountability issues in this critical area of decision-making. A subsequent increase in formal organizational policy paralleled the overall awareness of the problem. Police scholars began to examine the nature and context of police vehicular pursuit, and as a result, an ambitious research agenda began.

Both national and regional studies have begun to focus on this neglected area of research. These various studies consider the content or existence of formal policy, pursuit-related injuries and deaths, liability issues, demographic issues (i.e., race-specific and location factors), and operational, environmental, organizational, and administrative factors to name a few. More recently, issues surrounding safety have refocused police vehicular pursuit as a lethal force issue. This new research allows for comparisons between traditional lethal force research and police pursuit.

As with lethal force in general, police pursuit has been subjected to much more legal scrutiny than in the past. Liability as well as civil rights issues have made decision-making and organizational response to police pursuit more complex. This complexity is analogous to other critical decision-making in policing, namely traditional lethal force policies. In this sense, pursuit policy making is part and parcel of the evolution of policy making in formalized policing.

There is a level complexity in decision-making and compliance in most organizations. The complex nature of policing and the police mandate makes decision-making and accountability issues highly problematic. Also, the extent to which police agencies desire formalization as compared to informalization complicate organizational initiatives, compliance, and culture.

Past challenges to police practices, in the 1960's, questioned the use of lethal force (e.g., firearms, rifles, and shotguns). These various challenges involved civil rights, safety issues, and disparate treatment. In essence, perceptual and real changes in society prompted institutional reform in many areas, including law enforcement. The more contemporary challenges with respect to police pursuit are currently challenging police scholars and practitioners in much the same way. Therefore, it would seem natural that past challenges and contemporary ones be conceptualized as to their commonalities, especially since lethal force (traditionally) and police vehicular pursuit (as lethal force) encompass the same phenomena.

In the following chapter, general organizational theory that observes the nature of complex organizations and decision-making is discussed. Etzioni's analysis of complex organizations will be utilized. The research will also be placed within the context of social change analysis. Most social change analysis has been applied to non-public organizations; this research applies social change theory to the evolution, context, and nature of police lethal force policy in the United States. It is therefore, postulated that the past attention given to lethal force provides an appropriate framework from which to observe recent attention to police pursuit.

Chapter three examines empirical studies at the national, regional, and state levels on pursuit policy. Discussion of the substantive nature

and content of these studies isolates relevant shortcomings of the past research. Information specific to methods and procedures, research questions, and data analysis are addressed in chapter four.

## CHAPTER TWO:

### Theoretical Review

The nature by which organizations manage themselves has held scholarly interest for social scientists in fields as diverse as economics, political science, psychology, and sociology. A substantial portion of the scholarship on organizational theory has been applied to nonpublic organizations (Scott 1995; Leifer 1989; Gemmill & Smith 1985). Themes of traditional organizational research have dealt mostly with productivity, efficiency, and scientific management (Scott 1995).

#### General Organizational Theory

Ott (1989:3) suggests that organizational perspectives have been discussed primarily from three different standpoints:

the systems perspective focuses on things such as an organization's information systems and its decision processes; the structural perspective emphasizes things like structures and the procedures and rules that maintain order; and, the power perspective looks mostly at managing conflict, building, maintaining, and using coalitions, and the nature of real and perceived power relationships.

The systems perspective can further be sub-divided. Natural system perspectives observe to what extent organizational members share common interests and support the survival of the system as a whole. This perspective deals with normative levels of commitment to organizational goals and objectives (Scott 1995; Ott 1989). From a

natural systems perspective, the criminal justice system represents the vested interests of society in social control. Therefore, the justice system can be viewed as self-validating; its primary support is derived from societal interest in civility.

An open systems perspective analyzes the interdependent nature of the system as it engages with other sub-systems for more effective operation. Various scholars in criminal justice and criminology have viewed the legal system as a set of interdependent parts, where actions or strategies in one area directly or indirectly influence other sub-systems (Scott 1995; Ott 1989). Walker's (2001) discussion of criminal justice thermodynamics embraces the open systems perspective by illustrating the long-term, "chain-reactive" consequences of new crime and justice initiatives.

Rational systems perspectives view organizations as highly formalized with specific, tangible goals (Scott 1995). The criminal justice has often been depicted as a highly formalized system with specific goals that revolve around enforcement of the criminal law. The first systematic study of the structure of the criminal justice system by the President's Crime Commission in 1967 illustrated a system that was highly formalized and procedural (Walker 2001). It is apparent that all the aforementioned perspectives have implications for both private and public organizations.

Structural, organizational theorists emphasize maintenance, order, and compliance to rules and procedures (Scott 1995). *In A Comparative Analysis of Complex Organizations*, Etzioni (1961) observes organizations as to their structures. From this perspective, organizations have three primary compliance structures which entail various levels of organizational commitment. Normative compliance indicates a moral, natural commitment to the organization. Churches, professional organizations, political organizations, and criminal justice agencies would be included in this category. Calculative or remunerative organizations utilize competitive strategies to achieve goals and objectives. For example, a factory may offer its employees substantially higher wages to secure productivity and survival of the system.

Finally, organizations utilize coercive means to realize goals and objectives. Coercive systems hold almost complete control of the decision-making abilities of organizational members; hence, there is less need for normative or calculative persuasions (Etzioni 1961).

Normative, calculative, and coercive perspectives are all present in modern day policing. There is an implicit normative nature to all public organizations. Accordingly, there is general societal consensus that policing promotes social control. The coercive nature of policing can be illustrated by its quasi-military structure and police use of force to ensure compliance with the law. Therefore, the consequences of noncompliance may involve the use of firearms or high speed pursuits.



Coercive and normative compliance structures provide the basic foundation of modern policing to the extent that they promote social control and compliance with legal constraints.

Though many policing wages are sub-standard, law enforcement salaries can offer competitive employment with other economic as well as social benefits. Many police organizations offer starting salaries that exceed many private sector jobs that most officers would be qualified to perform. Relatively higher wages, social benefits, such as better retirement and insurance programs, and the level of respect given to law enforcement officials make calculative compliance relative to policing. However, calculative compliance is most likely a tertiary compliance structure, balancing coercive and normative considerations.

It is apparent that Etzioni's normative compliance and natural systems perspectives are similar ideologically. Both would view moral commitment, normative compliance, and societal consensus as essential to policing. Therefore, police organizations (in a democracy) exist implicitly through the consent of the governed (the citizens). Since normative compliance and natural perspectives are central to modern policing, it important to discuss normative compliance across rational and open systems, and rational perspectives across coercive and calculative compliance structures.

Normative compliance as it relates to rational police systems indicates once again that there is some agreed upon measure of police

accountability within general society. Therefore, whether tangible or not, society is committed to reducing crime and providing order. The normative compliance as it relates to the open systems perspective suggests that the same commitment to societal order is consistent across the major system (the criminal justice system) and the different sub-systems (police, courts, and corrections). There is great continuity between Etzioni's concept of normative commitment and natural, rational, and open systems perspectives.

Natural systems perspectives are dependent on shared values, interests, and beliefs. As normative compliance illuminates rational and open systems perspectives, the natural systems perspective is related to coercive and calculative compliance. Police use of coercive compliance is supported by the majority of the public. It is believed to be in the common interest of society to lockup dangerous offenders, arrest drunk drivers, and ultimately, to eradicate dangerous violent predators by imposing death sentences. Accordingly, American society proclaims public service is the highest sense of duty. Hence public servants, at least ideologically, should be paid more for difficult public mandates. This may explain why police officers are paid more than individuals working in similar private sector jobs with comparable qualifications (i.e., security and loss assets protection duties).

Formal and informal structures are also applicable when considering the complexity of modern organizations. One method by

which organizations coordinate tasks and maintain compliance is through the creation of policies and procedures. Organizational uncertainty, in terms of specific tasks, elevate the need for formalization. But, the very nature of uncertainty suggests that formalization will not anticipate all possible situations and conditions (Hodge, Anthony, & Gales 1996). Critical decision-making in policing involves non-routine, unstructured events. Non-routine and unstructured tasks are extremely difficult to formalize (Robbins 1990).

Centralization relates to organizational hierarchy or at which level organizational decisions are made. Accordingly, organizations desire various levels of centralization. Agencies with centralized organizational schemes vest decision-making within the upper echelons. Bureaucratic organizations and highly formalized structures desire a locus of control that is essentially centralized. "Centralized decision-making is typically necessary when a broader organizational perspective is present (Hodge et al. 1996: 43)." Within the broad mandate of democratic policing, centralization is often seen as one way of adherence to basic principles and organizational goals and objectives. The idea of police professionalism as propounded by O. W. Wilson envisions the unification and codification of law enforcement functions from a top-down perspective (Wallace, Roberson, & Steckler 1996).

Other organizations value input from the lower-level and embrace a participatory posture. In these organizations, decision-making may be

quicker and can reduce the burden placed on the top level. This, in turn, allows the organization to be more responsible to various challenges both internal and external to the organization (Hodge et al. 1996). Community policing, which embraces problem-solving at the street-level, relies upon the individual actions of police officers. These officers make discretionary decisions in a very decentralized fashion (Mastrofski and Uchida 1993; Wallace et. al. 1996).

Often, large organizations manage complexity through greater levels of formalization and centralization (Hodge et al. 1996). The complexity of the law enforcement mandate in modern society would naturally promote some basic level of centralization. However, police organizations are not normatively large and may not particularly demand a centralized locus of control.

Both systemic and structural approaches to organizational theory are relevant to understanding modern organizations. Natural, open, and rational perspectives all help to illuminate an understanding of how modern organizations behave. Likewise, complex structures, formalization, and centralization are important philosophical bases for studying organizational behavior. These various systemic and structural perspectives, in turn, influence the nature of specific, non-routine, critical decision-making. The following section considers the specific factors and contexts related to making critical or otherwise *risky* decisions.

## Decision-making in Complex Organizations

Traditionally, behavioral decision theory has used the terms “risky” and “uncertain” interchangeably (Kuhn & Budescu 1996; Highhouse & Yuce 1996). Definitions of risk vary from one arena to the next. These various definitions emphasize the threat of personal harm to the loss of opportunities. However, the most common theme in conceptualizations of risk involve the possibility of loss with some built-in strategy to avoid it (Highhouse & Yuce 1996). It is obvious that an individual police officer’s decision to arrest includes both risks to the public and individual safety, as well as the opportunity to apprehend a suspected offender. An important element to understanding risk is the decision-makers point of reference (i.e., loss or gain). Often, this point of reference is framed in the context of existing alternatives (Highhouse & Yuce 1996).

Many risk decisions are based upon vague probabilities; therefore, gain or loss perspectives are mitigated by the uncertainty of action in various situations (Kuhn 1997; Kuhn & Budescu 1996). The effects of vagueness and uncertainty has received a great deal of attention in the organizational literature. It has been established by extant research that decision-making under uncertainty or vagueness, where the probability values are unknown, is different from making decisions where possible risks are known. In general, the evidence suggests that individuals are averse to taking risks where ambiguous probabilities or outcomes exist. Uncertainty often leads to cautiousness (Kuhn 1997). In contrast, other

organizational behavior scholars argue that vagueness effects operate through preferences rather than beliefs about probable outcomes.

Whether vagueness is handled through preferences or cautiousness, the propensity toward aversion is well established in the available literature (Highhouse & Yuce 1996; Kuhn 1997).

Social and cognitive factors also impact behavioral norms and organizational decision-making. Levine et al. (2000) conclude that those sensitive to the presence and absence of positive outcomes engage in more risky behavior whereas those sensitive to the presence or absence of negative outcomes practice conservatism in judgement. Various organizational tasks are dynamic as opposed to routinized. An important aspect of non-routine decision-making is that it gives immediate feedback as to the consequences of alternate courses of action (Gibson, Fichman, and Plaut 1997). Generally, researchers have studied decision-making that affords individuals an unlimited amount of time. Decisions in the real world are often made under various time-related constraints. Ordonez and Benson (1997: 122) have observed that:

Air traffic controllers must make quick decisions when directing air traffic to avoid an accident. Police officers must quickly decide whether situations warrant the use of force. A driver, upon seeing a yellow light, must decide whether to speed up through the intersection or hit the brakes to stop before the red light appears.

Time constraints, vagueness, and uncertainty impact organizational decision-making involving both routine and non-routine tasks (Ordonez and Benson 1997).

In completion of complex tasks, individuals utilize implicit theory and socially constructed reality. When individual implicit theory is matched with socially constructed reality, the predisposition to choose a certain course of action will be strengthened. Conversely, when there is a contradiction, individuals must cope with the possibility of substandard performance and the negative reactions of others. Implicit theory can involve both formal and informal processes. For example, formalized or informalized policies and procedures can enable an individual to reconcile appropriate action after perceiving a certain event. (Tabernero and Wood 1999). Naturally, these conceptualizations depend upon substantive formal and informal organizational knowledge as well as how reality is ultimately constructed.

Law enforcement officers make both routine and non-routine decisions on a daily basis. However, the complex, non-routine decisions made under pressure must be guided by breadth of knowledge as opposed to breadth of experience. This breadth of knowledge can be obtained through organizational training and the establishment of unambiguous policies and procedures. In essence, organizational members need to know goals and guiding philosophies (policies),

behavioral standards (procedures), and improper, unwarranted responses (restrictions).

Organizational decisions are made under various contexts which are subject to change. The evolution of organizations parallel the social changes in the larger society. As discussed, organizational behavior can be viewed systemically, structurally, and as a process of non-routine and routine decision-making; organizations can also be viewed through an analysis of social change. The following section will discuss organizations as dynamic, ever-changing entities. Further, social change in the organization of modern policing will be discussed specific to traditional lethal force policy and external review of the police.

### Change and Dissipative Structure Theory

According to Klofas et al., (1989: 32), “change is a transformation, modification, alteration, or passing from one place, state, form or phrase to another.” Rather than static, change is dynamic, continuous and often complex. As a dynamic phenomena, change is variable and happens in relation to current and past social, economic, or organizational conditions (Hall 1982; Duncan 1978). Duncan (1978) further uses the term organizational change in reference to any significant alteration of behavioral patterns or functioning of a large segment of individuals who constitute an organization. Two components of the change process deserve special consideration. Planned and



unplanned change and resistance to change are of primary import to the present analysis.

The notion of planned or deliberate change refers to organizational strategies designed to change individual, group, or organizational procedures. Naturally, planned or deliberate change has the propensity to be less traumatic to the organization. However, this does not imply that social and environmental factors do not play a significant role in planned change (Klofas et al. 1989). Forces that induce change stem from both internal and external sources. Unplanned change or change that happens as a consequence of outside forces is probably more disturbing to the organization (Hodge et al 1996; Klofas et al. 1989). Hodge et al. (1996) suggests that new, progressive or diverse individuals entering the organization can prompt unplanned change by promoting new administrative or managerial principles. Therefore, the prevailing values of those at the upper echelons positively or negatively influence the implementation of organizational change.

Change can be developmental or transitional. Developmental change, in this view, relies upon strategic planning and recognition of better methods of achieving organizational goals. Potentially, developmental change can be less threatening than either planned or unplanned change. Because transitional change consists of implementation of new organizational schemes by rearranging or

disassembling older structures, it can also be traumatic (Hodge et al. 1996; Robbins 1990).

There are two common methods of producing change. Unilateral continuum of the organization suggests a top-down, highly formalized strategy. The second method, a bottom to top strategy, utilizes group decision-making and is potentially less disruptive than the former method. Whether change is planned, unplanned, developmental, or transitional, the very notion of change is often met with substantial opposition (Klofas et. al 1989; Hodge et al. 1996).

Because new ideas and procedures are often speculative and conflict with prior organizational goals, it is natural for organizations to resist change (DuBrin 1972). Technical change is resisted to a lesser degree than philosophical change. Change that threatens the legitimacy of the organization is met with the most resistance. Often organizations resist change when no harmful outcomes are identified due simply to personal anxiety and uncertainty (Hodge et al. 1996; Klofas et al. 1989).

Contained within the substantial amount of social change literature, there is a wealth of information of organizational change and transformation. Traditional social change evaluations rely heavily upon equilibrium perspectives (organizational desire to maintain balance and a high sense of order), suggesting that normal organizations seek stability while change indicates an unbalanced condition (Leifer 1989; Gemmill & Smith 1985; Liu 1996). Unlike equilibrium-based perspectives, the

dissipative structure paradigm views non-equilibrium as a catalyst for providing a new, more efficient organizational structure (Leifer 1989; Gemmill & Smith 1985).

Equilibrium models suggest that organizations need rationality in that they operate under certain prescribed and orderly conditions.

Change is, therefore, a natural threat to the organization (Leifer 1989; Gemmill & Smith 1985; Prigogine & Stengers 1984; Scott 1991). Leifer (1989:902) states:

The equilibrium model derives from the open systems perspective and its premise is adaptation to environmental conditions. While the model does begin to account for organizational and environmental interdependency, it is applicable to systems operating within certain parameters. It does not describe profound transformational, discontinuous change brought about by fundamental changes to basic political and cultural systems of the organization as a result of uncontrollable environmental turbulence.

Mitroff (1979) notes that rational organizations become overwhelmed by social or environmental change and cope by increasing their complexity and openness to external input. This openness, while positive on some levels, often fragments the organizational structure. At odds with the equilibrium perspective, the dissipative structure paradigm suggests that an organization's instability does not necessarily harm the organization.

Dissipative structure theory is rooted in the natural as opposed to the social sciences (Prigogine & Stengers 1984; Scott 1991; Leifer 1989; Liu 1996; Overman 1996; Gemmill & Smith 1985; Svyantex & Brown

1999; Wicks 1998; White et al. 2001). Prigogine and Stengers (1984:12)

state:

In far-from-equilibrium conditions, we may have transformation from disorder, from thermal chaos, into order. New dynamic states of matter may originate, states that reflect the interaction of a given system with its surroundings. We have called these new structures dissipative structures to emphasize the constructive role of dissipative processes in their formation.

The transition to the study of non-equilibrium and non-rationality is predicated on the notion of environmental uncertainty. This uncertainty occurs in both naturally and socially occurring and reoccurring phenomena (Leifer 1989; Gemmill & Smith 1985). Complexity in both natural and social settings requires adaptive responses and, at times, environmental changes lead to periods of uncertainty (Leifer 1989). The dissipative structure theory suggests that the presence of instabilities at the bifurcation point (where the limits of the organization's coping mechanisms are exceeded) does not necessarily lead to chaotic random behavior, but instead offers the opportunity for a new dynamic order, which is able to handle increasing amounts of uncertainty and complexity (Gemmill & Smith 1985; Leifer 1989).

According to the dissipative structure perspective, the system or organization reaches a bifurcation point (i.e., overload) and is forced to reorganize and accomplish needed transformation. Therefore, the perspective views non-equilibrium as an opportunity for organizational change in a positive sense (Leifer 1989; Gemmill & Smith 1985;

Goldstein 1988). Hence, organizations must constantly adapt and change under dynamic environmental and social conditions (Gioia 2000).

Four aspects of the dissipative structure paradigm have been identified. These aspects include: (1) point of singularity, (2) transformation utilizing radical strategies, (3) ineffective or symbolic acting and experimentation, and (4) organizational or systemic resynthesis (Leifer 1989: 906). Modern organizations transform through these complex processes that are not understandable through equilibrium models, which are unable to explain dynamic processes (Gemmill and Smith 1985).

The point of singularity refers to an overwhelming adaptive response—some trigger event that causes the organization to take a corrective posture. Often, the trigger event stems from environmental influences or factors external to the system (Leifer 1989; Gemmill & Smith 1985). However, the disequilibrium condition or singularity point can be brought about through environmental or internal conditions or both (Gemmill & Smith 1985; Prigogine & Stengers 1984).

Transformation utilizing radical strategies, or what Gemmill and Smith (1985) refer to as symmetry breaking, refers to the visionary tactics employed by organizations to increase efficiency, acceptability, and accountability. This process might entail administrators revising their objectives to correspond with available data that appears relative to organizational prosperity (Leifer 1989; Gemmill & Smith 1985).

Transformative or nonequilibrium models imply unsuccessful replication of prior organizational strategies and the ability to break symmetry, allowing for greater degrees of change (Gemmill & Smith 1985).

The inefficient acting and experimentation component of the dissipative structural paradigm indicates that where organizations are inefficient, problem-solving postures are assumed. Through this process, new philosophies, strategies, and tactics are discussed within the new environmental or internal constraints with respect to organizational bifurcation (Leifer 1989). Systems or organizations which are best able to experiment with and retain a progressive posture have a better probability of positive, organizational transformation (Gemmill & Smith 1985).

Resynthesis or reformulation refers to the openness of the organization after procession through the aforementioned stages. This resynthesis suggests that an organization or system will be more open and receptive to various strategies than in the past. However, this openness may only be relevant to the singular point or points that caused bifurcation in the first instance (Leifer 1989). As opposed to a final process, resynthesis might better be viewed as a spiral. "Once new configurations are spawned, the autopoietic process or continual self-renewal will again build new structures, much like it does in an equilibrium system (Gemmill & Smith 1985: 759)." However, equilibrium systems desire reformative postures, whereas nonequilibrium systems

must continually maintain sufficiently high transformative modes (Progogine & Stengers 1984; Scott 1991; Gemmill & Smith 1985).

Therefore, the dissipative structure theory suggests that points of singularity and bifurcation allow organizations to maintain composure through uncertainty to transform themselves. Through organizational transformation, qualitative and fundamental changes occur that strengthen organizational ability to adapt (Leifer 1989; Gemmill & Smith 1985; Progogine & Stengers 1984). The following section applies the dissipative structural paradigm to developments in police use of lethal force and external review of the police. The discussion will concentrate on points of singularity, radical strategies, symbolic or ineffective responses, and finally, reformulation and resynthesis.

#### *Police Organizational Transformation and Dissipative Structures*

Due to various external forces, American policing has gone through transformative changes. In order to apply the dissipative structure paradigm to modern policing, two critical areas are reviewed. These critical areas concern policy changes in handling police misconduct and the use of lethal force. While lethal force changes are consistent with the present analysis, the discussion of dissipative structures from a different reference point (external police review) may better verify theoretical relativity. Therefore, the following elaborations are not meant to provide a comprehensive review of either lethal force or external review of the police.

External review of the police refers to any procedure whereby civilians or persons external to the police agency have involvement in the citizens' complaint process. This definition may seem overly simplistic, but the variety of review procedures that exist across the United States demand such broad categorization. Although the term "external police review" dates back to the late 1940's, the impetus for external review procedures was derived from the President's Commission on Law Enforcement and the Administration of Justice in 1967 (Walker and Bumphus 1992; Walker 1992). The literature in this area reveals that the politics of external police review first surfaced through the establishment of external review procedures in New York City and Philadelphia in the 1960's (Walker 1992).

The catalyst for increased external review procedures came from three primary sources: the Presidential Crime Commission, scholarly research that validated significant police abuses in urban areas, and civil rights initiatives in urban America (Littlejohn 1981; Walker 1992). Both the 1967 and 1968 Crime Commissions noted systematic abuses of police authority. These commissions cited abuses in some cities that ranged from minor discourtesy to the clear use of unnecessary, often brutal, force. The 1967 Commission advocated reforming the system by establishing external review procedures; the 1968 Crime Commission concluded that internal procedures for handling grievances against the



police were merely symbolic, window-dressing to appease various disgruntled groups (Campbell et al. 1970; Reasons and Wirth 1975).

The direct influence of the 1967 Crime Commission was evident in the establishment of a number of external review procedures; in fact, by the late mid-1970's, most large departments were experimenting with review procedures. However, many of these procedures served very symbolic objectives (Reasons and Wirth 1975; Klyman and Kruckenburg 1979).

Research conducted by police scholars also served as a catalyst for external police review. Both Chevigny (1969) and Reiss (1968) confirmed systematic abuses of police authority in urban areas. During the same time, minorities and disenfranchised groups gained momentum in civil rights initiatives and began to challenge the status quo. The urban riots of the 1960's can be explained in part by new challenges claiming discriminatory and disparate treatment (Walker 1992).

During the first era of external review (roughly 1966-1974), procedures were created by administrative or executive order; these measures did not necessarily entail a consensus judgement on the part of the larger community. Additionally, early boards were often manned by former police personnel or people who had strong ties to policing. They were in essence symbolic gestures and seldom provided independent evaluations. These procedures were vulnerable to

fluctuations in political climate, and subsequently boards fell prey to efforts from oppositionists (Walker 1992; Goldsmith 1991).

Over time external review of the police has become more independent. The majority of the seventy-five largest cities have external review agencies. In fact, external review of police has become a normative component of policing, especially in larger cities (Walker and Bumphus 1992; Goldsmith 1991).

Consistent with the dissipative structure paradigm, external points of singularity that observed police misconduct and citizen dissatisfaction caused major problems in police administration. A bifurcation point was reached, whereby, citizens questioned police authority through rioting and open rebellion. In reaction, the police created symbolic procedures to appease various communities. Finally, a resynthesis occurred whereby these once symbolic agencies became less so and were integrated into the normative structure of policing. New structures of complaint resolution have allowed police organizations to better handle complexity caused by external stimuli.

Alpert and Fridell (1992) in *Police Vehicles and Firearms: Instruments of Deadly Force* discuss changes in police policies and procedures from a social movement perspective. Their analysis embraces the notion that external turbulence forces drastic, often transformative, changes within organizational processes. In specific, the authors use the social movement perspective to analyze drunk driving and the

external forces and grassroots initiatives that forced considerable change. The social movements approach is not contradictory to the present analysis. Both social movement and dissipative structure paradigms consider preeminent external forces that prompt substantial organizational change.

Though police authority to use lethal force represents one of the most significant powers of government, there is a lack of reliable national information in the area (Alpert and Fridell 1992). Data consistently reveals that only a small percentage of police actions involve the use of force. These various exercises of force indicate non-routine tasks. A recent study concluded that physical force is used in fewer than one of five adult custody arrests (U. S. Department of Justice 1999). Factors related to the situational use of police force has made decision-making very controversial.

Similar to external police review, various external catalysts influenced the evolution of use of force policy. These external influences involved challenges to the appropriateness of using police force and legal challenges involving equal protection and civil rights. In the late 1960's and early 1970's, evidence was presented by a number of researchers indicating that shots fired often wounded or killed citizens. Fyfe (1979) reported that as high as thirty-one percent of shots fired injured or killed in New York City in a given year. As evidence began to emerge that police use of force (lethal force) often ended in death, scholars and

activists started to question the situational appropriateness of the use of lethal exercises of police force.

During the same period, Fyfe (1979) concluded that police exercise of lethal force was discriminatory. It was revealed that minority citizens were significantly more likely to be injured or killed by the police than their majority counterparts. Using the Memphis, Tennessee metropolitan area, Fyfe also found that community characteristics such as race, gender, and social class influenced police shootings. Studies that looked at the appropriateness of police use of lethal force served as a catalyst for change; however, the disparate treatment issue was most likely a more significant point of singularity.

A number of legal challenges questioned the use of lethal force by the police. The substantial legal challenges dealt primarily with defining excessive force in context. Various court cases and alleged civil rights violations forced many police agencies to institute more restrictive policies. The major change came in 1978 with the ruling in *Tennessee v. Garner*. This important supreme court case established a standard for the use of lethal force which required that the situation be of a felonious nature, that there is no substantial risk to incident bystanders, the offender's conduct involve the threatened use of lethal force, and that failure to apprehend would cause a substantial risk to personal safety. In essence, the *Garner* ruling struck down the fleeing felon provision and

established criteria by which lethal force could legitimately be exercised (Alpert and Fridell 1992; U. S. Department of Justice 1999).

Information that brought safety, disparate treatment, and legalistic issues to light served as catalysts or points of singularity in transformative changes in use of force policy. Many agencies as a result managed complexity by instituting policies reflecting some of the external challenges existing procedures. Many of these policies were symbolic in nature (ineffective acting). As external complexities mounted, especially legal factors, a resynthesis occurred in policing that fundamentally changed the organizational structure relative to exercising force.

The remainder of this literature review examines the current body of research on police pursuit as a weapon of lethal force. Therefore, the review examines police pursuit-related safety and liability issues as well as the costs and benefits of police pursuit and the nature of formalized policies and procedures.

## CHAPTER THREE:

### Research on Police Pursuit Driving

The use of force (e.g., firearms or vehicular pursuit) is one of the most critical decisions law enforcement officers undertake (Alpert & Fridell 1992). Police officers are mandated by the state to use reasonable force to apprehend probable offenders (Alpert & Fridell 1992; Barker 1998; Alpert 1987). Naturally, what is to be considered reasonable force varies from situation to situation. Bayless and Osborne (1998), Homant and Kennedy (1994), and Alpert et al. (1997) find that the public and police have reasonably strong support for police pursuit. There is a significant amount of recent scholarship that considers various aspects of police use of vehicular pursuit. This research examines substantive areas such as safety and liability factors, legalistic considerations, cost versus benefits analyses, and characteristics of police decision-making, policies, procedures, and restrictions. The following review of the extant literature discusses both the empirical and non-empirical scholarship relative to these specific substantive areas as well as philosophical matters.

The utility of police pursuit is most appropriately viewed in relation to the conflict between enforcement of the law and order maintenance. All pursuits would make sense from a strict crime-control perspective to the extent that they relate to general penal goals such as deterrence

(specific and general) and incapacitation. Conversely, police pursuit may become counterproductive and antithetical to order maintenance functions. The potential, therefore, exists that pursuits may cause more harm than social good (Blankenship & Moneymaker 1991).

A number of researchers have recently begun to classify police vehicular pursuit as a lethal force issue (Alpert & Fridell; 1992, Barker 1998; Alpert 1987; Kenney & Alpert 1997). Accordingly, Alpert and Fridell (1992) report that it was not until the 1960s that any serious attention was given to police vehicular pursuit. In the 1960s, several important advocacy groups began to notice and comment on the negative aspects of police pursuit behavior. Initial perceptions of the consequences of police pursuit were anecdotal and greatly influenced by the political climate and media interpretation (Patinkin & Bingham 1986).

Early philosophical debates were not based on objective information but entertained the need for swift apprehension of serious offenders and protection of the general public (Hannigan 1992; Alpert & Fridell 1992). Police vehicular pursuit becomes more controversial when considering the context (Hannigan 1992; Alpert & Fridell 1992).

Philosophical arguments involving the appropriateness of police pursuit can be divided into two broad camps. The first position views pursuits, especially high-speed ones, as inherently dangerous and advocate highly restrictive and comprehensive policies (Kennedy et al. 1992; Alpert &

Dunham 1989; Charles, Falcone, & Wells 1992; Barker 1998; Payne & Corley 1994; Payne 1997). More consistent with the crime-control model, the second position conceptualizes the dangerous consequences of failure to pursue (California Highway Patrol 1983; Hannigan 1992).

Both positions present palatable arguments. On the one hand, position one supporters highlight the detrimental, public consequences of lack of control of police pursuit, citing safety and liability issues. Those embracing position two highlight the repercussions of abolishing or limiting police use of vehicular pursuit as constituting dereliction of duty and creating lower levels of public safety (Britz & Payne 1994).

Alpert and Fridell (1992) contend that research and debate on police pursuit follows a similar trend as traditional deadly force research. In this sense, the state of research examining firearms could be explaining what is known about pursuit driving (Geller & Scott; Alpert & Fridell 1992). Accordingly, scholars have recently begun to conceptualize police vehicular pursuit as deadly or lethal force (Alpert 1987; Alpert & Fridell 1992; Alpert et al. 1996; Barker 1984). Barker (1984: 70) concludes “high-speed pursuit is one of the most dangerous activities that can be engaged in by a law enforcement officer. The police vehicle is a potential deadly weapon and pursuit driving is often a life-or-death situation.”

As evidence began to emerge that police pursuits often resulted in serious physical harm or death to citizens and officers, police officials





and scholars were forced to rethink philosophical rationales for the use of police vehicular pursuit as they related to safety and liability issues (Charles & Falcone 1992). The police pursuit debate has generated a considerable amount of scholarly interest focusing on safety and liability, costs versus benefits analyses, characteristics of pursuits, pursuit decision-making, and restrictiveness (Alpert & Dunham 1990; Crew 1992; Blankenship and Monkeymaker 1991; Alpert & Dunham 1992; Crew et al. 1995; Charles & Auten 1994).

More recent debates concerning the relevant factors related to police pursuit is based upon better information, but data is still less than systematic (Alpert & Fridell 1992). However, recent scholarship has focused upon the following substantive areas.

### Safety Issues

In 1968, the Physicians for Automotive Safety, a self-appointed, unofficial body, released a report concluding the negative aspects of police pursuit. The document presented some disturbing findings which included the following information:

One out of five pursuits ends in death; five out of ten pursuits end in serious injuries; seven out of ten pursuits end in accidents; one out of 25 killed is a law enforcement officer; four out of five pursuits are for minor offenses; and pursuits cause more than 500 deaths each year. (Alpert & Fridell 1992: 99).

Alpert & Fridell (1992) report that the findings from the Physicians for Automotive Safety Study caused significant controversy in law enforcement and gave way to a veritable amount of scholarly interest.

The first official study of police pursuit driving soon followed. Published in 1970, Fennessy and colleagues attempted to pool the available data sources and provide a comprehensive examination of police pursuit consequences. The U. S. Department of Transportation sponsored the study which is commonly referred to as the Fennessy Report (Alpert & Fridell 1992).

The Fennessy Report attacked the lack of reliable data used in the Physicians' Study. According to Fennessy et al. (1970), conceptual uncertainties limited the validity of the former study. In an effort to counteract some the negative publicity caused by the Physicians' Study, the U. S. Department of Transportation Study conducted a survey of citizens in one county in Virginia and found that approximately two-thirds (sixty-four percent) of the population agreed with the use of police vehicular pursuit (Fennessy et al. 1970).

In their attempt to invalidate the Physicians' Study, Fennessy and his associates concluded that to impair the ability of the police to pursue would be a mistake. However, they recognized the importance of reducing crashes, injuries, and fatalities. The Fennessy Report concluded that police pursuit was a necessary element of modern policing and that reform issues should concentrate on matters related to

administrative policy and practice as opposed to abolition (Fennessy et al. 1970).

Though the government sponsored Fennessy Study suggested that attention be given to policies and practices in evaluating police pursuit, Alpert & Fridell (1992: 101) note that “the second generation of research on police pursuits was not initiated until the early 1980s.” The California Highway Patrol (CHP) Study (1983) provided a descriptive analysis of police pursuit outcomes in 683 incidents. Data from the CHP Study demonstrated divergent findings when compared to the Physicians’ Study. The CHP study concluded that 29 percent of pursuits ended in an accident, 11 percent ended with injuries, and 1 percent ended in death. The findings contradicted the Physicians’ Study, which had concluded that around 20 percent of pursuits resulted in death and 50 percent in injuries. Additionally, the study found that around 77 percent and 70 percent of incidents ended in apprehension and without incident, respectively (California Highway Patrol 1983).

As with the Fennessy Report, the California Highway Patrol Study (1983) viewed the pursuit outcome as the best method to assess risk to public and officer safety. Proponents and opponents utilized findings derived from the CHP Study to further their causes. For the proponents of police use of vehicular pursuit, the evidence suggested that very few pursuits ended in injury, and even fewer resulted in death. Opponents,

once again, advocated controlling police discretion and the enactment of more comprehensive, restrictive pursuit policies (Alpert & Fridell 1992).

Subsequent research examining safety issues involving police vehicular pursuit has built upon all the aforementioned studies. The research has, accordingly, become more methodologically and conceptually sound. Normatively, the police pursuit research has examined very location-specific, often state, populations. These studies have provided more information on the nature of accidents, injuries, and fatalities involving police use of vehicular pursuit.

Alpert and Dunham (1990) examined data from Ontario, Canada from 1981 to 1984 and concluded that accidents happen in 33 percent of the cases, injuries in 10 percent, and fatalities in less than 0.4 percent. A similar study conducted in Dade County, Florida over a 3 year-period, suggested that accidents occurred in 33 percent of the cases , injuries in 17 percent, and fatalities in 0.7 percent.

Auten (1991) reported that for 86 participating police agencies in the state of Illinois evaluation of police pursuits reveal accidents in 41 percent of the cases, injuries in 12 percent, and fatalities in 1.4 percent. Subsequent analysis of Illinois pursuit data provided comparable information on the safety issues related to police pursuit (see, Charles et al. 1992; Falcone et. al 1992). Osechsli (1992), in surveying data from the Kentucky State Police from 1989 to 1992, concluded that the 3 fatalities during the time period involved fleeing drivers, passengers, or

uninvolved bystanders. In an analysis of Michigan pursuit data, Payne and Fenske (1996) examined five years of data and concluded that fatalities occur in less than one percent of all pursuits. Personal injuries occurred more often (around twenty-five percent of the time).

Studies conducted in Illinois, Kentucky, and Michigan have validated the relatively low occurrence of fatalities in police vehicular pursuit with significant levels of accidents and injuries. Therefore, the conclusion reached by the Physicians' Study may have exaggerated the rate of fatalities caused by police pursuit behavior as evidenced by subsequent state and local studies (Payne & Fenske 1996; Falcone et. al 1992; Charles et al. 1992; Osechli 1992; Auten 1991; Alpert & Dunham 1990).

National information on police pursuit driving is available through the National Highway Traffic Safety Administration (NHTSA). The NHTSA collects data on pursuit-related fatalities and deaths on a national level. Data used by the NHTSA is actually compiled by the Fatal Accident Reporting System (FARS). The FARS system only observes fatalities at the scene and collects no information on accidents or injuries separately (Kenney & Alpert 1997; Geller & Scott 1992). Though FARS has reported information on pursuit fatalities since 1993, the methodology being utilized is being continually modified; as a result, there is still a lack of systematic information on police pursuit fatalities at the national level (Geller & Scott 1992).

Kenney and Alpert (1997) conducted the most exhaustive study to date that examines police pursuit safety issues. This national survey of use of police force was conducted for 7 months in late 1994 and early 1995. The sample consisted of 737 randomly selected police organizations. Kenney and Alpert (1997) found that approximately 2.4 per 1,000 and 8.6 per 1,000 percent of police pursuits in municipal and county agencies, respectively, ended in fatalities. Additionally, the authors concluded that injuries occurred in 25 per 1,000 pursuits. The available national data suggests significantly lower rates of fatalities and injuries than other, more localized, accounts.

### Liability Issues

Several provisions of the United States Constitution are relevant to the use of police pursuit: the 4<sup>th</sup> Amendment, the 8<sup>th</sup> Amendment, and the Due Process Clause. The Supreme Court has concluded that arrests and seizures must be conducted with a reasonable amount of force in light of the circumstances. Accordingly, the 8<sup>th</sup> Amendment, which protects against cruel and unusual punishment, applies when the force exercised is deemed unreasonable (Hall 1997; 1999). The Due Process Clause “prohibits the federal and state governments, respectively, from depriving any person of life, liberty, or property without due process of law (Hall 1999: 2).” Generally, the Due Process Clause is relative when no 4<sup>th</sup> or 8<sup>th</sup> Amendment violation is evident. Since police vehicular

pursuit characterizes use of force, reasonable or otherwise, liability considerations would impact both 4<sup>th</sup> and 8<sup>th</sup> Amendment provisions (Hall 1999).

Liability claims are generally based upon three considerations which include: 1) existence of a legal duty owed, 1) an alleged breach of duty, and 3) injury or loss resulting from the breach. The Supreme Court has not addressed whether or not a departmental policy creates a legal duty (Hall 1997: 1). Generally, the negligent or improper use of vehicular pursuit would present initial liability questions. To the extent that improper use of vehicular pursuit breaches policy and other constitutional protections, organizational and individual factors become important considerations (Hall 1997; 1999)

Improper or negligent use of the various law enforcement technologies impact organizational and individual liability. Kappeler and del Carmen (1990) examine the liability issues involved in the operation of police emergency vehicles. They classify police use of motor vehicles into categories of routine and non-routine use. In normal routine duties, police officers are afforded no special privileges or immunities; they are held to the same standard of conduct as ordinary citizens. The non-routine operation of police vehicles under emergency situations grant police officers limited statutory immunity. Because of hazards involved in emergency driving, all states have enacted statutes that address emergency vehicle operation.



The courts have concluded that the proper test for determining if an emergency exists depends upon the nature of the situation. In this sense, courts have ruled that the chase or attempted apprehension of a law violator does not always constitute an emergency situation. The condition of reasonableness must be satisfied in that the pursuant perceived the situation as a true emergency (*Fiser v. City of Ann Arbor*, 339 N.W. 2d. 413 1983; Kappeler & del Carmen 1990). However, the California Supreme Court in *Kisbey v. California* concluded:

the purpose of the legislation was to immunize public entities and employees from the entire spectrum of potential injuries caused by persons actually or about to be deprived of their freedom who take physical measures of one kind or another to avoid the constraint or escape from it (*Kisbey v. California* 682 P2d. 1093 1984).

Traditional barriers to police liability are evident in many jurisdictions, such as in the state of Virginia, where police pursuit is considered conduct within the scope of official duties. Such statutes preclude liability for negligent operation of motor vehicles (Kappeler & del Carmen 1990).

In the aftermath of the *Garner* Case, which invalidated the fleeing felon response to criminal apprehension, Hall (1997) concluded that federal courts have been reluctant to accept policy violations on constitutional grounds. Therefore, the majority of the complaints question policy violations as related to liability only. As Kappeler and del Carmen (1990) state, liability issues in police pursuit driving have been

handled on a case-by-case basis, observing proximate causes and levels of negligence. Pursuit driving legal considerations have not traditionally rose to the level of traditional lethal force issues (Hall 1997).

Courts have viewed factors relating to proximate cause and contributory or comparative negligence. Even if a breach of duty is proven, the actions taken must be viewed as the proximate or most likely cause of the injuries. Both comparative and contributory negligence claims suggest that the action taken resulted in at least part of the outcome (Kappeler & De Carmen 1990). For example, in *Maple v. City of Omaha*, the Supreme Court of Nebraska concluded that a driver's failure to hear emergency sirens was contributory negligence (*Maple V. City of Omaha 348, N.W. 2d. 254 1986*). Contributory or comparative negligence considerations cover a wide range of behaviors. To date, there has been no uniformity in applying these concepts to police pursuit driving (Kappeler & del Carmen 1990).

### Cost versus Benefits Analyses

A number of scholars have examined the consequences of police vehicular pursuit from a costs versus benefits perspective (Payne & Corley 1994; Blakenship & Moneymaker 1991; Crew & Hart 1999; Payne & Fenske 1996). Further, Blankenship and Moneymaker (1991) concluded that a significant number of pursuits involve individuals accused of misdemeanor offenses. They suggest that the utility of all

pursuits must be questioned given the significant number of serious injuries and non-serious violations. Cost and benefits of police pursuit have traditionally been framed in comparing the benefits, such as crime prevention and deterrence, and the costs, such as the number of accidents, injuries, and fatalities (Crew & Hart 1999).

The costs of police pursuits are easier to operationalize than are the benefits (Crew & Hart 1999; Alpert & Dunham 1990). As mentioned, the literature reveals, in both state and national studies, significant levels of accidents, injuries, and deaths (Payne & Fenske 1996; Falcone et. al 1992; Charles et al. 1992; Osechsli 1992; Auten 1991; Alpert & Dunham 1990). Crew et al. (1995) examined the probabilities that offenses end in apprehensions (as benefit measure), property damages, personal injuries, and death. The authors concluded that the probability of capture varies by type of pursuit (i.e., perceived offense). Generally, around 75 percent of all those pursued are apprehended. Those pursuits involving felonies in progress or felonies absent a warrant less often ended in capture and had higher levels of damages and injuries. Driving while intoxicated incidents were more likely to end in capture. Felony warrants and traffic violations were likely less likely to be apprehended. The authors found that benefits versus cost ratios in some kinds of chases are better than in others. For example, non-warrant, felony pursuits often ended without success (in terms of capture).

Another potential benefit of police pursuit is its likely deterrent effect, specifically or generally (Crew et al. 1995; Alpert & Dunham 1990; Crew & Hart 1999). It is difficult to reliably measure the relation between police pursuit and general deterrence. The knowledge that most individuals are captured may indicate, that at least in the specific incident, there is a level of specific deterrence. However, the question is still open to debate whether or not the individual will desist from participation in pursuits in the future.

Crew and Hart (1999) estimated costs versus benefits by probability of capture divided the probability of accident, injuries, and deaths and concluded that police pursuits derive more benefits than costs. Police pursuits produce more captures than accidents, injuries, damages, or deaths. Minnesota pursuits (for the time-period specified) produced around 60 times greater benefit than estimated costs. The rates of negative outcomes (e.g., damages and injuries) are relatively high in police pursuit activities. When considering the potential loss of lives, the authors acknowledged the difficulty in generalizing economic and life and death considerations.

As with lethal force in general, there is a need to balance pursuit benefits relative to situational and contextual chase factors. Research has indicated certain chase situations are normatively less successful than others (Crew & Hart 1999; Senese & Lucadamo 1996). Thus, pursuits that are likely to end with a negative outcome should be highly

scrutinized (Crew & Hart 1999). The Supreme Court in *Tennessee v. Garner* addressed the seriousness of the situation as it related to the use of lethal force (Hall 1999; Alpert & Fridell 1992); to date, courts have not considered similar guidelines in lethal force in the area of police pursuit.

### Characteristics of Pursuits and Pursuit Policies

Alpert (1998) noted that analysis of police pursuit driving can now be examined via a host of fact patterns and decision-making processes. Further, Alpert et al. (1997: 371) state “fortunately there is agreement on at least three aspects of pursuit: (1) pursuits are dangerous, (2) pursuits must be controlled, and (3) involvement in a pursuit causes participants’ adrenaline and excitement to increase.” Organizational elements (i.e., existence of policies and training) and individual and situational differences impact the nature of police pursuit decisions (Alpert & Fridell; Alpert et al. 1997). In profiling the typical pursuit, the California Highway Patrol Study (1983: 1-2) found that the typical chase:

is initiated by a traffic violation; takes place at night; continues for one mile; last one to two minutes; involves two police cars; is terminated voluntarily by the offender; and involves a male driver twenty years old.

Individual and situational aspects (i.e., officer decision-making) have been examined by a number of scholars using police officer samples (Falcone 1994; Charles & Falcone 1992; Alpert et al. 1997; Homant & Kennedy 1994; Homant et al. 1993; Alpert & Madden 1994).

Charles and Falcone (1992) conducted face-to-face interviews with police personnel including both municipal and sheriffs' departments in the state of Illinois. The non-randomized sample of 107 of patrol officers, sheriffs' deputies, state troopers, and supervisory staff represented a good measure of organizational and regional diversity across the state. Findings suggested that factors such as weather conditions, volume of traffic, the presence of pedestrians, condition of police vehicle, and whether a school zone was nearby influenced pursuit initiation and continuation. Some officers revealed that seriousness of the offense was a factor, while others viewed eluding law enforcement as justification alone.

The general findings of the Illinois study suggested that pursuit behavior was a combination of reliance upon pursuit policy and accepted norms. Well-articulated policies, departmental training, and administrative adherence to policy were the three factors most associated with pursuit decision-making (Charles & Falcone 1992). Falcone (1994) surveyed officers in the Chicago metropolitan area and found that officers overwhelmingly felt that a "no pursuit policy" would increase police pursuit and attempts to elude apprehension. In this sense the flight of potential offenders might serve as pursuit justification outside of organizational restrictions.

Homant and Kennedy (1994) measured officer tendencies to become involved in police pursuits in a multi-state sample of 614 sworn

officers. The findings revealed that officer perceptions of police pursuit have more to do with their experiences within the organization as opposed to formal policy. Therefore, some officers had very restrictive perceptions of permissive policies and permissive perceptions of literally restrictive policies.

Alpert et al. (1997) found that the decision to pursue was related to further force as evidenced by individual officer perception. Some officers become excited during a pursue and extend the use of force after capture. This observation supports the notion that the nature of flight, defiance of authority, and increased levels of adrenaline impact police use of force. Research has also found a correlation between officer sensation-seeking and high-speed pursuit. In essence, personality differences may impact pursuit as much as formal or informal policy guidelines (Homant et al. 1993).

Alpert (1998) conducted a factorial analysis of variables related to police pursuit initiation. He concluded that the most important factor influencing officer behavior was the nature of the offense. Accordingly, officers viewed traffic conditions as the most important risk factor. Other risk factors included weather conditions, type of roadway (freeway, commercial, inner city, or residential) and population density. Seriousness of the offense (misdemeanor or felony) served as the most important rationale for pursuit initiation. Alpert (1998: 347) concluded that “this one factor (offense seriousness) is more than twice as

important as the environmental factors such as chase area, traffic conditions, and weather.”

Recent studies have considered offender perception of police pursuit (Dunham et al. 1998; Alpert et al. 1997). The California Highway Patrol Study (1983) determined that individuals chose flight for various reasons, which included avoidance of arrest or citation, being caught in a stolen vehicle, and being cited for other penal code violations. Additionally, flight was associated with fear or dislike of the police and excitement. Dunham et al. (1998: 37) found that 32 percent fled because of driving a stolen car, 27 percent to avoid arrest, 21 percent because of driving under the influence, and finally, 27 percent due to fear of physical abuse by police officers. Alpert et al. (1997) found that 57 percent of suspects claimed abuse pursuant to apprehension.

Various individual factors have been associated with police pursuit initiation. As for suspects, Dunham et al. (1998: 38) have suggested that high-risk suspects can be differentiated by certain characteristics “(i.e., age, ethnicity, being previously chased or caught by the police in other chases, and being under the influence of drugs or alcohol during a chase)”. Besides sensation-seeking (Homant et al. 1993), other demographic factors have been associated with police pursuit from an officer perspective (Dunham & Alpert 1991; Alpert & Dunham 1989).

Dunham and Alpert (1991) found that police pursuit initiated by female officers differed on a number of characteristics. Differences by



gender suggested that female officers chased for shorter periods of time, used lesser speeds and were less likely to chase in evenings or at nighttime. Additionally, female officers were less likely to run traffic lights or to chase onto freeways. The study suggested that, all together, female officer exercised more caution in pursuing. Further, Alpert and Dunham (1989) found that female officers were less likely to become involved in accidents.

Other findings presented by Dunham and Alpert (1991) concluded that older officers are more likely to pursue and for longer periods of time. The authors found that officers over 40 years of age were more likely to be involved in pursuits and utilized higher rates of speed. However, older officers were less likely to pursue in the evenings or at night. Alpert and Dunham (1989: 530) determined that “there is very little difference between the chances of accidents when Anglo officers engage in pursuits compared to the pursuits of non-Anglo officers.”

Because of the general lack of information of police pursuits and pursuit driving, many police organizations are left to develop limited inconsistent policies (Kenney & Alpert 1997; Alpert et. al 1996). As addressed earlier, NHTSA compiles data on pursuit-related deaths on the national level, but no national sources exist for other pursuit-related information. The empirical research has addressed characteristics of police policy (Kennedy et. al 1992; Kenney & Alpert 1997; Falcone & Wells 1999), policy content (Fyfe 1989; Kennedy et al 1992; Alpert &

Fridell 1992 Crew & Kessler 1994, 1995; Alpert et al. 1996; Falcone & Wells 1999), and model policies (Wilding 1998; Auten 1990).

Fyfe (1989) examined the characteristics of pursuit driving policies relative to three critical areas: laying back, overtaking, and roadblocks. Laying back strategies indicate that if it becomes impossible to apprehend one does risk lives in order to apprehend minor criminal violators. Overtaking refers to strategies aimed at forcing an individual off the road or attempting to pass. Since this process exposes potential bystanders to danger, pursuit policies address the concern procedurally. Lastly, the use of roadblocks or obstacles that prevent passage are often contained in most policies. The measures deal with issues of safety and risk to the general public. Auten's (1990) analysis highlighted some of the above substantive areas as well as additional ones. In his content analysis of 296 agencies, the author found that the following elements were mentioned in the majority of policies:

seriousness of offense (93.6 percent); officer safety (100 percent); dispatcher notification (93.2 percent); supervisor monitoring (62 percent); officer authority to discontinue (85 percent); supervisory authority to discontinue (84.3 percent); physical contact between vehicles—ramming (68.9 percent); roadblocks (37.9 percent); limitation of number pursuit vehicles (49.8 percent); permission to join other agency in pursuit (57 percent); written reports on pursuits (72.8 percent); pursuit limited to marked vehicles (44.7 percent); use of firearms during pursuit (56.2 percent); and use of occupant restraint devices required (60 percent) (p. 53-54).

The author concluded that the most alarming findings of the research was that 61 percent of the 296 Illinois agencies had no written policy.

Kenney and Alpert (1997) found that 91 percent of a random sample of police agencies had written policies on pursuit driving. The authors found that one half of the sample had modified their existing policies within the past two years. Further, the authors found that 48 percent and 16 percent of the sampled agencies allowed chases for any offense and felonies, respectively. Kennedy et al. (1992) subjected the written pursuit policies of 45 state law enforcement agencies and the 25 largest U. S. cities to a comparative analysis. The research concluded that physical operation of the police vehicle, circumstances of operation, and external factors (i.e., climate, population density, and type of roadway) were consistently mentioned in police policy.

Shuman and Kennedy (1989) concluded that the majority of policies make a distinction between emergency driving and high-speed pursuance. In this sense, the dangerousness of accelerated speeds is addressed as well as seriousness of crime and risk to public safety. The authors concluded that almost all pursuit policies have four major deficiencies which include: "(1) failure to embody the agency's mission statement; (2) under utilize the supervisor; (3) do not contain guidelines on how to terminate a pursuit; and (4) do not provide mandatory administrative view of all pursuits (Shuman & Kennedy 1989: 24)".

In response to the various dangers posed by police pursuit driving, the federal legislature has launched an effort to provide a uniform standard on pursuit policy. The National Pursuit Policy Act of 1997 was

introduced by the legislature and supported by the International Association of Chiefs of Police. The measure required all state, county, and local law enforcement agencies to conform to the pursuit standards set by the Secretary of Transportation (Wilding 1998). As a restrictive measure, the National Pursuit Policy Act attempted to place restrictions on police pursuit driving at the national level. Recent police scholars have also addressed pursuit policy restrictions (Kennedy et al 1992; Kenney & Alpert 1997; Auten 1990; Alpert et al. 1992; Alpert & Fridell 1992). This body of emergent research has differentiated between policies, procedures, and restrictions.

#### Policy Restrictiveness

Pursuit policies contain implicit and explicit restrictive language (Auten 1990; Kenney & Alpert 1997). The analysis of explicit restrictions acknowledged in formal policy may appear to be a logical, objective method for assessing overall restrictiveness. However, implicit language can also place restrictions on individual officer discretion. Restrictive language is often embedded in pursuit policy. Contemporary police scholars have attempted to conceptualize both explicit and implicit features of policy restrictiveness along a continuum from highly restrictive to highly discretionary (Kennedy et al. 1992; Falcone & Wells 1999; Becknell, Mays, & Giever 1999).

Becknell et al. (1999) have defined policy restrictiveness as related to the degree of specificity in pursuit policy. This specificity is related to the amount of effort police departments take to reduce the negative consequences of pursuit. Falcone and Wells (1999) used the categories of discretionary, restrictive, and discouraging to analyze 279 pursuit policies collected in the state of California. The authors found that the majority of policies were discretionary (57 percent) with restrictive policies and discouraging policies representing 38 and 4 percents, respectively. Similarly, Kenney and Alpert (1997) concluded that the majority of policies were discretionary as opposed to restrictive or discouragement. Using the categories of judgemental, restrictive, and discouragement, Crew (1992) has noted the same general patterns.

Kennedy et al. (1992) conducted a policy content analysis of a judgemental sample of 47 state law enforcement agencies and police departments in the 25 largest U. S. cities. The qualitative analysis observed restrictiveness on a greater continuum than the research mentioned thus far. Justification f (i.e., seriousness of offense and level of risk), physical operation of vehicle (i.e., emergency sirens, caravanning, ramming, or roadblocks), circumstances of operation (i.e., weather and visibility), and external factors (i.e., violations of policy, officer training, and physical condition of vehicle). The categories utilized by the authors included: judgement pure, judgement limited, restrictive mild, restrictive

severe, and discouraged. Commenting on the appropriateness of the scale, Kennedy et al. (1992) concluded:

In order to go beyond merely cataloging and counting elements that are included in pursuit policies, it is necessary to develop a rating system that allows those policies to be scaled along a continuum. Furthermore, a policy that highly restricts the pursuit process, or one that counsels or requires termination of pursuit under a number of conditions, is likely to influence the initial decision to pursue(p. 239).

The findings were consistent with past research indicating that the majority of both state and city agencies fell within the judgement pure or limited categories (Kennedy et al. 1992).

As evident from the body of literature of police pursuit, scholarly interest has most often involved analysis of very specific populations, primarily analysis of state agencies. Seldom has the content and restrictiveness of pursuit policies been discussed on a national level. When national samples have been utilized, the conceptualizations of restrictiveness based upon policy content have been lacking. Conversely, research utilizing better conceptualizations have not been diverse or representative enough. For example, the Kenney and Alpert (1997) research utilized a national sampling frame but fell short in conceptualizing restrictiveness of existing policy. Further, the most comprehensive conceptualization of restrictiveness utilized a judgemental sampling frame.

The present research utilizes a national probability sample to examine the characteristics of police pursuit policy. Additionally, the proposed research will utilize the Kennedy et al. (1992) restrictiveness scale (the most comprehensive scale to date) to analyze pursuit policy across factors related to initiation, environment, termination, and operation.

## CHAPTER FOUR:

### Methods and Procedures

This research examines police pursuit as a form of lethal across a representative sample of municipal and consolidated (county and municipal) law enforcement agencies in the United States. In specific, the descriptive analysis observes perceptual and substantive characteristics of pursuit across agencies of different sworn officer and service population sizes. Additionally, organizational factors such as size, centrality, and environmental concerns are examined in relation to the conceptualization, implementation, and operationalization of police pursuit policy.

#### Sampling Frame

The research utilizes a secondary analysis of an organizational survey sent to a random, stratified sample of law enforcement agencies in the United States. The sampling frame for the present research included municipal and consolidated law enforcement agencies serving county populations of 50,000 or more. In 1997 the College of Law Enforcement at Eastern Kentucky University sampled of 408 agencies was drawn representing law enforcement agencies in counties between 50,000 and 250,000 in population (n=217), and agencies in counties over 250,000 in



population (n=191). The sampling frame was provided by the Institute for Law and Justice (ILJ). Sampling procedures were selected to ensure representation of law enforcement agencies serving rural, suburban, and urban areas. The sampling procedure also insured a degree of regional diversity by selecting at random agencies across the entire country.

### Procedures and Instrumentation

In September of 1997, the College mailed out 408 surveys. The mailed-out packet included an introduction letter explaining the importance of the research and was addressed to the chief executive officer. Each packet also included a self-addressed, pre-paid return envelope in an attempt to maximize the rate of return. After eight weeks, 214 surveys had been returned in useable form, reflecting a 53 percent response rate. Because of economic and time constraints, no follow-up mailing were conducted by the researchers.

Social science researchers have often discussed acceptable response rates in the context of generalizability of the findings. A seventy-percent response is usually considered appropriate (Fink 1995; Babbie 1998). However, as Fink (1995) and Litwin (1995) conclude, some research projects involve complex or complicated issues that result in a lower response rate. Also, there is generally a lower response in unsolicited surveys. The research involved an unsolicited survey which dealt with a critical area in policing decision-making. Granted the

response rate could have been increased by follow-up mailings, however, the response rate seems appropriate within the context of the research.

Survey construction was conducted by examining various scholarship dealing with the subject area. An attempt was made to develop an instrument which incorporated items in past research as well as more specific items related to pursuit initiation, environmental, operational, and termination factors. The end result was a five-page questionnaire aimed at gauging perceptions of organizational pursuit policies, procedures, and restrictions.

### Major Variables

The survey included a number of different items deemed important to the overall research objective (see attached survey instrument). Demographic information was included in the first section of the instrument. Respondents were asked to record their agency type (municipal, county, or consolidated), service area size, number of sworn staff, whether a formal pursuit policy existed, and tenure of existing policy. Two organizational variables were also included: agency centralization level and policy type. The centralization variable was measured on an ordinal scale from 1 to 5, with 1 representing highly centralized and 5 representing highly decentralized.

Perception of centralization is a very complex variable to measure in organizational research. Though the current measurement has been

used in similar research, it fails to represent the complexity of centralization. Hence, there may be a construct validity problem. The purpose, however, of the research is to measure perceptual views and attitudes on organizational structure. Individual perceptions may vary for a number of explicit and implicit reasons. It is beyond the scope of the research to present a constructually valid measure of centralization. Therefore, measurement deals wholly with individual organizational perception, however constructed.

The policy type rating category was adopted from a scale developed by Kennedy et al. (1992 : 240). These researchers measured the level of police pursuit policy restrictiveness on a five-point scale as follows:

*Judgement: Pure.* The officer is cautioned only against unreasonable or disproportionate danger to the public. A list of general guidelines may be given; some restrictions, such as no ramming and break-off pursuit of a minor traffic violator if identity is known may be included.

*Judgement: Limited.* The officer is made aware of close supervision over his or her decision-making. A long, detailed list of criteria may be given. The general tone is that the officer must justify the decision to pursue, but the policy is to apprehend law-breakers and to support police authority as long as the risk does not outweigh the benefit.

*Restrictive: Mild.* The policy gives some reasonably clear guidelines regarding when not to pursue. Minimizing risk clearly receives a higher priority than enforcing the law. Officer's liability is likely to be emphasized, but the policy places no absolute restrictions on the type of offense for which one may pursue.

*Restrictive: Severe.* The burden of proof to justify the pursuit is on the officer. The officer is assured that the decision not to pursue or to break-off the pursuit would not be a cause

for censure. Clear restrictions are placed on the process of pursuit, and pursuits arising from routine traffic stops typically are prohibited.

*Discouraged.* Pursuits must meet fairly narrow guidelines, such as probable cause of a dangerous felony, and must be a last resort to prevent escape. The policy states clearly that the officer is to avoid pursuits.

The validity of the aforementioned scale will be tested through the analysis. Taken together, the centralization and policy type variables allowed for two separate measures of organizational orientation.

Finally, the survey included important factors involved in police pursuit decision-making: initiation (11 items), environmental (8 items), termination (14 items), and operational (10 items). The designation of police pursuit factors was derived from an exhaustive review of the extant literature as well through the examination of a number of actual police pursuit policies. Respondents were first asked whether or not any of the items were addressed in their respective policies. If items were addressed, respondents were then asked to comment on the emphasis placed on each. The emphasis placed upon items was measured in likert-scale format, with 1 representing high emphasis, and 5 representing little emphasis.

## Research Questions

A number of research questions and hypotheses are considered for examination. These questions reflect various types of analyses. Below is a list of relevant research questions.

### *Questions*

To what extent do demographic features (i.e., size, level of centralization, agency type, and policy type predict composition and accumulation of factors addressed in pursuit policies?

To what extent do these demographic features relate to the restrictiveness level of police pursuit policy?

What is the relationship between agency centralization and levels of policy restrictiveness?

How do initiation, environmental, termination, and operational factors relate to agency centralization and policy restrictiveness?

Do organizational perceptions of policy reliably reflect a substantive content contained in policy (*to be observed through a content analysis of actual policy compared to survey responses*)?

Does the Kennedy-Homant-Kennedy Restrictiveness Scale provide a valid method in which to analyze police pursuit policy restrictiveness?

Does the Kennedy-Homant-Kennedy Restrictiveness Scale provide a valid method in which to analyze pursuit policy restrictiveness by agency type and sworn officer size?

## Data Analysis Strategy

The data analysis provides descriptive information as to the nature and characteristics of the sample as well as perceptions of centralization, restrictiveness, and policy content. Descriptive analysis also examines

information contextual features of pursuit policies. This analysis isolates relevant factors related to pursuit initiation, operational, environmental, and termination indicators contained in pursuit policy.

The associational analysis correlates the four sets of factors represented by cumulative measures. For example, I1 (initiation factors) measured the cumulative number of initiation factors mentioned for each policy (E1--environmental factors, O1--operational factors, and T1--termination factors). A second correlational analysis measures the combined or cumulative emphasis placed upon each set of factors. Accordingly, I1B will measure the cumulative emphasis given to all initiation factors. E1B, O1B, and T1B considers cumulative emphasis placed upon environmental, operational, and termination factors respectively.

This research will descriptively examine the demographic, perceptual, and substantive characteristics of all policies. Cross tabular analysis will measure the relationship between centralization, organizational size (number of sworn officers), and policy type perceptions. A series of cross tabular analyses will examine bivariate relationships between policy pursuit factors and demographic and organizational characteristics of the agencies (organizational size, policy type, and centralization).

In an effort to predict restrictiveness, multivariate analyses regresses policy type and centralization on cumulative factor areas

(initiation, termination, environmental, and operational) and on key independent variables such as policy type, centralization, and number of sworn officers. Finally, to test the validity of the restrictiveness scale, policy type is correlated with cumulative policy content, and re-coded policy-type variables constructed by the researchers based upon a content analysis of actual policies. Correlational analysis is used to compare the number of restrictions found in the actual policy with organizational perception of policy type. A modified restrictiveness is presented subsequent to the content analysis of policies included in the sample.

### Research Shortcomings

As with most research projects, there are a number of limitations to the research design. The exclusion of policing organizations such as state and federal law enforcement agencies, public safety organizations like those on college and university campuses, and county law enforcement agencies limits to some extent, the generalizability of the research. However, the diversity of the existing sample can be generalized to most municipal law enforcement agencies which tend to be more localized. Though the response rate, given the nature of the research, seems quite adequate, a higher response rate would have undoubtedly strengthened the generalizability of the research.

Organizational survey research is dependent upon competency levels of those providing information (Babbie 1998). Though steps were taken by the research to ensure competence (i.e., addressing request to the chief administrative officer), there is no way to test the competency of individuals who ultimately provided information.

The aforementioned limitations are normative in organizational research, especially research dealing with controversial issues. Often sampling frames do not cover different varieties of organizations, therefore, they are excluded. All organizational research relies heavily upon the competence of those giving information. There are seldom mechanisms for assessing competence in anonymous, self-administered, mailed-out surveys.

The various limitations do not substantially affect the appropriateness of the research design. Therefore, the design is capable of examining police pursuit policy in the context of lethal force used by law enforcement, and the sample represents a diverse, representative sample of municipal and consolidated agencies in the United States.



## CHAPTER FIVE:

### Analysis and Results

#### Descriptive and Associational Analyses

Table 1 presents descriptive analyses of police agencies and pursuit policies. The vast majority of departments (99%) reported having a written pursuit policy. This observation revealed that only one responding department had no policy. Municipal agencies serving county populations of 50,000 or more formed the basis for the sampling frame used in this research. However, the random list of

**Table 1. General sample characteristics**

	<u>Yes</u>	<u>No</u>	<u>Mean</u>	
Policy Existence (n=214)	213 (99.5%)	1 (.05%)	Years 5.13	
Policy Included in the packet (n=214)	<u>Yes</u> 183 (85.55%)	<u>No</u> 31 (14.5%)		
Agency Type (n=214)	<u>Municipal</u> 200 (93.5%)	<u>Consolidated</u> 14 (6.5%)	<u>Mean</u> Officer # 53.80	<u>Mean</u> Population 31298.22

*Note:* No agencies reported the existence of an informal policy.

agencies also included municipal/county or consolidated departments. Because these agencies were a hybrid and could be classified as both municipal and county, random consolidated agencies were included in

the sample of municipal agencies. Over ninety percent (93.5 %) of the departments were municipal only. The remaining were consolidated departments serving both municipalities and counties.

**Table 2. Centralization and policy type characteristics**

Mean ptype Rating (N=214)	<u>Judgement</u>		<u>Restrictive</u>		<u>Discouraged</u>
	PURE	LIMITED	MILD	SEVERE	
2.79	11 (5.1%)	46 (21.5%)	62 (29.0%)	77 (36.0%)	18 (8.4%)
Mean central Rating (N=209)	<u>Decentralized</u>		<u>Moderate</u>	<u>Centralized</u>	
	HIGHLY	MILDLY		MILDLY	HIGHLY
2.51	50 (23.9%)	62 (29.7%)	52 (24.9%)	31 (14.8%)	14 (6.7%)

*Note:* The means for ptype and central were calculated based on a 1 to 5 scale for the categories “pure judgement” through “discouraged” and for “highly decentralized” through “highly centralized.”

A high percentage of policies were classified as restrictive (Table 2). In fact, seventy-three percent were deemed to be restrictive mild or greater. The mean policy rating on the five-point scale was 2.79 which reflected a somewhat neutral position although the direction was toward more discretion as opposed to less. Table 2 also reveals frequency distributions for the second measure of organization type. Approximately

fifty-four percent (53.6%) reported their agencies as being highly or mildly decentralized. Another twenty-five percent (24.9%) viewed their agencies in the moderate range. The remaining departments (21.5%) characterized themselves as being either mildly or highly centralized. The mean centralization rating given to departments was 2.51. Logically, the discouraged policy type category and the highly centralized category would entail much less officer discretion. Accordingly, very few agencies reported having policies (8.4%) or departments (6.7%) in these categories.

Tables 3 through 6 present the frequencies at which specific items were addressed in policy as well the average amount of emphasis placed upon each factor. Among the most often addressed initiation factors were a limitation of number of vehicles (96%), the use of marked police vehicles (91%), supervisory approval (85%), and a felony situation (81%). Further, relatively high emphasis was placed upon the four leading factors (see Table 3). Factors such as a non-serious traffic offense (50%), the influence of alcohol or drugs (51%), and passengers in the chase vehicle (52%) were addressed less often.

Six of eight environmental factors were addressed with relatively high frequency and emphasis. Table 4 illustrates that weather conditions (95%), roadway or traffic conditions (94%), presence of vehicular or pedestrian traffic (93%), time of day (84%), location, such as business or commercial (84%), and lighting conditions (77%) were all addressed by the vast majority of agencies in the sample. Additionally,

the most emphasis was placed on these factors. The likelihood of successful apprehension (61%) and the availability of assistance (58%), were emphasized at lower rates.

**Table 3. Pursuit initiation factors. Frequencies, and emphasis**

<u>Factors</u>	<u>Percentages(%)</u>	<u>Mean Emphasis(<math>\bar{x}</math>)</u>
Supervisory approval for continuation of the pursuit.	85	1.56
The need to apprehend outweighs the risks to citizens in the vicinity of the pursuit.	61	2.87
Reasonable belief by the officer that the violator is a felon or suspected felon.	81	2.01
Reasonable belief that the violator committed a misdemeanor.	60	2.98
Reasonable belief that the violator committed a serious traffic offense.	60	3.01
Reasonable belief that the violator had committed a non-serious traffic offense.	50	3.43
Reasonable belief that the violator is under the influence of alcohol or drugs.	51	2.56
Primary pursuit vehicle must be a marked vehicle.	91	1.31
Secondary pursuit vehicles must be a marked vehicle.	79	1.48
A limit is placed on the number of units that can be involved in the pursuit.	96	1.34
Pursuits are prohibited when passengers, unrelated to the violation, are present in the vehicle.	52	2.03

*Percentages present the number of policies containing the specific factor. Means represent the average amount of emphasis placed upon specific items measured on a 5-point scale, with 1 representing high emphasis.*

The four most often mentioned operational factors (table 5) were the use of police roadblocks (76%), firing at a moving vehicle (75%),

ramming a vehicle (68%), and shooting at a vehicle to terminate a pursuit (67%). As table 5 reveals, a higher amount of emphasis was placed on

**Table 4. Pursuit environmental factors, frequencies, and emphasis**

<u>Factors</u>	<u>Percentages(%)</u>	<u>Mean Emphasis(<math>\bar{x}</math>)</u>
The time of day.	84	1.20
Weather conditions.	95	1.05
Roadway or traffic conditions.	94	1.66
Lighting conditions.	77	1.88
Area or location such as business or commercial.	84	1.79
Presence of pedestrian or vehicular traffic.	93	1.58
Availability of assistance.	58	2.09
Likelihood of a successful apprehension.	61	2.00

*Percentages present the number of policies containing the specific factor. Means represent the average amount of emphasis placed upon specific items measured on a 5-point scale, with 1 representing high emphasis.*

the four factors as opposed to the six remaining items. Designation of maximum speed (33%), channelization of vehicles (37%), and the use disabling devices such as tire deflation (46%) were addressed in less than a majority of the policies in the sample.

Only two termination factors were addressed with great frequency. Table 6 shows that circumstances of the pursuit in terms of public safety was mentioned in 99 percent of pursuit policies. This factor was,

therefore, mentioned more than any other single initiation, environmental, operational, or termination factor. Likewise, this factor

**Table 5. Pursuit operational factors, frequencies, and emphasis**

<u>Factors</u>	<u>Percentages(%)</u>	<u>Mean Emphasis(<math>\bar{x}</math>)</u>
Firing, at or from a moving vehicle, while engaged in the pursuit.	75	1.67
A maximum speed is specified in the policy.	33	3.00
Shooting at a vehicle to terminate a pursuit.	67	1.83
The pursuing officer is permitted to ram the vehicle being pursued.	62	2.00
Shooting at tires, radiators, etc in order to disable a vehicle.	53	2.23
Forcefully stopping the vehicle by ramming it.	68	1.92
Boxing-in or surrounding the vehicle being pursued.	65	2.12
The use of disabling devices such as tire deflation devices.	46	2.20
The use of police vehicles in roadblocks.	76	1.85
The channelization of the vehicle being pursued off roadway surfaces.	37	2.36

*Percentages present the number of policies containing the specific factor. Means represent the average amount of emphasis placed upon specific items measured on a 5-point scale, with 1 representing high emphasis.*

**Table 6. Pursuit termination factors, frequencies, and emphasis**

<u>Factors</u>	<u>Percentages(%)</u>	<u>Mean Emphasis(<math>\bar{x}</math>)</u>
When circumstances of the pursuit present a safety hazard to the public, officer, or the suspect.	99	1.27
When no supervisor or superior can be contacted to approve the pursuit's continuation.	37	3.21
When the officer loses visual contact with the suspect for an extended period of time.	72	2.38
The pursuing unit loses radio contact with the communications dispatcher.	49	1.94
The pursuing unit is unfamiliar with the area of the pursuit.	49	2.24
The suspect travels the wrong way on an interstate highway, divided highway, or divided roadway.	60	1.55
An officer's decision to terminate a pursuit for safety reasons is not subject to a disciplinary review.	68	1.49
The pursuing vehicle travels into a residential area.	43	2.14
The pursuit travels across state lines.	43	2.37
The pursuit travel across jurisdictional lines.	58	2.28
When the violator can be identified to the point where later apprehension can be accomplished.	86	1.79
The officer has reason to believe the vehicle is being operated by a juvenile.	44	2.28
The pursuing officer has reason to believe the suspect is intoxicated or otherwise impaired and poses a danger to the public.	43	1.96
The policy requires pursuit termination after a specified time occurred or distance has been traveled.	44	3.18

*Percentages present the number of policies containing the specific factor. Means represent the average amount of emphasis placed upon specific items measured on a 5-point scale, with 1 representing high emphasis.*

was among the highest emphasized. Second, eighty-six percent of the policies addressed identification and later apprehension of suspects as a termination factor. A majority of the policies addressed loss of visual contact (72%), officer determination of a pursuit and disciplinary review (68%), travelling the wrong way (60%), and proceeding across jurisdictional lines (58%). The remaining eight termination factors were indicated in less than a majority of the policies analyzed.

In theory, various levels of centralization in decision-making and restrictiveness should relate. For example, a highly centralized and formalized agency would conceivably be much more likely to exercise power from a hierarchical, top-down perspective. Conversely, the highly discouraged policy places certain restrictions on individual decision-making in much the same fashion. Utilizing cross tabular analysis, the relationship between policy type and centralization was considered. Table 7 reveals that there was no significance between these two organizational categories. Further, these categories were subsequently collapsed into centralized-decentralized and discouraged-not discouraged using 0-1 dummy codes. Again, there was no relationship between nominal measurements.

Table 8 reveals the correlational analysis of pursuit factors by policy type, agency type, centralization, departmental size (in terms of sworn officer number) and population of departmental service areas. As



**Table 7. Cross tabulation centralization and policy type**

	Centralization					Total
	high cent	mild cent	moderate	mild decent	high decent	
Policy type						
discouraged	6	6	2	1	3	18
restrictive severe	16	24	18	9	6	73
restrictive mild	16	18	15	10	3	62
judgement limited	10	13	12	8	2	45
judgement pure	2	1	5	3		11
Total	50	62	52	31	14	209

*Note:* Chi-Square test showed no significance.

presented, all pursuit factors correlated with each other. This statistic suggests that those agencies having substantial pursuit factors in one category were more likely to have higher levels of items mentioned among other factors. In this sense, high levels of initiation, environmental, operational, and termination factors were all significantly related at the bivariate level; therefore, pursuit policies containing more cumulative factors in one area were more likely to have a higher level of cumulative factors in others. However, none of the cumulative pursuit factors were related to other variables in the analysis. The only other significant correlation was between officer number and population size, simply

indicating that the number of sworn officers was related to the population of the service area.

**Table 8. Correlations of pursuit factors, policy type, agency centralization, and agency size.**

	E1	I1	O1	T1	Ptype	Size	Pop.	Cent.
E1	1.000	.205**	.182**	.526**	.050	.074	.063	-.001
I1	.205**	1.000	.229**	.368**	.035	.049	.055	.132
O1	.182**	.229**	1.000	.260**	-.067	-.004	.049	.131
T1	.526**	.368**	.260**	1.000	.050	.044	.025	.065
Ptype	.050	.035	-.067	.050	1.000	.113	.043	.044
Size	.074	.049	-.004	.044	.113	1.000	.636**	.005
Pop.	.063	.055	.049	.025	.043	.636**	1.000	.044
Cent.	-.001	.132	.131	.065	.044	.005	.044	1.000

*Note:* \*\*Correlation is significant at the 0.01 level (2-tailed)  
 E1 represents the cumulative environmental factors mentioned  
 I1 represents the cumulative initiation factors mentioned  
 O1 represents the cumulative operational factors mentioned  
 T1 represents the cumulative termination factors mentioned

Since policy type and centralization factors neither correlated to each other or with any other variable in the analysis. In an effort to examine how emphasis placed upon pursuit factors correlated with the other variables, the second correlational analysis utilized a cumulative measure of emphasis given to pursuit factors.

The correlational analysis presented in Table 9 reveals that the pursuit factors (based upon emphasis in policy) generally correlated with one another with one exception. The environmental factors (E1B) did not correlate with the initiation (I1B) factors. However, the analysis did reveal significant correlations between pursuit factors, centralization, and policy type. Centralization correlated (.269\*\*) with initiation factors

(I1B) which indicated that more centralized departments placed significantly higher emphasis on the decision to initiate a police pursuit.

**Table 9. Correlations of emphasized pursuit factors, policy type, agency centralization, and agency size.**

	E1B	I1B	O1B	T1B	Ptype	Size	Pop.	Cent.
E1B	1.000	.084	.316*	.568**	.244**	.139	.147	-.079
I1B	.084	1.000	.370*	.407**	.119	.214	.168	.269*
O1B	.316*	.370*	1.000	.401*	-.006	-.111	-.079	.150
T1B	.568**	.407**	.401*	1.000	.152	.194	.205	.034
Ptype	.244*	.119	-.006	.152	1.000	.113	.043	.044
Size	.139	.214	-.111	.194	.113	1.000	.636**	.005
Pop.	.147	.168	-.079	.205	.043	.636**	1.000	.044
Cent.	-.079	.269*	.150	.034	.044	.005	.044	1.000

*Note:* \* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

E1B represents the cumulative emphasis placed on environmental factors, ranked 1 to 5

I1B represents the cumulative emphasis placed on initiation factors, ranked 1 to 5

O1B represents the cumulative emphasis placed on operational factors, ranked 1 to 5

T1B represents the cumulative emphasis placed on termination factors, ranked 1 to 5

In respect to policy type, this organizational variable positively correlated (.244\*\*) with environmental factors (E1B). This statistic revealed that departments with less individual discretion placed a higher emphasis on environmental conditions and police pursuit. Again, other organization characteristics such as officer size and population service area revealed no significant correlations with other variables in the analysis. As mentioned earlier, there was a significant correlation between these variables.

Critical decision-making in the field of policing is complex to say the least. These decisions potentially involve many variables that have

yet to be discerned. However, the extant literature has focused on a number of important factors implicated in understanding critical decision-making in this area as well as the consequences of different courses of action.

In the present analysis, there was a substantial amount of variation in perceptions of policy restrictiveness. However, the normative perceptions of policy discretion were restrictive, mild or severe. In fact, sixty-five percent of the departments perceived their policies to be in one of the two categories. Conversely, the pure judgement and the discouraged categories were non-normative and represented the two categories mentioned least often. These findings suggest that most police policies are neither highly restrictive nor discretionary but contain elements of both orientations.

### Multivariate Analysis

To test whether the major independent variables predicted perceptions of organizational centralization and policy restrictiveness, two multivariate analyses were conducted. Tables 10 and 11 present policy type and centralization as dependent variables regressed on the cumulative initiation, environmental, termination, and operational factors as well as officer size, and years of policy existence.

Table 10 reveals that the regression model using policy type as the dependent variables was not significant. Only one independent variable

(years of policy existence) revealed a significant prediction, indicating that as years of policy existence go down perceptions of restrictiveness increase. Newer policies, or recently modified ones, were perceived to be more restrictive than older policies. The second regression model utilized centralization as the dependent variable and used the same independent variables. Again, the regression model was not significant and no significant predictors were found.

**Table 10. Regression analysis of policy type by selected independent variables**

	Standardized <i>beta</i>	<i>T</i> -Value	Sign.
Cumulative # of Initiation Factors (I1)	-.036	-.397	.692
Cumulative # of Environmental Factors (E1)	.057	.671	.503
Cumulative # of Termination Factors (T1)	.075	.715	.475
Cumulative # of Operational Factors (O1)	-.082	-.954	.341
Officer #	-.100	-1.431	.154
Years of Policy Existence	-.139	-1.995	.047
Centralization	-.045	-.650	.516

*Regression Model is non-significant @ .263.*

**Table 11. Regression analysis of centralization by selected independent variables**

	Standardized <i>beta</i>	<i>T</i> -Value	Sign.
Cumulative # of Initiation Factors (I1)	-.109	-1.172	.243
Cumulative # of Environmental Factors (E1)	.031	.357	.722
Cumulative # of Termination Factors (T1)	-.045	-.421	.674
Cumulative # of Operational Factors (O1)	-.040	.454	.650
Officer #	-.007	-.105	.916
Years of Policy Existence	-.040	-.561	.575
Policy Type	-.047	-.650	.516

*Regression Model is non-significant @ .872.*

Consistent with the correlational analysis, years of policy existence emerged as a factor related to the restrictiveness of police pursuit policy. As noted, there may be problems with construct validity with both the centralization and policy type. The use of ordinal level measurements as dependent variables (though often used in multivariate analysis) may not have represented a necessary degree of linear variability. As presented, the independent variables (see tables 10 and 11) did not predict perceptual degrees of centralization or policy restrictiveness.

### Content Analysis

The content analysis of pursuit policies was conducted to supplement the survey results and to calculate alternate measurements of policy restrictiveness. Though policies contain restrictions and prohibitions on officer behavior in pursuit driving, these various factors are usually scattered throughout and not presented in a systematic fashion. Most pursuit policies are sub-divided into policy and procedure statements. Few pursuit policies have substantive sub-sections devoted to restrictive statements. Additionally, prohibitive statements are normatively contained within procedural subsections.

The content analysis utilized two independent coders and recorded three different content areas. First, the policies were examined to see if a sub-section entitled restrictions (or some similar category (i.e., rules) was

included in the document. If an appropriate sub-section was included, the policy code was labeled 1; subsequently, if no appropriate subsection existed, the policy was coded as 0. Second, where the restriction code was equal to 1, coders counted the actual number of restrictions regardless of their substantive nature. Third, coders were instructed to read through each policy and count the number of prohibitive statements, excluding those contained in the restriction sub-sections. Taken together the content analysis recorded whether a restriction sub-section existed, the number of restrictions within the sub-section, and the number of latent prohibitive statements throughout the policies. In cases where coding disagreements occurred, the two coders and a third observer reconciled the differences.

Table 12 provides descriptive information on policy restrictions and prohibitions. The table revealed that approximately 28 percent of the policies in the sample contained a restriction sub-sections, with the

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**Table 12. Content analysis characteristics of policy restrictions and prohibitions (n=183)**

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	<u>Number(%)</u>	<u>Mean</u>	<u>Standard Deviation</u>
Policy Restrictions	51 (27.9)	2.00	3.77
Policy Prohibitions	143 (78.1)	3.01	2.78

---

*All percentages represent valid ones.*

average number of restrictions being 2. With regard to prohibitive statements, the majority (78%) of policies contained prohibitions, which averaged about 3 per policy.

The correlational analysis in table 13 compares the numbers of restrictions and prohibitions to officer size, policy type, and centralization. There is again correlation between cumulative content in each of the factor areas. None of the cumulative factor indexes correlated with the number of restrictions or prohibitions. The analysis

**Table 13. Correlations of restrictions, prohibitions, and major independent variables (n=183)**

	E1	I1	T1	O1	Ptype	Officer#	Cent.	Restr.	Prohit.
E1		.205**	.526**	.182**	-.050	.074	-.001	.030	-.014
I1	.205**		.368**	.229**	-.035	.049	.132	.008	-.094
T1	.526**	.368**		.260**	-.050	.044	.065	-.004	-.025
O1	.182**	.229**	.260**		.067	-.004	.131	.060	-.052
Ptype	-.050	-.035	-.050	.067		-.113	-.044	-.048	-.003
Officer#	.074	.049	.044	-.004	-.113		.005	.134	-.079
Cent.	-.001	.132	.065	.131	-.044	.005		.035	-.089
Restr.	.030	.008	-.004	.060	-.048	.134	.035		-.192**
Prohit.	-.014	-.094	-.025	-.052	-.003	-.079	-.089	-.192**	

**\*\* probability=.001, \* probability=.05**

revealed a negative relationship between prohibitions and restrictions. A probable explanation for the inverse relationship is that if restrictions are explicit in policies, there may be less of a need to include prohibitive statements (or implicit restrictions). There was no significant correlations between restrictions, prohibitions, centralization, or policy



type. This observation suggested that perceptions of policy restrictiveness are unrelated to the number of prohibitions and restrictions contained in policy.

As mentioned in chapter three, the pursuit policy restrictiveness measurements do not provide systematic methods by which to observe policy type. Though some of the measurements seem conceptually sound (e.g., the Kennedy et. al 1992 scale used in this research), they are wholly too subjective and present very broad parameters for categorization. Hence, there is a need for conceptually appropriate restrictiveness rating systems that can be subjected to some level of quantification. The present study, therefore, attempts such a rating scale.

Based upon the content analysis, five rating scales were derived that are conceptually related to the scale utilized by Kennedy et al. in 1992 as well as in the present research. The discouraged category according to Kennedy et al. is the most restrictive. In this category, pursuits are allowed as last resorts. These policies are (according to Kennedy et al. 1992) clearly prohibitive and restrictive. Therefore the first modified rating (type 5) contains a non-normatively level of total restrictions and prohibitions. A rating 5 policy is indicated if the number of total restrictions and prohibitions are one standard deviation above the mean. In the present analysis, the mean number of restrictions and prohibitions was 5 with a standard deviation of 4. For the modified

scale, all policies having a total number of restrictions and prohibitions of 9 or higher were placed in *rating 5 category*.

The second category created by Kennedy et al. (1992) is restrictive severe. In this category clear restrictions are placed on the process of pursuit and the policy lists a number of prohibitions. Since this category again discourages police pursuit and outlines numerous procedures, the second modified category is indicative of policies that have average restrictions and prohibitions and the cumulative number of factors addressed is above the mean. The mean number of cumulative factors was calculated at 72. Therefore, policies having restrictions and prohibitions and a mean rate of cumulative factors over 72 were placed in the *rating 4 category*. The *rating 3 category* is founded when restrictions and prohibitions are present and a less than average number of factors are addressed. According to Kennedy et al. (1992), the restrictive mild category is reasonably clear but contains fewer absolute restrictions and/or prohibitions.

The judgement limited and judgement pure categories are the least restrictive ones created by Kennedy et al. (1992). The judgement limited asks personnel to justify pursuit and may incorporate a number substantive areas but a high degree of discretion is evident. Policies in the judgement pure category contain few procedural guidelines and allow for a high degree of individual discretion. For the present analysis, *rating 2* is where there are no restrictions or prohibitions but the policy

contains an above average level of content. Finally, *rating 1* is where there are no restrictions or prohibitions and the level of content addressed is average or below.

Table 14 presents characteristics of the 183 policies in the sample. The largest category for the sample is rating 3, followed by rating 4. Accordingly, approximately 90 percent of all policies examined contained some restrictions or prohibitions. More policies were in the highest restrictive category (18%), rating 5, than in the most discretionary category (6%), rating scale 1.

**Table 14. Modified restrictiveness scale and sample characteristics (n=183)**

Category	<u>Frequency</u>	<u>Percentage</u>
<b>Rating 5</b> <i>(prohibitions and restrictions 9 or above)</i>	18	33
<b>Rating 4</b> <i>(prohibitions and restrictions below 9, cumulative factors 72 or higher)</i>	63	34.4
<b>Rating 3</b> <i>(prohibitions and restrictions below 9, cumulative factors below average of 72)</i>	68	37.2
<b>Rating 2</b> <i>(no prohibitions or restrictions, cumulative factors above average 72)</i>	8	4.4
<b>Rating 1</b> <i>(no prohibitions or restrictions, cumulative factors below average of 72)</i>	11	6.0

*All percentages represent valid ones.*

Table 15. Correlational analysis of selected variables with dummy-coded restrictiveness categories.

	<u>Rating 1</u>	<u>Rating 2</u>	<u>Rating 3</u>	<u>Rating 4</u>	<u>Rating 5</u>	<u>Policy Years</u>	<u>Ptype</u>	<u>Centralization</u>
Rating 1								
Rating 2	-.054							
Rating 3	-.194**	-.054				.049	.086	-.050
Rating 4	-.121	-.164**	-.194**			.217**	.037	-.054
Rating 5	-.181**	-.102	-.164**	-.121		.010	-.037	.133
Policy Years	.049	-.153*	-.367**	-.367**	-.181**	.007	-.050	-.018
Policy Type	.086	.217**	-.550**	-.342**	-.550**	-.134	.020	-.072
Centralization	-.050	.037	-.037	.007	-.134	-.144**	-.144*	-.026
		-.054	.133	-.050	.020	-.026		-.044
				-.018	-.072		-.044	

\*\*=probability of .001 or higher, \*=probability of .05.

Table 15 presents correlational analysis using the dummy-coded rating categories, policy years, policy type, and centralization. For this analysis the modified ratings were recoded 1, for being in the scaled category and 0, for outside the scaled category. Excluding logical scale correlations, years of policy existence correlated once again with policy type and with one of the dummy-coded scale categories, rating 2. This finding suggests that the longer the policy has existed the more likely it is to be in rating 2, a less restrictive category.

**Table 16. Comparison of policy type and modified restrictiveness scale**

<u>Discouraged</u>	<u>Restrictive Severe</u>	<u>Restrictive Mild</u>	<u>Judgement Limited</u>	<u>Judgement Pure</u>
15 (8.2%)	64 (35%)	55 (30%)	40 (22%)	9 (5%)
<u>Rating 5</u>	<u>Rating 4</u>	<u>Rating 3</u>	<u>Rating 2</u>	<u>Rating 1</u>
33 (18.0)	63 (34%)	68 (37%)	8 (4%)	11 (6%)

*Chi-Square statistic revealed no significant relationships between categories.*

Table 16 compares the modified policy rating scale to the restrictiveness scale of Kennedy et al. (1992) for the sample of police agencies. In both the original and modified ratings, over 65 percent of the agencies fall with categories 3 and 4, restrictive severe or mild. Policy agency perceptions indicate that restrictive severe is the normative category, while the modified rating scale suggests a more neutral normative position, indicating that most policies are mildly restrictive.

There was a difference when comparing the previous scale and the modified one in the highest restrictive category. For the modified scale, more agencies (18%) in the sample fell within this category as compared to the previous scale (8.2%). Conversely 27 percent and 10 percent, respectively, were in the previous and modified scale least restrictive categories. It should be noted that neither the previous scale nor the modified one is capable of measuring agency compliance to the pursuit policy. In this sense, a content analysis may indicate a relatively restrictive policy, while informal dimensions of organizational behavior reflect a “business as usual mentality.” The perceptions of police pursuit policy in the present research indicate more discretion than the modified scale would suggest.

### Research Questions

Several important research questions have guided the present study. The first research question examines whether organizational features (i.e., officer size, level of centralization, and policy type) predict or associate with the composition of police pursuit in terms of the total numbers of factors the respective policies address. For the most part, these organizational variables neither associated with nor predicted the composition and accumulation of factors addressed in policy. Accordingly, there was no relationship between officer size, and policy type through bivariate correlational analyses. The centralization variable

correlated with the cumulative emphasis placed on initiation factors, which indicated that more centralized agencies addressed a greater number of pursuit initiation factors. The extent to which centralization and formalization are associated most likely explains this correlation. However, as mentioned earlier, the centralization variable is a complex one and may suffer from construct validity problems. Excluding the centralization variable, the analysis reveals that the majority of organizational factors were unrelated to policy content and composition.

The second research question examines whether organizational variables relate to the perceived restrictiveness of police pursuit policies. Perceived restrictiveness measured on the Kennedy et al. (1992) scale revealed no correlation between policy type and centralization, initiation factors, operational factors, termination factors, and officer size. There was an association between the policy type and the level of emphasis placed on environmental factors. This relationship suggests that perceptions of restrictiveness increase as environmental factors included in policy increase. The environmental factors included time of day, climate, type of location, type of roadway, and level of traffic. Since safety to the public is of primary concern, this association may indicate this value orientation with respect to the agencies in the sample.

Both the centralization and policy type factors reflected organizational perceptions. More specifically, they addressed individual perspectives that may or may not adequately reflect formal or informal

dimensions of the organization. The present research revealed no relationship between policy type and centralization. Most departments were perceived as only moderately centralized. However, more agencies reported being highly decentralized (23.9%) as opposed to highly centralized (6.7%). Departmental perceptions concerning centralization might be influenced by decentralized organizational structures such as community policing models. It might seem logical that the policy type scale and the centralization scale relate to one another since they both potentially involve limitations on individual officer discretion. As revealed, neither the bivariate analysis examining the relationship between the two scales through cross tabulation or correlation suggested a significant relationship. Nothing in the present analysis can empirically explain the lack of correlation. However, there are two plausible explanations.

First, the centralization and policy type scales may suffer from a criterion validity problem. In this sense, the lack of predictive validity may indicate that one or both of the measures were invalid or inaccurate. However, the description of each policy type category (contained in the survey) potentially minimized the problem of miss-specification of policy category. Additionally, the nature of centralization and decentralization may be more common to departmental analysis, resulting in less perceptual confusion. It would seem that both measures possessed adequate face validity.



A second explanation involves macro and micro organizational perspectives. The centralization factor clearly addressed macro organizational orientation, whereas the policy type factor reflected a micro orientation. In this sense, the expectation of convergence between policy type and centralization may reflect an ecological or individualistic fallacy in applying macro orientations too definitively to micro processes or vice versa.

This second explanation implies that there may be no substantial relationship between policy restrictiveness and centralization. Indeed Robbins (1990) suggests that the relationship between centralization and formalization is often ambiguous since high formalization can be associated with either decentralization or centralization. The variations in pursuit policy type make this lack of association very real. The very structure of police pursuits may make this association weak. Pursuits are highly unstructured and non routine events containing a vast number of task exceptions. Simply stated, police pursuits vary dramatically in every conceivable way. Non routine and unstructured tasks are extremely difficult to rigidly formalize; therefore, they reduce managerial ability to place restrictions on behavior simply because of variations in the structure of pursuits facing decision-makers in the field. Therefore, the explanation for the lack of association is that there is none. Both the cross tabular and correlational analysis revealed no relationship between the two measures of orientation.

The fourth research question observes the relationship between the policy content factors, centralization, and policy type. The first bivariate analysis, which observed the amount of content in each factor area, revealed no significant correlation between policy factors, policy type, and level of centralization. However, the second correlational analysis, which examined the amount of emphasis placed on the substantive factors, reveals two significant relationships. As addressed, there was a positive correlation between policy type (perceived restrictiveness) and environmental factors. There was also a correlation between the emphasis placed on initiation factors and centralization. In this sense, perceived centralization is related to more emphasis being placed on the initiation of police pursuits. It would seem logical that highly centralized agencies control critical decision more than decentralized ones.

Do organizational perceptions of policy type reliably reflect substantive policy content? The research found no relationship between policy type and substantive content. Further, the number of restrictions and prohibitions contained in policy was unrelated to policy type. In essence, the actual number of restrictions and prohibitions in pursuit policy had no influence on perceived restrictiveness. Three possible explanations are offered for this finding. First, informal processes may be more formidable than formal ones in critical decision-making. Second, the survey may not reflect overall organizational values and

orientations. The final explanation involves whether the restrictiveness scale serves as a valid measurement of policy type.

The last two research questions specifically address the validity of the Kennedy et al. (1992) restrictiveness scale. When comparing the modified rating scale (based upon actual policy content), the previous scale and modified one placed the majority of the policies within the same two, conceptually comparable, categories. Using the Kennedy et al. (1992) scale, the majority of policies fit within the restrictive mild or restrictive severe categories. The modified scale places the majority of policies in categories 4 and 3, which is comparable to the restrictive categories mentioned above. However, the content-based modified scale places more policies in the highly restrictive (4) or discouraged (5) category than the previous scale, while the previous scale places a higher percentage in the most discretionary categories.

The previous research conducted by Kennedy et al. (1992) suggests that the norm for agencies would be in the least restrictive categories. This study contradicts that finding; both the modified and the Kennedy et al. scale suggests that policies are somewhat more restrictive. One problem with the Kennedy et al. scale is the judgmental sampling frame utilized in the research. Due to the probability nature of the present research, it may be considered more comprehensive or valid.

In this research, there was no relationship between the number of restrictive and prohibitive statements in pursuit policy and perceptions

of organizational restrictiveness. However, the modified (content-based) scale compares with the perceptions of survey results for the majority of respondents. In light of the majority consensus, the differences within the extreme categories may be less problematic.

This research has analyzed restrictiveness in the context of perceptions and actual policy content. It is apparent that the perceptions of policy are less restrictive than the policies would suggest. The importance of informal structures would most likely illuminate some of the differences. As many scholars have noted, American policing has a distinct and rather complex culture.

The modified restrictiveness scale attempts to quantify the conceptual nature of the previous restrictiveness scale. Therefore, pursuit policies that barely miss certain categories or that can barely make others may explain the differences at the extreme.

There were two positive associations between policy type, the modified scale, and years of policy existence. The number of years a policy had existed was related to it being more discretionary in nature. In sum, policies with less tenure tended to be perceived and scaled as more restrictive. This observation would tend support a change in policies on police pursuit toward more restrictive as opposed to less. The dissipative structural model addressed earlier indicates that organizations proceed through symbolic changes, then resynthesize to manage external or internal complexity. Perceptual differences in policy

type compared to actual content may indicate that agencies, to some extent, are saying one thing and doing another. The concluding chapter examines police pursuit and traditional deadly force policy changes as a process of dissipative structures and discusses the need for further research on police pursuit policy.

## CHAPTER SIX:

### Summary and Conclusion

Much of the existing literature has suggested that there is a high degree of discretion contained within police pursuit policy. In contrast, this research has revealed that generally policies contain a substantial amount of prohibitions and restrictions on individual officer behavior. Police pursuit policies, however, were perceived to be less restrictive than their content would suggest. The available literature that examines the discretionary nature of police pursuit policy does not necessarily contradict the findings of this inquiry. Hence, the present analysis may indicate a substantial change in police pursuit policy, at least in formalized policy. As Geller and Scott (1992) observe, developmental changes in police use of deadly force may provide the best historical continuum for observing subsequent changes in police pursuit policy.

The dissipative structure model discussed in chapter two provides a provocative context in which to observe developmental changes in police use of lethal force: firearms, rifles, shotguns, or vehicles. In the following paragraphs, the sequential stages of the dissipative structural model are discussed in light of specific events related to changes in lethal force policy in the United States.

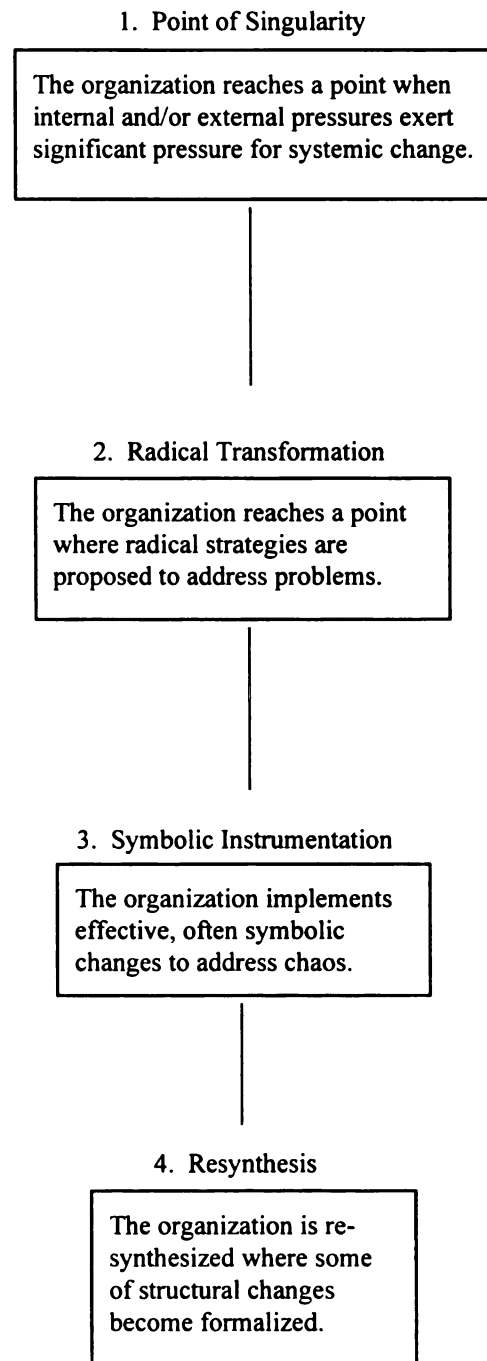
In context of the dissipative structure model (see figure 1), a structure reaches a point of singularity. Some trigger event causes the organization to take a corrective posture and internal of external

pressure is exerted on the organization to take a corrective posture. As figure 1 presents, the next step in the process is transformation using radical strategies. This is where the organization reaches a point where a major adaptive response is essential. In the third stage (symbolic or ineffective acting), the system implements the radical change ineffectively or somewhat symbolically to appease external or external influences. The fourth step in the model is where the organization goes through a resynthesis or transformation of sorts and some of the alternate responses become part of the new organizational structure. The dissipative structural process is dynamic and continues to impact and resynthesize organizational structures over time (Leifer 1989; Gemmill & Smith 1985).

As Geller and Smith (1992) suggest, the evolution of traditional deadly force policy and be the most appropriate venue from which to observe changes in police pursuit policy. The authors conceptualize traditional lethal force matters (i.e., the use firearms, shotguns, and rifles) as being synonymous with the use of police vehicular pursuit.

In the 1960s, the first systematic research began to emerge on the use of deadly force by law enforcement in the United States (U. S. Department of Justice 1999; Alpert & Fridell 1992). The early research revealed two problematic findings. First, a small proportion of officers were disproportionately involved in use of force incidents, and second, the use of force was utilized disproportionately by race, class, and

**Figure 1. Dissipative Structure Model**





gender. These important findings caused various advocacy groups to become involved in police reform. During the same period, the 1960s Presidential Commissions verified the use of unreasonable amounts of force being used against citizens, especially in urban areas (Walker & Bumphus 1992). Fyfe (1979) found that the minorities and the poor were much more likely to have deadly force used against them as compared to non-whites in similar situations. These various events, in the context of the dissipative structural model, served as important points of singularity that exerted substantial pressure upon police organizations to change.

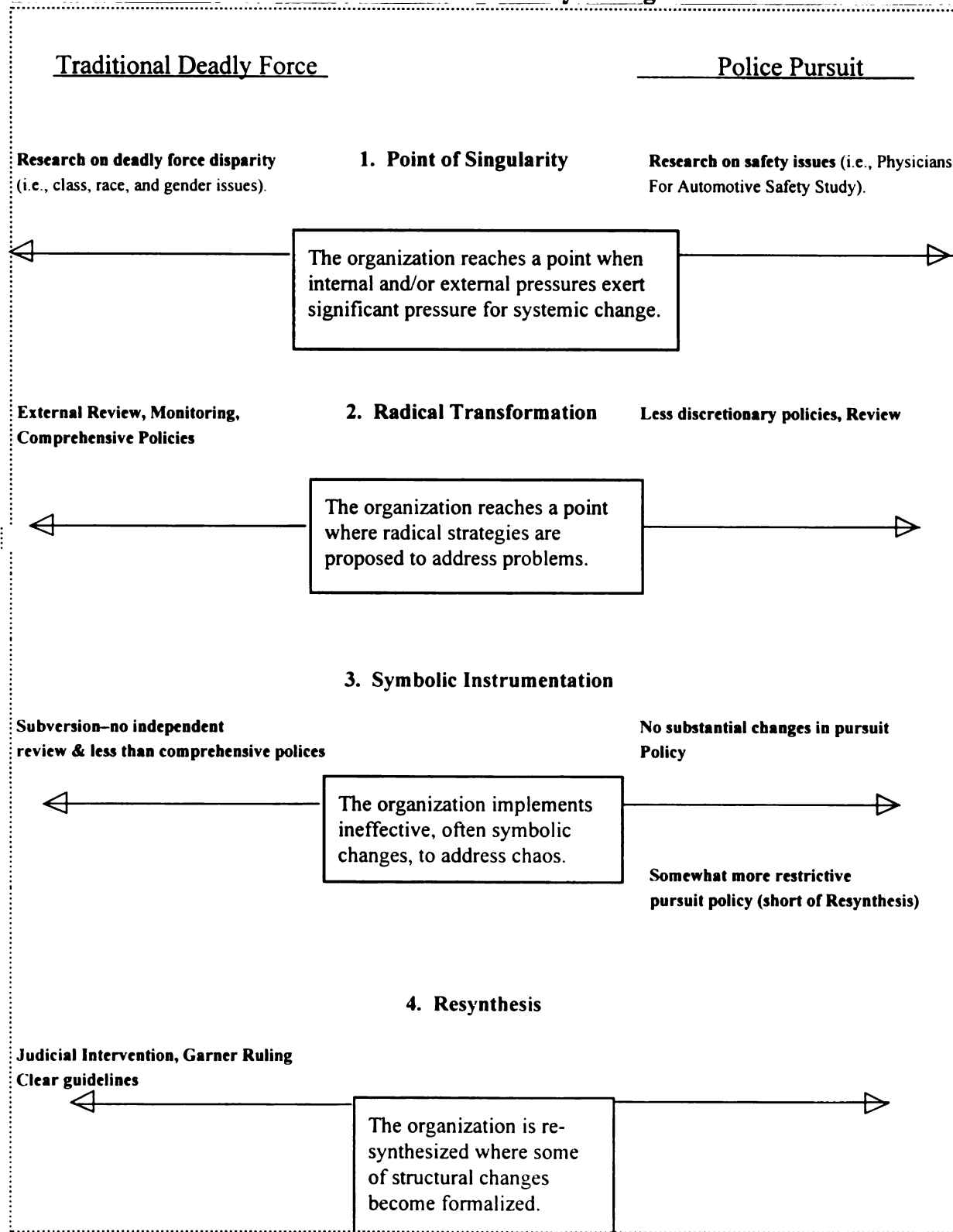
As for changes in police pursuit policies, evidence in the 1960s suggested that the use of police vehicular pursuit costs lives. The Physicians for Automotive Safety Study in 1968 served as a major point of singularity that pressured American law enforcement agencies to take a look at the policies related to police pursuit. Though other reports concluded (such as Fennessy et al. 1970; California Highway Patrol 1983) that police pursuit was not as life-threatening as the earlier study suggested, American police departments were pressured into making changes to existing policies or creating new policies to address these various concerns (Alpert & Fridell 1992). Not only safety but also liability concerns influenced changes in police pursuit policies (del Carmen & Kappeler 1990; Alpert & Fridell 1992). The emergence of research observing safety and liability issues served as points of singularity that

forced law enforcement to make changes in police pursuit policy. The points of singularity in deadly force and police pursuit policies are presented in figure two.

One of the radical responses to police use of deadly force traditionally was the recommendation by the 1967 Presidential Crime Commission to have police incidents investigated externally. The Commission advocated the creation of external or civilian review procedures that observed police misconduct. These strategies first appeared in major cities like Chicago, Philadelphia, Los Angeles, and Washington DC, where substantial pressures for change existed (Littlejohn 1981; Walker & Bumphus 1992; Walker 1992). At the same time, the judiciary was beginning to address the problem of police use of deadly force as an issue of due process. Both judicial and civilian intervention in policing were radical strategies proposed to handle what some scholars and activists viewed as substantial problems.

During the same time, scholars, practitioners, and activists began to consider methods to control officer discretion in critical decision making by creating comprehensive policies that addressed appropriate actions under various contexts. Both use of force and pursuit driving policies were developed by law enforcement agencies across the United States. As with deadly force traditionally, judicial intervention exerted pressure as well on police agencies. In this sense, due process and liability issues influenced the composition of police policies in these areas

**Figure 2. Dissipative Structure Model: Traditional Deadly Force  
And Police Pursuit Policy Changes**



(Alpert & Fridell 1992). In 2001, these various changes in policing may not seem to be radical, but they constituted fundamental philosophical changes in American policing.

According to the dissipative structure model, organizations proceed through periods of symbolic or ineffective acting. The radical strategies to facilitate organization change are more likely window-dressing to appease internal or external pressures. In the area of police misconduct and deadly force, new policies and monitoring systems were developed, but these various initiatives received limited acceptance among police personnel and often these processes were subverted (U. S. Department of Justice 1999). One aspect of the civilian review strategy was that the early boards were manned with former police officers who would not be considered independent evaluators. As Littlejohn (1981) concluded, many of these new review structures were symbolic and had no real impact upon critical issues related to police misconduct.

Currently, nearly all police departments have policies addressing both use of force and police pursuit driving. As some scholars have noted, these policies (especially early ones) contained a significant amount of discretion and did little to control or regulate police behavior on the street (Alpert & Fridell 1992; Kennedy et al. 1992). Recent scholars have also suggested that the normative police pursuit policy can be characterized as a discretionary, as opposed to restrictive, one (Kennedy et al. 1992).

A reformation or resynthesis occurred in use of force police largely due to judicial intervention. In 1978, the Garner case (discussed earlier) invalidated the fleeing felon rule and gave specific guidelines as to the use of deadly force by law enforcement. This important decision had an immediate impact on policing in the United States and, for the first time, put significant constraints on officer discretion. Today all police policies on the use of force are cognizant of the ruling made in the Garner case.

Though there has been some judicial decision-making in the area of police pursuit driving, these decisions (for the most part) have not raised federal concerns as in the Garner decision. No Garner-type decision has been handed down in relation to police pursuit policy. Pursuit issues more often deal with liability factors and rarely consider larger questions of constitutionality.

Changes in traditional deadly force policy are consistent with the sequences of the dissipative structure model. There have been points of singularity, radical strategies, symbolic acting, and resynthesis where structural changes have occurred. The evolution of police pursuit policy would appear at least a step behind traditional deadly force policy. In this sense, it is less obvious that fundamental structural changes have occurred.

If Geller and Scott (1992) are correct in assuming the comparability among changes in deadly force and police pursuit policies,

the resynthesis within the latter category will most likely be influenced by judicial intervention that limits organizational ability to act out symbolically. There is however some inference from the present research that police policies are becoming formally more restrictive than in the past. Whether or not restrictive policies relate to individual compliance is the important question, but answering it is beyond the scope of this research.

With regard to complex organizational theory as propounded by Etzioni, the coercive nature of the policing mandate as the primary compliance structure would likely force a substantial amount of ineffective acting. In this sense, law enforcement officers who view their mandate as enforcement at any cost would likely by-pass rules and regulations that suffer from ambiguity. Absent an event such as a major constitutional ruling, police policy regarding the use of deadly pursuit force will continue to promote a great deal of controversy.

The present research has focused on the relationship between pursuit factors, policy type, centralization, and sworn officer and service population size. In terms of policy content, all pursuit factors positively correlated, with high content among one set of factors relating to high content among the others. None of the pursuit factors through substantive content correlated with other variables in the analysis (i.e., policy type, centralization, sworn officer size, or service area size). However, the correlational analysis that observed emphasis placed on

pursuit factors revealed correlations between both policy type and centralization.

High centralization positively correlated with an increased emphasis placed on initiation factors. Arguably, initiation factors lend themselves to lesser degrees of discretion by administrations who seek to maintain control over officer behavior. These factors may be emphasized so highly that the need to place further concentration on other substantive factors is minimized. Hence, this may explain the lack of correlation between centralization and operational, environmental, and termination factors.

The correlation between policy type and increased emphasis on environmental factors is likely best explained by examining the nature of these factors. Environmental factors are easy to define and control since many contain clear-cut and highly observable elements. For example, if the roadway is wet then it is easy to observe and therefore control officers' behaviors. Additionally, there seems to be increased levels of environmental uncertainty to the point where administrative emphasis is highly necessary. For example, there are large numbers of variations in the occurrence of high speed chases in crowded pedestrian conditions.

There are a number of limitations to the present research. First, though the research had over a fifty percent response rate, a higher rate of return (preferably over 60 percent) would have increased the generalizability of the findings. Second, the research can not be

generalized to departments situated in service areas of less than 50,000 in population, since the sampling procedure excluded such agencies. Finally, as with most organizational surveys, researchers may not always be certain that those competent and knowledgeable responded the questionnaire.

This research is presently the only study to utilize a national probability sampling frame while also examining organizational factors and associations with pursuit policy elements. While Kenney and Alpert (1997) used a national probability sample, their primary research focus was on pursuit policy elements and organizational mechanisms for examining pursuits that have occurred. Although the Kennedy et al. (1992) research involved an appropriate judgmental sample, the non probability nature of the research does not permit broad generalizations.

In the present analysis, the single most influential factor in police pursuit dealt with individual and officer safety. Ninety-nine percent of the policies addressed this important issue. Additionally, a very high amount of emphasis was placed upon this termination factor. This finding indicates that while most police departments support the necessity of police pursuit there is a cost versus benefits approach to continuation in any initiated pursuit.

Years of policy existence emerged as the single most important organizational factor related to policy restrictiveness based on both perceptions and policy content. This finding suggested that newer



polices are substantively and perceptual more restrictive in nature. Consistent with the dissipative structural model, this finding may also indicate incremental movement toward organizational resynthesis.

The current research emphasized a national probability sample that permits generalizations across departments with varying service area populations. Not only does the research permit a descriptive analysis of pursuit policy, inferential and correlational analysis were conducted. These analyses allow for the examination of major variables and associations between measures such as departmental centralization and degree of emphasis placed on individual elements of the pursuit policy. In part, this research has relied upon an associational approach. Future research is needed to examine the nature and consequences of police pursuit decision-making.

The present research has conceptualized police use of vehicular pursuit as a deadly force issue. In this sense, no power is a democracy is more direct and instant. Much of the research on police pursuit (including the present) has concentrated on policy restrictiveness in a formal sense. As such, the research examined restrictiveness as opposed to compliance to policy. A policy may be quite restrictive, but compliance to policy may be nonexistence. While it might be hypothesized that restrictive policies relate to better control and fewer pursuits, the complexity of informal police structures suggest cause to reframe from broad generalizations.

One way to examine restrictiveness and compliance to policy would be to compare critical incident data to a sample of agencies and compare policy restrictiveness to frequency, prevalence, and incidence of these occurrences. Other variables such as the nature and frequency of in-service training could shed some light on the relationship between restrictiveness and compliance to police pursuit policy.

Research conducted at the organizational level assumes that the perceptions given by one individual represent the organization. Though organizational research is normatively carried out in this manner, individual officer perceptions of policy discretion may be more valid. This type of analysis might better illuminate the complex relationship between formal and informal police cultures.

Wells and Falcone (1997) have addressed the importance of multiple data collection strategies specific to police pursuit research. These multiple strategies might better include existing data, individual and organizational surveys, field experiments, and content analysis of policies, procedures, and restrictions.

This research has conceptualized police pursuit consistent within the dissipative structure perspective and as an issue of deadly force. The body of research that examines police pursuit as a deadly force issue is growing. Both proponents and opponents realize the need to control the use of police pursuit; the disagreement, however, involves the level

and nature of control. The debate will likely go on for some time to come with strong advocates on both sides.

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# APPENDIX

**Police Pursuit Policy Questionnaire  
College of Law Enforcement  
Eastern Kentucky University**

<b>Demographic Information</b>
--------------------------------

1. What is the official name of your agency? \_\_\_\_\_
2. Please list the city and state where your agency is located. \_\_\_\_\_
3. How many sworn officers are employed by your agency? \_\_\_\_\_
4. What is the population of your agency's service area? \_\_\_\_\_
5. Which category applies to your agency ?

- ☐ Municipal
- ☐ County.
- ☐ Consolidated Municipal/County
- ☐ Sheriff's Agency

6. Does your agency have a formal/written police pursuit policy?

- ☐ Yes
- ☐ No

7. How many years has the current policy existed? \_\_\_\_\_

8. If a formal/written policy does not exist, does your agency operate under an informal/unwritten policy?

- ☐ Yes
- ☐ No
- ☐ Not Applicable

<i><b>If your agency has neither a written nor an unwritten policy, please stop at this point and return the questionnaire in the envelop provided, otherwise please continue.</b></i>
--

9. Using the following Centralization Scale, please check the rating that most applies to appropriately applies to your administrative style.

- ☐ Highly Centralized.
- ☐ Mildly Centralized.
- ☐ Moderate.
- ☐ Mildly Decentralized.
- ☐ Highly Decentralized.

### Pursuit Policy Rating Scale

Using the rating scale provided below, please check the category that best describes the level of officer discretion in your department's pursuit policy.

- **Judgement: Pure.** The officer is cautioned only against unreasonable or disproportionate danger to the public. A list of general guidelines may be given; some restrictions, such as "no ramming" and "break-off pursuit of a minor traffic violator if identity is known," may be included.
- **Judgement: Limited.** The officer is made aware of close supervision over his or her decision-making. A long, detailed list of criteria may be given. The general tone is that the officer must justify the decision to pursue, but the policy is to apprehend law-breakers and to support police authority as long as the risk does not outweigh the benefit.
- **Restrictive: Mild.** The policy gives some reasonably clear guidelines regarding when not to pursue. Minimizing risk clearly receives a higher priority than enforcing the law. Officer's liability is likely to be emphasized, but the policy places no absolute restrictions on the type of offense for which one may pursue.
- **Restrictive: Severe.** The burden of proof to justify the pursuit is on the officer. The officer is assured that the decision not to pursue or to break off the pursuit would not be a cause for censure. Clear restrictions are placed on the process of pursuit, and pursuits arising from routine traffic stops typically are prohibited.
- **Discouraged.** Pursuits must meet fairly narrow guidelines, such as probable cause of a dangerous felony, and must be last resort to prevent escape. The policy states clearly that the officer is to avoid pursuits.

### Pursuit Policy Factor List

Please place a *check mark* in the following items if your agency includes them in the police pursuit policy. If these factors are included in the policy, please **rank the level of training emphasis** placed on each of these factors by *circling the appropriate response*.



<b>Initiation Factors</b>
---------------------------

Factor	Ranking Emphasis				
	<i>Circle Choice</i>				
√ Emphasis	High Emphasis				Low
----- Supervisory approval for continuation of the pursuit.	1	2	3	4	5
----- The need to apprehend outweighs the risks to citizens in the vicinity of the pursuit.	1	2	3	4	5
----- Reasonable belief by the officer that the violator is a felon or suspected felon.	1	2	3	4	5
----- Reasonable belief that the violator committed a misdemeanor.	1	2	3	4	5
----- Reasonable belief that the violator committed a serious traffic offense.	1	2	3	4	5
----- Reasonable belief that the violator had committed a non-serious traffic offense.	1	2	3	4	5
----- Reasonable belief that the violator is under the influence of alcohol or drugs.	1	2	3	4	5
----- Primary pursuit vehicle must be a marked vehicle.	1	2	3	4	5
----- Secondary pursuit vehicles must be a marked vehicle.	1	2	3	4	5
----- A limit is placed on the number of units that can be involved in the pursuit.	1	2	3	4	5
----- Pursuits are prohibited when passengers, unrelated to the violation, are present in the vehicle.	1	2	3	4	5

<b>Environmental Factors Associated with the Decision to Initiate the Pursuit</b>
---

----- The time of day.	1	2	3	4	5
----- Weather conditions.	1	2	3	4	5
----- Roadway or traffic conditions.	1	2	3	4	5
----- Lighting conditions.	1	2	3	4	5
----- Area or location such as business or commercial.	1	2	3	4	5
----- Presence of pedestrian or vehicular traffic.	1	2	3	4	5
----- Availability of assistance.	1	2	3	4	5
----- Likelihood of a successful apprehension.	1	2	3	4	5

<b>Termination Factors</b>
----------------------------

----- When circumstances of the pursuit present a safety hazard to the public, officer, or the suspect.	1	2	3	4	5
----- When no supervisor or superior can be contacted to approve the pursuit's continuation.	1	2	3	4	5
----- When the officer loses visual contact with the suspect for an extended period of time.	1	2	3	4	5
----- The pursuing unit loses radio contact with the communications dispatcher.	1	2	3	4	5
----- The pursuing unit is unfamiliar with the area of the pursuit.	1	2	3	4	5
----- The suspect travels the wrong way on an interstate highway, divided highway, or divided roadway.	1	2	3	4	5
----- An officer's decision to terminate a pursuit for safety reasons is not subject to a disciplinary review.	1	2	3	4	5
----- The pursuing vehicle travels into a residential area.	1	2	3	4	5
----- The pursuit travels across state lines.	1	2	3	4	5
----- The pursuit travel across jurisdictional lines.	1	2	3	4	5
----- When the violator can be identified to the point where later apprehension can be accomplished.	1	2	3	4	5
----- The officer has reason to believe the vehicle is being operated by a juvenile.	1	2	3	4	5
----- The pursuing officer has reason to believe the suspect is intoxicated or otherwise impaired and poses a danger to the public.	1	2	3	4	5
----- The policy requires pursuit termination after a specified time occurred or distance has been traveled.	1	2	3	4	5

<b>Operational Factors</b>
----------------------------

----- Firing, at or from a moving vehicle, while engaged in the pursuit.	1	2	3	4	5
----- A maximum speed is specified in the policy.	1	2	3	4	5
----- Shooting at a vehicle to terminate a pursuit.	1	2	3	4	5
----- The pursuing officer is permitted to ram the vehicle being pursued.	1	2	3	4	5
----- Shooting at tires, radiators, etc in order to disable	1	2	3	4	5
----- Forcefully stopping the vehicle by ramming it.	1	2	3	4	5
----- Boxing-in or surrounding the vehicle being pursued.	1	2	3	4	5
----- The use of disabling devices such as tire deflation.	1	2	3	4	5
----- The use of police vehicles in roadblocks.	1	2	3	4	5
----- The channelization of the vehicle being pursued off roadway surfaces.	1	2	3	4	5

<p><b>Please include a copy of your pursuit policy with this questionnaire. Your time and efforts are greatly appreciated. Thank you.</b></p>
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