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MANAGING POLICE AGENTS

By

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ABSTRACT
MANAGING POLICING AGENTS

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This study examines management issues in police departments. Agency theory is used to examine employee attitudes and to assess potential compliance or resistance to policy initiatives. The study focuses on two areas: goal congruence between officers and their chief and officers' job satisfaction. Patrol officers, detectives, and community police officers were examined to appraise management strategies.

Data were collected in two American police departments during the summer of 1997. Job assignments and demographic information were compared to scales of goal congruity and job satisfaction using chi-square, t-tests and regression analysis. The entire data set was analyzed; then each department was analyzed separately.

Goal congruency with the chief was found to be associated with job satisfaction. This association holds for patrol officers, but was less important for detectives and community police officers. Detectives and community police officers had closer goal congruence with their chief than did patrol officers. Officers' level of education had mixed associations with goal alignment and job satisfaction for each job assignment. Officers' tenure and time in their current job assignment were found to be strongly associated with goal congruency. It was concluded that police chiefs need to reconceptualize management problems and tailor their management strategies to the characteristics of their employees.

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**To Julie, Matthew and Kathleen,
for their patience and support.**

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Chapter 1

INTRODUCTION

1.1 Overview of Study

This study explores police management issues by examining officers' goals and job satisfaction. Its purpose is to inform decision makers by identifying potential areas of policy compliance and resistance in police organizations. Identifying potential problem areas is important because it provides insight into how policy can best be designed and implemented.

An economic approach to management is used to further our understanding of behavior in police organizations. Economic approaches are potentially important tools for police managers. They are convenient devices that help to conceptualize the management task. Economic models help to define what policies and actions are possible and how much compliance or resistance can be anticipated. While this study will only attempt to identify potential areas of support of resistance to policy, this approach will help police managers frame other important questions. What incentives or sanctions are needed? What is the cost of enforcing a policy? What resources should be allocated to obtaining feedback? If police managers better understand the complexities of the management task, they can formulate more successful policies and more effectively implement them.

The implementation of community policing provides an opportunity to study police management practices. Community policing has brought about a fundamental shift in policing philosophy. When police chiefs implement new programs like community policing, it is important to know what effect they will have on the organization. Police chiefs need to devise management strategies and monitoring schemes to successfully implement their new policies. Important and controversial programs, such as community policing, provide an opportunity to study police management. The research will address management issues and important implementation issues for community policing. A new and innovative perspective of police management will be presented.

1.1.1 Background to Research

The police are re-examining how they deliver services. The introduction of community policing has prompted the police and academic researchers to re-examine policing philosophies. This reassessment of police management practices inspired this study.

Advocates are claiming that community policing is the next evolutionary step in American policing (McEwen, 1995; NIJ, 1995; Abshire, 1995; Peak, 1994; Rosenbaum, 1994; Normandeau, 1993; Barr, 1992; Trojanowicz & Bucqueroux, 1990; Mott, 1987). Some scholars believe that community policing is incompatible with traditional organizational structure (Abshire, 1995; Wilkinson & Rosenbaum, 1994; Wycoff & Skogan, 1994; Eck & Rosenbaum, 1994; Peak, 1994; McElroy, Cosgrove & Sadd, 1993; Trojanowicz & Bucqueroux, 1990). If this is true, police managers need to redesign their management practices.

Community policing advocates recommend changing problematic structures and procedures to give officers more flexibility to solve problems (McElroy, Cosgrove & Sadd, 1993; Trojanowicz & Bucqueroux, 1990; Weisburd, McElroy & Hardyman, 1988). Traditionalists fear that loosening structural constraints will return the police to the corrupt practices of an earlier era (Redlinger, 1994; McElroy, Cosgrove & Sadd, 1993; Mastrofski & Greene, 1993; Moore, 1992; Reicher & Roberg, 1990; Mastrofski, 1988; Bayley, 1988; Klockars, 1988; Kelling, Wasserman & Williams, 1988). A police chief must resolve these competing demands for officer autonomy and organizational control. When implementing new policy, the chief must contend with these opposing factions and fine-tune programs to fit into the organization's culture. The chief must loosen constraints to bring about change, yet must maintain control of his or her subordinates (Eck & Rosenbaum, 1994). Chiefs are guided by observation and feedback. Monitoring, the process chiefs use to gather information, is limited by cost and effectiveness. This study explores the problems associated with forming management strategies to control employees' behavior.

The narrow focus of this study is on areas of compliance and resistance in police organizations. In that scope, the concern about loosening structural constraints to accommodate community policing will be addressed. The findings also have implications for the larger scope of policy implementation. Despite its popularity, case studies of community policing show mixed results. Why do some programs succeed while others fail? Part of the answer can be found in the policy implementation process. A new policy must achieve a threshold of acceptance in the organization. Change

advocates must overcome competing factions and interests in the organization. The model developed in this study will help us to better understand this process.

1.2 Overview of Theory

Police administration has grown out of the Reform Model as enunciated by O.W. Wilson. Wilson (1963) inspired a control model for police administration. He based his teachings on the bureaucratic school of organization. Classic bureaucratic theorists believe that subordinates' activity is best controlled through organizational structure (Perrow, 1986; Dessler, 1980; Weber, 1958). The reform manager treated the organization as a black box. Little interest was paid to the inner dynamics of managing police organizations. Reformers focused on the chief and the anticipated outcomes of policy. Wilson designed structure and formalized procedures to guide police administrators, which de-emphasized the examination of specific circumstances.

Community policing is inspired by other management theories. In part, successful organizational management consists of supervisors persuading employees to comply with policy. Rational theories of organization view this problem from several perspectives. Human Relations theorists contend that motives and goals shape the cooperation and compliance of subordinates (Barnard, 1962; McGregor, 1957). Goals replace the structural constraints relied on by the reform manager.

Others propose subordinates' actions are limited by the parameters of the information and alternatives at hand (Cohen, March, & Olsen, 1972; Simon, 1976). Each of these perspectives, though, considers subordinates to be rational actors who are

influenced by incentives and sanctions. "Any organization must offer a continuous stream of incentives to elicit the activities that it requires from its members or other contributors" (Banfield & Wilson, 1965: 27) Successful policy initiatives modify behavior by integrating themselves into the organization's reward and disciplinary strategies. "A new criminal justice policy will have an impact at the street level (where crimes occur) only if it effectively manages to regulate or change the conduct of the individual policeman." (Yates, 1977: 4) Police chiefs are charged with regulating this process in their organizations.

To place these competing theories in perspective, this study uses Agency Theory to guide the analysis and interpretation of the data. Agency Theory provides an alternative management model for police administrators to assess the strengths and weaknesses of Wilson's reform model. Agency Theory is useful for understanding cooperative approaches, as well as incentive and sanctioning schemes. Agency Theory will provide a bridge between traditional police management philosophies and the management proposals of community policing advocates.

Control is an important element of both the Reform Model and Agency Theory. In police organizations, control is often determined through monitoring. Monitoring is an important element of the police chief's role and is repeatedly stressed in the traditional reform model (Wilson, 1963).

While traditionalists emphasize punishment, community policing advocates stress the importance of incentives. The chief, or principal, may use incentives and punishments to induce officers, or agents, to act in a desired manner. These inducements

are tools whose usefulness is generally evaluated through monitoring. However, when the effectiveness of monitoring is limited, other factors may be more useful. This study focuses on goals and job satisfaction as indicators of the potential compliance and resistance. Examining principal-agent relationships highlights supervisory problems and provides a framework for better problem-solving. Through Agency Theory, we can better understand the behavioral dynamics in police organizations.

Two of the components of Agency Theory, adverse selection and moral hazard, are particularly appropriate to this study. Agency Theory simplifies relations in organizations to the actions of two players, principals and agents. Agency Theory has not previously been applied to police administration. The model that is developed here, while unconventional in its approach, is rooted in the vast literature of Agency Theory. Because most police administrators know little of Agency Theory, some background is now provided. The brief discussion that follows is developed more fully in Chapter 2.

Organizations are viewed as a series of contracts negotiated between principals and agents. Adverse selection is the problem that confronts the principal when entering into a contract with an agent. Agents attempt to present an image that will qualify them to receive the contract. This may include exaggerating his or her level of talent or work effort. The principal can never be certain of the agent's skills and goals until after entering into the employment contract.

Moral hazard is a problem of unobservable activity. This is a particular problem for managers in occupations such as policing. Once agents are hired, much of their work is unsupervised. The principal rarely knows the full nature of the agents' activities and

motivations. Most police scholars and administrators now recognize the futility of trying to account for officers' activities by counting tickets and arrests. The proxy measures used to evaluate policing are fraught with moral hazard (Moe, 1984). Police officers, because of the unsupervised and discretionary nature of their work, have ample opportunity to shirk.

Both these problems could be partially alleviated if the principal could be sure of the agents' goals and commitment to the organization. Knowing agents' goals does not ensure you can predict their behavior. Nonetheless, this information is useful to managers and may be a more meaningful predictor of behavior than what is now available. If agents share similar goals with their principal and are satisfied in their jobs, they are likely to have larger zones of indifference (parameters of acceptance) toward the principal's policies and directives. When agents have larger zones of indifference, they are more likely to comply with, rather than resist, direction from their principal.

Wilson used job assignments to control the work process. Police organizations are divided into specialized units. Though there are many subspecialties, two traditional units are patrol and detectives. These are well-established job assignments in traditional police agencies. Community policing redefines the role of police officers. Community police officers perform some of the functions of both patrol and detectives. We know little about how to effectively manage community police officers. Each of these job assignments will be examined using a principal-agency model to identify potential management problems. As long as police organizations are structured and administered

in specialized units, job assignments will be important elements of management strategies.

If the managing is viewed from a principal-agent perspective, we can begin to categorize and predict possible agent behavior. First, we must view organizations as a series of contracts and negotiations where agents have hidden information and are motivated to shirk. Goals are important because they help to diminish the risks of alleviating adverse selection and the moral hazard of unobserved activity. Knowing an agent's goals helps to identify potential management problems. Although principal-agent theory will not help predict levels of goal alignment for different job assignments, knowing the level of goal alignment clarifies the management task. Knowing agents' goals helps to alleviate the problem of asymmetrically distributed information. If the manager and subordinate are in close goal agreement, the manager knows that incentives being offered are sufficient, and extensive monitoring may not be necessary. If there is high goal disparity between managers and subordinates, more incentives, sanctions, and closer monitoring may be in order. Managers can then define supervisory challenges as problems associated with inducing desired behavior.

Principal-agent theory may be more helpful in predicting levels of job satisfaction. Many factors can affect job satisfaction. Officers' levels of job satisfaction may stem from their goal congruence with their chief. Close goal congruence may elevate job satisfaction by fostering a feeling of working toward a common cause. High levels of goal disparity may lower job satisfaction if subordinates feel frustrated because their efforts are directed toward unimportant activities. Subordinates may have high levels of

job satisfaction if they feel that incentives (pay, status, opportunity to shirk, etc.) fully compensate their abilities and work effort. If incentives excessively compensate (an example of classic adverse selection) the employee, he or she should have high levels of job satisfaction.

Applying this to police organizations, the model would predict detectives to have high levels of job satisfaction and patrol officers to have low levels of job satisfaction. Community police officers should fall somewhere in between. Detectives have high levels of career status and greater discretion, possess significant amounts of confidential information, and are less identifiable in public. In short, detectives receive many incentives and have more opportunity to shirk. Patrol officers are more closely monitored by rules, report writing requirements, radio dispatch and are readily identified in public by their uniforms and marked patrol cars. Success is often defined as transferring out of patrol to a new job assignment. Patrol officers enjoy fewer organizational benefits and have less opportunity to shirk. Community police officers have fewer constraints than patrol officers, but more than detectives. Community police officers receive more benefits than patrol, but fewer than detectives. They should be more able to shirk than patrol officers and less able to shirk than detectives.

If differences are found between job assignments, then police chiefs can devise more appropriate management techniques. Knowing what job assignments are more likely to foster compliance or resistance to policy direction is important for developing effective management strategies. It allows managers to formulate more efficient and effective incentives, sanctions, and monitoring schemes.

1.3 Research Problem and Research Questions

American police chiefs direct and control complex organizations and oversee a variety of social control agents. These agents, though, may have diverse and competing objectives. New programs, such as community policing, must be integrated into this organizational milieu. Once a program is in place, the executive needs to monitor activity to determine if the desired results are being achieved. Unfortunately, monitoring does not deliver perfect information to the chief.

This brings us to the purpose of our research. The first question is derived from Wilson's belief that the work process can be controlled through job specialization and the principal-agent model's concern for negotiating compliance from subordinates. *Do the goals and values of officers differ across job assignments in police organizations?* If we can determine subordinates' goals, the asymmetrical distribution of information is reduced. Administrators improve their knowledge base and can develop more effective management strategies.

The second research question is also derived from Wilson's emphasis on specialized job assignments, his concern for high morale, and principal-agent model's recognitions of shirking, and the negotiated nature of employment contracts. *Do levels of job satisfaction and commitment to the organization differ across job assignments in police organizations?* Job satisfaction and organizational commitment are closely related indicators of job morale and are often measured together (Miller, 1991). If we know the levels of employees' job satisfaction, we can better evaluate incentive schemes.

This study examines the relationship between job assignment and potential areas of policy resistance in police organizations. Officers' attitudes and perceptions are measured and analyzed to detect differences associated with job assignments. Three typical job assignments in police departments are examined: patrol/traffic, community policing, and detective/investigation. If police officers comprise a single research population, we can expect these three groups will share similar attitudes. Attitudes of officers and their levels of commitment to the organization are measured and compared. If a significant variance is found among these groups, it may indicate a need for different management schemes.

1.3.1 The Manager's Problem

The purpose of this study is to help police chiefs devise more efficient and effective management schemes. In the process, resources can be more effectively utilized if chiefs better understand the motivations of their employees. This study will attempt to separate areas that may need increased monitoring from areas that require less monitoring. It will provide additional understanding of employees' potential actions not revealed by monitoring.

Traditional police administrative theory separates job assignments into semi-autonomous units, but often policy is implemented as if organizational members are cohesively uniform. If areas of potential compliance and resistance can be identified, police chiefs can more effectively design policy and manage implementation. Examining this issue as a principal-agent problem helps to conceptualize the complexities involved in managing police organizations.

Each action a manager takes consumes resources. Police chiefs, as public managers, must work within the restraints of their budgets. They are charged with guiding and directing their organizations through recurring, as well as unexpected, problems. Effective managers will allocate sufficient resources to solve the problem at hand. Their objective is to spend only the resources necessary to resolve the matter. Managers who expend more than needed to solve a problem are inefficient. Inefficient managers have fewer resources to allocate to organizational functions and problem solving. In short, the objective is to reduce managers' transaction costs.

Police chiefs are especially aware of the importance of controlling behavior (Goldstein, 1977, 1994; Eck & Rosenbaum, 1994; Alpert & Dunham, 1992; ; Kelling, Wasserman & Williams, 1988; J. Wilson, 1978; O. Wilson, 1963). Chiefs know they must appear in control of their organization if they are to maintain their jobs. Where monitoring is inefficient, the police manager has little available to guide decision making. Some managers may over monitor their employees to stave off the appearance they lack control. This wastes resources.

In addition to being efficient, management strategies must be effective. A chief's concern for maintaining control narrows his or her policy alternatives. Fearing the loss of organizational stability, a chief may shun programs that lack traditional control structures. A chief, concerned with cost and effective monitoring, may forgo unproven programs. This hampers effectiveness.

A chief must design effective and efficient management strategies. Monitoring increases transaction costs. Over monitoring consumes excessive resources and decreases

efficiency. Inappropriate incentives also reduce efficiency. To be effective and efficient, the management strategy should be tailored to the organization's task and employees' characteristics.

1.4 Methodology

This section presents a brief overview of the methodology and models used in the study. The model is more fully developed in Chapter 2. A detailed discussion of the research design is found in Chapter 3.

Chiefs may mistakenly believe that all employees require similar supervision or management strategies. Tasks, working conditions and personal characteristics may create the need for different management schemes. This study will examine common job assignments in police organizations – patrol/traffic officers, detectives/investigators and community police officers – to determine their potential for compliance or resistance to policy direction.

Patrol and traffic officers will serve as a bench mark for organization personnel. For much of the twentieth century, police reformers have used various monitoring techniques to control patrol officers' behavior. Police departments have the most experience trying to regulate this group. Comparing the other groups to patrol/traffic will give perspective to the management problem.

Detectives and investigators, in a traditional department, are bestowed higher status than patrol officers (Walker, 1983; Goldstein, 1977). They often have greater discretion and are subjected to fewer structural constraints. In addition, the nature of their

assignments allows them to circumvent aspects of the monitoring system. This increased freedom is highly valued by officers. Many officers seek assignment to a detective or investigative unit for this greater flexibility and status. This group will help us understand the problems managing elite units.

Less is known about the problems managing community police officers. It is uncertain how community police officers fit into the management system. The philosophy of community policing requires that some decision making be moved down the hierarchy to these lower-level employees. It advocates giving officers greater autonomy and flexibility. However, it is uncertain what effect this has on organization control. More information is needed to determine the most effective management scheme for this group.

1.4.1 Data Collection

This is a study of police officers from two large U.S. departments engaged in community policing. These departments have distinct job classifications for community police officers, patrol officers, and investigators or detectives. Data are collected using self-administered questionnaires. The data consist of officers' views about policing issues, their perception of their chief's views on these issues, and their level of job satisfaction and commitment to the organization. Patrol and traffic officers are used as a base line to compare detectives and community police officers. Attitudinal responses of each group are compared to determine differences associated with job assignment.

The first step is to determine if job assignment is associated with a police officer's attitudes and attachment to the organization. It makes little difference if job assignment

influences attitudes, or if officers with particular attitudes seek particular job assignments. The management problem is the same. We need to know if officers' job assignments affect the principal-agent relationship. Do officers differ in their level of goal congruence with the chief? Do they have the same level of commitment to the organization? Once we know the answers to these questions, we better understand the problems that confront managers. If officers in these job assignments differ, it may be inefficient and ineffective to treat them as if they were the same.

1.4.2 Definition of Terms

Community policing is a philosophy of client-oriented service delivery aimed at improving police effectiveness and accountability. For a program to qualify as community policing, it should contain these elements: community partnership, problem solving, decentralized tasks with responsibility and accountability for outcomes resting with beat officers.

To simplify the analysis, the policing function will be condensed into the role of two actors: principals and agents. In Agency Theory, the *principal* is a person that contracts a service. The principal employs the services of others to accomplish objectives. In this study, the principal is the chief of police.

An *agent* is the person who is contracted to perform a task. In this study, agents are line-level officers. Agents will have job assignments such as patrol and traffic, detective and investigator, and community police officer.

1.4.3 Delimitations of Scope and Key Assumptions

This study examines police offices' attitudes and their perceptions of goal congruence with their chief. Perceptions are measured – not actual behavior. There is no attempt to evaluate the validity of these perceptions. It is assumed that increased goal congruence and higher levels of job satisfaction and organizational commitment will lead to more compliant workers. It is presumed that perceptions guide decision making and resistance to policy.

To make this study useful for scholars and police administrators interested in community policing, it was necessary to ensure that community policing is a valid variable. The sample is drawn from two police organizations. Each organization was selected for its commitment to community policing. The value of their programs is recognized and financially supported by the U.S. Department of Justice. Nevertheless, as with any case study data, one must be cautious in generalizing these findings to other police organizations.

1.5 Justification for the Research

Since its inception in the early 1980s, the popularity of community policing has continued to grow. Community policing has been proclaimed the future of American policing (Trojanowicz & Bucqueroux, 1994; Harrison, 1994; Rosenbaum, 1994; Wilkinson & Rosenbaum, 1994; Normandeau, 1993; National Institute of Justice, 1988-1993; Moore & Trojanowicz, 1988; Barr, 1992; Mott, 1987). Presidents Bush and

Clinton included community policing as an important element of U.S. crime policy. This stimulated the implementation of community policing throughout the country. Such a growing phenomenon places more pressure on police chiefs to implement community policing in their departments. However, police chiefs know little about how to effectively manage officers involved in these programs.

Theories of police administration are shaped by urban political thought. In the recent past, reformers have focused on technocratic job definition and structural constraints to control employees. Currently, public administrators are being encouraged to move beyond regulating organizational process. The reinventing government movement (National Performance Review, 1993; Osborne & Gaebler, 1992) has altered our perception of government performance. Increased attention is focused on productivity and outputs (Boschken, 1994; Walton, 1986; Peters & Waterman, 1982). Managers are now being judged on the quality of the goods and services produced.

As this new political theory shapes our expectations, police chiefs will need to shift their focus from controlling behavior to improving productivity. Advocates claim community policing will address these new demands. Police chiefs face increasing pressure to innovate, but are given little direction. Chiefs will need to ensure management strategies are appropriate for these new policies. Can chiefs maintain control of their organization if employees are freed from structural constraints? To address this concern, we need to know more about the potential for policy compliance and resistance of various actors within police departments.

The recent police effort to manage and control employees through organizational structure is one of many possible strategies. Behavior can also be managed and controlled through internalized values. However, the importance of values is often overlooked by policy makers accustomed to relying on structural controls.

Values have many components and help to determine a person's actions. They are often the motivation for individuals' behavior. Values are difficult to identify and to measure. Without a true measure, a surrogate must be found. Values can be expressed in an individual's goals and his or her satisfaction with surroundings. In this study, officers' level goal alignment with their police chief and their level of job satisfaction are used as substitute measures of motivation or propensity to comply with or resist policy. If we can identify a person's goals and job satisfaction, we can better determine how to formulate policy and monitor its implementation.

We cannot assume that management schemes are equally effective or necessary for all employees. An individual's place in the organization may affect his or her level of resistance or compliance. If we compare police officers in different job assignments, we may more fully understand organizational dynamics. By examining levels of organizational commitment and goal alignment associated with job assignments, we are better able to assess management requirements. This study will help identify areas of policy compliance and resistance in various job assignments throughout police organizations. It brings to police administration a new model for developing more

effective management schemes. This research will also address some of the concerns about managing community police officers.

1.6 Conclusion

By examining police officers' goals and levels of job satisfaction, we can formulate better management strategies. The implementation of community policing presents an opportunity to examine the concerns critics have regarding maintaining control of police organizations, as well as other important management issues. When these problems are conceptualized, using a principal-agent model, the dynamics of behavior in police organizations are better understood.

This chapter presented an overview of the study and its design. It introduced the research problem and research questions. A brief methodology was presented with an overview of the principal-agent model; key terms were defined, and the limitations of the research discussed. Finally, the importance of this research was discussed.

This study will follow the traditional order of presentation for dissertation research. Chapter 1 has introduced the research problem and provided an overview of the study. Chapter 2 reviews the literature on police administrative theory and Agency Theory. Efforts to reform policing are examined, and a principal-agent model is developed. The traditional model of police administration is then examined, using the principal-agent model. Chapter 3 details the study's design and methodology.

Hypotheses, data collection and statistical procedures are discussed. Chapter 4 discusses the research findings, and their implications; it begins the construction of a predictive model. In Chapter 5, conclusions are drawn from the data, and implications for future research are discussed.

Chapter 2

LITERATURE REVIEW

2.1 Introduction

Police managers have long struggled to monitor and control the actions of enforcement agents. Their management styles shift with political trends and ideology. The following discussion traces the development of police administrative theory and suggests how it can be improved. This presentation will address how police management theory came to its current state, its shortcomings, and the development of a new management model.

It is important to understand an existing system of management before suggesting a replacement model. It makes little sense to try to replace a system you know little about. This is particularly true in policing. Police chiefs differ from many other public administrators. Police administrators tend to be conservative in their approach to management. Most have worked their way up from line-level policing, advancing through the organization they now direct. Many are college educated, with a large number of them completing their education while working as police officers. They are not an elite cadre of public administrators trained in universities before being sent into the field. Much of what they know of management was learned on the job. The police management system is second nature to them, and it influences how they conceptualize

problems. Police managers have shown little interest in suggestions from those who have not shown that they thoroughly understand policing. To influence these administrators, one must demonstrate that one thoroughly understands what they are trying to do. Suggestions must be viable.

The presentation that follows will attempt to address the concerns of police administrators. It begins with a brief history of how the current theory of police administration developed. This section will explain how police management arrived at its current state, why police management systems do what they do, and the new challenges police administrators face. Next, a model of the traditional administrative system is constructed to demonstrate how it is supposed to operate, along with some of its shortcomings. This section will explain why police administrative systems do not work as well as intended. Finally, a new model of police administration is described. The new model is used to re-examine the traditional model and show its inherent deficiencies. This section will explain advantages of a new model for police management.

2.2 Eras of American Policing

George Kelling and Mark Moore constructed a typology of American police history by examining the dominant strategies of policing (1988a, 1988b). They delineated three eras: political, reform and community. The political era, from the introduction of policing in the 1840s to the 1900s, was characterized by a closeness to politicians and political machines. During this period, policing was fraught with corruption. The reform era, 1930s to the late 1970s, reflected the Progressive

Movement's efforts to rationalize government through bureaucratic professionalism.

Reformers attempted to centralize power in the office of the chief. The community era, beginning in the late 1970s, seeks to instill a client-centered approach in policing.

Decision making is transferred to lower levels in the organization.

Though widely cited, Kelling and Moore's typology has drawn criticism. The critical views are best represented by Kappeler (1996) who says, "[t]his presentation of police history is far too neat, isolated and indefensible to the intellectual." (4) In addition, he faults it for being simplistic, linear and too defined in paradigmatic shifts. Critics have called Kelling and Moore's work an invented history (Kappeler, 1996; McDonald, 1993).

These critics are demanding more from these typologies than the authors intended. Kelling and Moore did not propose their typologies to be so confining. They argue that their typology consists of the themes that dominated policing within general time periods. In addition, these themes coincide with generally accepted theories of urban politics (See Osborne & Gaebler, 1992; Judd & Kantor, 1992; Yates, 1977; Banfield & Wilson, 1965; Lynd & Lynn, 1956).

Kelling and Moore's typology is a useful tool for analyzing the history of police administrative theory. By examining the political era, we can begin to understand what reformers were attempting to overcome. Examining the reform era gives us a better understanding of the dominant theory of police administration. Examining the community era will identify new challenges that confront police administrators. When we have finished, we will be better able to evaluate a new model for police administration.

2.2.1 Political Era

Formal police organizations emerged during the political era. Patronage and political influence were common in organizations that were staffed and maintained by political machines (Kelling & Moore, 1988a; Walker, 1983; Auten, 1981). Corruption in these organizations flourished, while standards were few (Dempsey, 1994; LaGrange, 1993; Stamper, 1992; Alpert & Dunham, 1992; Kelling & Moore, 1988a, 1988b; Knott & Miller, 1987; Walker, 1983, 1984; Eldedono, Coffey & Grace; 1982; Auten, 1981; Carte & Carte, 1975). The officers were closely tied to their ward politicians (Kelling & Moore, 1988a), the mayor (Flinn, 1973), and political factions (Walker, 1977). Police officers owed their jobs and gave their allegiance to the ward boss and police captain that chose them (Uchida, 1993; Alpert & Dunham, 1992). In return, the police helped their ward politicians stay in power (Dempsey, 1994; Holden, 1992; Hartmann, 1988; Knott & Miller, 1987; Chapman & St. Johnston, 1962) by finding supportive voters, discouraging supporters of opponents, and helping to rig elections (Kelling & Moore, 1988b; Knott & Miller, 1987; Astor, 1971). Officers needed to make a sufficient contribution to the political party in power to be promoted to higher ranks (Astor, 1971). Precinct captains held the real power in these organizations, while police chiefs had no way to effectively supervise or control officers (Walker, 1977, 1983).

Chiefs used many devices to manage and monitor employees. Uniforms were introduced to improve performance (Astor, 1971). Officers were fined or transferred for their indiscretions (Astor, 1971). Over the objections of officers, call boxes were

installed to reduce shirking (Walker, 1977; Astor, 1971). Efforts to end corruption and bring police organizations under control of the police chief grew into the reform era.

2.2.2 Reform Era

The Progressive Movement sought to reform local government and governmental agencies such as the police (Toch, 1997; Patterson, 1995; Kelling & Bratton, 1993; Hunt & Magenau, 1993; Cole, 1989; Knott & Miller, 1987; Walker, 1977). Though the Progressives had little direct effect on police organizations, their efforts did spawn the Reform Model of policing (Uchida, 1993). Reform strategies were technical and mechanistic (Stamper, 1992). The Reform Model, emanating from the work of Richard Sylvester and August Vollmer, came to fruition through the work of reformers such as O.W. Wilson (Kelling & Moore, 1988b). Reform policing began in the 1930s, thrived in the 1950s and 1960s, and began to decline in the late 1970s (Kelling & Moore, 1988a).

Sylvester, as superintendent of the Washington, D.C. Police Department and president of the International Association of Chiefs of Police (IACP), encouraged professional development (Alpert & Dunham, 1992; Walker, 1983). The IACP called for civil service, centralization and strong executive leadership (Patterson, 1995). The thrust of Sylvester's efforts was to improve the image of policing (Walker, 1977). Sylvester's concern for professional development suggests an interest in internalizing values as a method of control. However, Sylvester focused his reforms on the chief rather than line-level officers.

Vollmer, as chief of the Berkeley Police Department, expanded Sylvester's ideas to develop a strategy that stressed education (Alpert & Dunham, 1992). Vollmer came to

symbolize an idealized model of professional policing (Dempsey, 1994; Klockars, 1980). He envisioned the police being deeply involved in the community, as rigorously trained, highly skilled crime fighters who used science and technology to solve social problems (Carte & Carte, 1975; Klockars, 1980). He sought middle-class, college-trained officers (Dempsey, 1994; Walker, 1983) who would remove policing from the lower-class, immigrant culture (Carte & Carte, 1975). Vollmer admired the organization skills of the professional army corps, but felt the military model to be inappropriate for police work (Carte & Carte, 1975). He feared it would inhibit officers from a close relationship with the community.

Vollmer took a step toward utilizing goals and internalized values to control police behavior. He recruited middle-class officers in an effort to eliminate the values of the immigrant class. His advocacy of college education for police officers was revolutionary for its time. He believed that college educated middle-class officers would have the skills and values to elevate policing.

As chief of Wichita and Chicago, as well as dean of the School of Criminology at the University of California (Alpert & Dunham, 1992; Uchida, 1993; Walker, 1983), O.W. Wilson refined Vollmer's ideas. Wilson, a *protégé* of August Vollmer, became a leading spokesman for the Reform movement of the 1950s and 1960s (Toch, 1995; Uchida, 1993; Walker, 1977, 1984, 1993; Wroblewski & Hess, 1993; Cole, 1989; Klockars, 1980; Bopp, 1977; Carte & Carte, 1975). Wilson relied on bureaucratic structure and the principles of scientific management to shape his management philosophy. His book *Police Administration* became the bible of police management

(Dempsey, 1994; Cole, 1989; Walker, 1983, 1984). “The Wilson model emphasized the efficient use of technical skills and equipment to suppress criminal acts and became more detached from the community than Vollmer’s Berkeley model.” (Carte & Carte, 1975: 3)

The reform philosophies of O.W. Wilson greatly influenced police managers.

Wilson hoped to bring legitimacy to policing by transforming police departments into efficient organizations carefully controlled by the chief (Walker, 1993; O. Wilson, 1963). It is important to note, Wilson sought to maximize managerial efficiency (Dempsey, 1994). “Wilson believed that corruption was the by-product of poor organization, scant planning, and tangled lines of command.” (Holden, 1992: 69)

Wilson felt that:

. . . line police officers must be closely supervised, the subject of massive policy pronouncements limiting their discretion, and consistently threatened with punishment lest they misbehave. Wilson held that policemen, if not closely controlled, would avoid work, engage in extralegal behavior, and would subvert the administration’s goals. (Bopp, 1977: 134)

Through strict discipline, the chief could build the *esprit de corps* necessary for a well functioning police organization (Wilson, 1963).

Wilson thought it futile to train subordinates when greater returns were achieved training command officers (Carte & Carte, 1975; Archambeault & Weirman, 1983). He believed charismatic leaders could be developed from intelligent, contagiously enthusiastic, forceful men. These new leaders would use all the available talent in their organization (Wilson, 1963).

Under O.W. Wilson, police administrators retreated from Vollmer's suggestion of managing through internalized values. For Wilson, structure, specialization, rules and close supervision were the appropriate mechanisms of control. He believed that job assignment could be used as a mechanism of control. He felt if he could focus the scope of officers' work, he could control officers' behavior.

The tools of the reform manager were bureaucratic procedure and scientific management (Kelling & Bratton, 1993; Moore & Stephens, 1991; Kelling & Moore, 1988a, 1988b; Haring, 1984; Archambeault & Weirman, 1983; Walker, 1977; Wilson, 1963). O.W. Wilson saw these as the most effective mechanisms to control police organizations (Uchida, 1993; Kelling & Bratton, 1993; Manning, 1992). Reformers tried to minimize officer discretion, centralize command, specialize and routinize work by increasing rules and the role of middle management (Toch, 1997; Kelling & Bratton, 1993; Walker, 1993; Nelligan & Taylor, 1994; Kelling & Moore, 1988b; Bopp, 1977). Police organizations adopted more bureaucratic and more militaristic organizational structures to control officers (Meese, 1993; Moore, 1992; Sparrow, 1992; Alpert & Dunham, 1992; Moore & Stephens, 1991; Klockers, 1988; Auten, 1981; Bopp, 1977; Bittner, 1970). Technology, such as two-way radios, was also introduced to control officers (Alpert & Dunham, 1992). These principles of reform became entrenched in police organizations (Archambeault & Weirman, 1983). Today, police managers continue to work among the vestiges of Wilson's reforms.

Taylor's (1939) scientific management sought to control the work process by limiting worker discretion. Unfortunately, police managers are not skilled in work

analysis required by scientific management. Harring describes police managers as the worst in the public sector (Harring, 1981). They come through the ranks of conservative organizations, with little formal management training. Police management strategy is entangled in organization politics. The paramilitary structure creates an image of accountability, but leaves officers with considerable discretion (Mastrofski & Greene, 1993; Sykes, 1985; Manning, 1978). Taylor recognized that workers would not give their best work effort unless managers provide the proper inducement. It was the manager's function to determine the one best method for every job (Lynch, 1986). Emphasis was placed on eliminating waste, and it was assumed that the workers and employer shared the same interests and goals (Hunt & Magenau, 1993; Taylor, 1939).

Police reform attempted to subordinate officers to bureaucratic process, but ignored the functional role of policing (Sykes, 1985; Manning, 1978). Officers do not work under close supervision, and patrol cannot be made routine (Kelling, Wasserman & Williams, 1988). Officers ". . . resent being treated as mere bureaucrats and resist the translation of their work into quotas, directives, rules, regulations, or other abstract specifications." (Klockars, 1980: 342)

Police chiefs are administrators and policy makers. They need to ensure that employees respond to policy direction. Preventing negative behavior is not the same as inducing positive behavior. Reform failed to devise methods to maintain control of the organization and to overcome the strategic behavior of employees. It focused on limiting inappropriate behavior, but did not guide police chiefs in inducing officers to comply with policy initiatives. Veteran officers were seen as unproductive, with low levels of job

satisfaction (Pogrebin, 1987; Robinette, 1982; Schwartz & Schwartz, 1975). At the end of the Reform era, the management problems were changing for the police manager.

In summary, the reform movement sought to remove the police from the influence of corrupt political machines. Managers focused on controlling the behavior of officers. Technology, structure and mechanistic processes were used to control subordinates' behavior. Efficient management through organization, planning, strict lines of command, extensive rules and threats of punishment were the principal control devices. The perception of control extended to improving the image of policing and transforming it from a lower-class immigrant occupation to a middle-class profession, but the reformers failed to account for differing motivations and values of the people performing the work.

2.2.3 Community Era

In the 1980s, the emphasis of policing began to shift to what is now called community policing. Community policing attempts to address the Reform Model's failure to reduce crime and improve quality of life (Moore & Trojanowicz, 1988). Civil unrest in the 1960s led to an increased research interest in policing (Patterson, 1995; Dempsey, 1994; Nelligan & Taylor, 1994; Alpert & Dunham, 1992) that helped set the stage for this new policing philosophy. Community policing also proposes new management strategies.

Advocates of community policing advocated loosening structural constraints on officers to allow them to be more creative problem solvers (Trojanowicz & Bucqueroux, 1990, 1994; Redlinger, 1994; Wroblewski & Hess, 1993; Sparrow, Moore & Kennedy, 1990; Weisburd, Mc Elroy & Hardyman, 1988). They proposed reducing hierarchal

levels in the organizational structure (Trojanowicz & Bucqueroux, 1990, 1994) and adopting a more collegial management style (Meese, 1993; Sunahara, 1991). The organization would become less authoritarian, with less emphasis on command and control, and have a more flexible participatory management approach that put more decision making in the hands of officers (Walsh, 1995; Trojanowicz & Bucqueroux, 1990, 1994; Wycoff & Skogan, 1994; McElroy, Cosgrove & Sadd, 1993; Murphy, 1993; Cole, 1993; Sunahara, 1991; Sparrow, Moore & Kennedy, 1990; Weisburd, McElroy & Hardyman, 1988; Kelling, Wasserman & Williams, 1988; Kelling & Moore, 1988a). "Community policing is, therefore, as much a force for organizational and management reform as it is an attempt to reform the police role in the community." (Murphy, 1988: 180) Advocates believe that recruiting and training can be used to control officer behavior by changing the culture of organizations (Trojanowicz & Bucqueroux, 1990, 1994; Redlinger, 1994; Meese, 1993). Less emphasis is placed on rule enforcement and more emphasis placed on values (Trojanowicz & Bucqueroux, 1990, 1994; Meese, 1993; Sparrow, Moore & Kennedy, 1990; Kelling & Moore, 1988a).

Community policing moves away from the traditional organizational theory imposed by Wilson's reforms. It entails freeing officers from some structural constraints to be more creative (Trojanowicz & Bucqueroux, 1990, 1994). Community policing embraces the theory of cooperative organization proposed by Barnard (1962). Advocates believe a common purpose will bond individuals to seek similar goals. The task itself will control the actions of officers.

2.2.4 Summary

This section has discussed the development of police administrative theory. Attempts to control officers and reduce corruption led to rule-bound, highly structured organizations. Reformers believed the police chief, with the proper structure, could control every important organizational decision. The early reformers' proposals to control through values gave way to the technocrats' structures. The era of community policing brings new challenges to the police administrator. Advocates of community policing propose a re-evaluation of management strategies they believe have failed. Efforts to find new ways to oversee officers have brought renewed interest in goals and values. This suggests a need for a new management model.

This section has placed the management problem into historical context. Police administrators must devise management schemes to use within the structures of the organizational environment. The new challenges of community policing present an opportunity to examine new management models. Utilizing previously overlooked factors, such as goals and values, may help us to develop more effective management strategies.

2.3 Traditional Bureaucratic Model

Before turning to a new management model, the traditional model will be examined. This is the model O.W. Wilson worked to implement. It is presented here in its idealized form. Understanding how this model is supposed to work will later help us understand its deficiencies and how to remedy them.

Traditional managers use structure to guide subordinates (Perrow, 1986; Dessler, 1980; O. Wilson, 1963). Management analyzes the work process and directs employees' activity. Employees execute management's directives. To be successful, managers use the tools of bureaucracy to secure cooperative and predictable behavior from subordinates (Pressman & Wildavsky, 1979). Bureaucratic organizations use a pyramidal hierarchy to transmit information from line operators to decision makers. The top of the hierarchy relies on the lower levels for detail, while the lower levels seek insight from the top (Marx, 1967). Instructions are transmitted back down the structure to direct subordinate activity. Managers formulate decisions from the information provided by subordinates.

In the classic bureaucratic model (See Figure 1) information is gathered at the line level and transmitted to the top of the organization. "The essence of this theory is that organizations pursue economy and efficiency through division of labor, specialization of work, impartial treatment of clients, and, above all, a hierarchical authority structure." (Bourns, 1995: 3) By design, all the line operator's information is not passed upward through the hierarchy (Scott, 1986; Arrow, 1984). Transmitting all available information would overwhelm the decision maker with irrelevant detail. It is important to the principal that only relevant information is passed on. Structure is used to make the decision process more efficient by filtering information at each level of the hierarchy.

Policymaking involves the choice of an option from some larger set of options. As information and advice about an advisory task flow upward, lower-level officials gradually eliminate options from further consideration. The result is that only a small subset of options may reach the director. (Hammond, 1986: 387)

Traditional Model

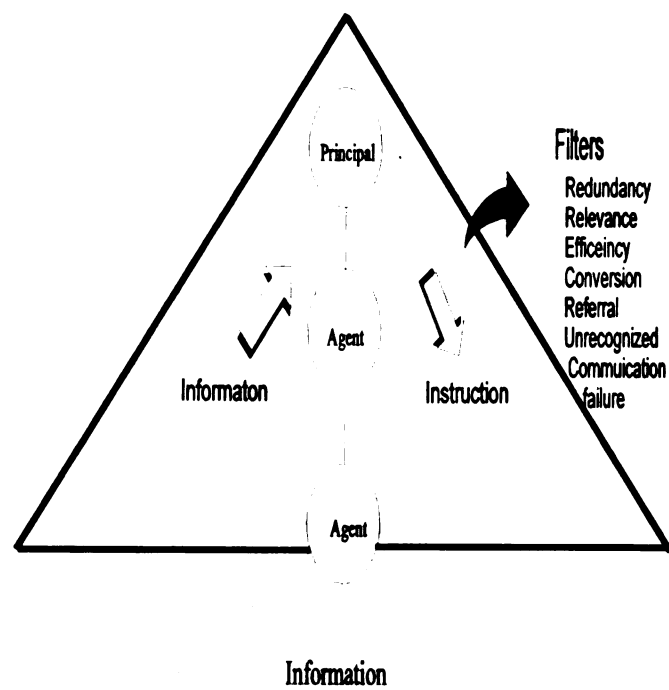


Figure 1

Nonessential information is filtered from the process with each increasing step. The goal is to supply proper information for decision makers to direct the organization (Simon, 1976). Redundant information is deleted (Arrow, 1984; Simon, 1976; Weber, 1958). Information that merely confirms what has already been reported, especially if it pertains to routine matters, is not passed on.

Only relevant information is useful. In theory, only information important to decision making is to be transmitted up the hierarchy. If the information is not relevant to the organization's purpose, it is disregarded (Simon, 1976; Weber, 1958).

Classic organizations strive for efficiency (Bourne, 1995; Perrow, 1986; Dessler, 1980; Weber, 1958; Taylor, 1939). Extraneous information complicates the decision-making process. It may confuse or divert a decisionmaker's focus from more substantive areas. To make the process efficient, information perceived to have slight value in the decision-making process may be eliminated (Arrow, 1984).

If the data cannot be readily processed by organizational mechanisms, they will need to be transformed. Organizations are poorly prepared for adapting to performing new tasks and are designed to resist innovation (Wilson, 1989). Depending upon the efficiency of the transforming mechanism, important information may be lost or its meaning altered in the transformation process.

Organizations divide and specialize work processes (Bourne, 1995; Hummel, 1994; Dessler, 1980; Weber, 1958; Taylor, 1939;). If the data do not seem applicable to the organization's purpose, it may be diverted to another division or another organization. As specialization increases, it becomes more difficult for a manager to integrate units into

an effective organization (Gruber & Niles, 1976). If the organization's screening process is ineffective, valuable information may be transferred rather than processed.

Organizations are staffed by experts, technically trained to perform organizational functions (Hummel, 1994; Weber, 1958). However, no human organization is perfect. If a processor misinterprets the value of data, it may not be passed on to the next level. Specialization and narrow responsibility lessen the abilities of people to work together (Hummel, 1994). Important information may also be inadvertently removed from the decision process through decision error.

Structure is used to direct the communication process. However, messages become distorted as they pass through many people (Sheehan & Cordner, 1989). Information transmission may be misdirected, poorly transmitted, distorted or not received (Skinner & Gilbert, 1978).

To summarize, the chief executive at the top of the hierarchy receives only a portion of the information collected or generated by the organization (Arrow, 1984; Wildavsky, 1972). Each step of the hierarchy refines and tailors the information for the needs of superior levels. The chief executive analyzes the information in light of the overall mission of the organization. Decisions are reached and directions transmitted back down the hierarchy to direct the activities of organizational members. This model assumes employees at each level are acting in the best interests of the organization.

2.4 Principal-Agent Model

It is difficult for police chiefs to monitor and evaluate their personnel. The work process and work effort of police officers are not easily measured. “Because police officers often work alone with very little direct supervision, their activities are extremely difficult to control.” (Sheehan & Cordner, 1989: 250) “[T]he work of patrolmen is difficult, if not impossible, to evaluate.” (VanMaanen, 1978: 233) The complexity of police work and ambiguity of performance standards make it difficult for the chief to exercise control. (Hunt & Magenau, 1993).

Because [police officers] work alone his [sic] superior can never know exactly what happened and must take either his [sic] word or the complainant's. The patrolman necessarily exercises wide discretion, but the police administrator is obligated publicly to deny that there is much discretion in police work . . . (Wilson, 1978: 72)

“Where both outputs and outcomes are unobservable there is likely to be a high degree of conflict between managers and operators in public agencies, especially those that must cope with a clientele not of their own choosing.” (Wilson, 1989: 169) When there is intense conflict in goals, it is more likely that officers will hide their activities from managers (Sherman, 1978). The monitoring problem lessens when the principal and agent share similar goals (Arrow, 1984).

To compensate for the difficulty evaluating officers, managers have emphasized process measures. This has not solved the management problem. What can be easily measured (numbers of arrests, tickets, reports written, calls answered, etc.) is either easily manipulated by officers or is not a useful measure of policing performance (Trojanowicz, Bucqueroux & Sloan, 1993; Trojanowicz & Bucqueroux, 1992, 1990; Carter, 1990;

Goldstein, 1990; Trojanowicz, 1990; Trojanowicz & Belknap, 1986; Wycoff & Manning, 1983). Subordinates may become efficient at achieving process indicators while neglecting the underlying objectives of the organization. This process orientation provides agents opportunities to shirk. With no reliable way to judge success, chiefs must overcome self-interest of organizational members (Kelling & Bratton, 1993).

Assessing quality and quantity is often difficult for police administrators. Reporting systems that tabulate quantities are often incapable of evaluating quality. Assessing quantity is also problematic. The upper range of production is unbounded and the workers' true opportunity to produce is seldom known. The lower limit can only be gauged by estimating or comparing to the production level of others in the work group.

It may be more difficult for a police chief than for other public administrators to implement new policy. "Such characteristics of police work as discretion, authority, variety, ambiguity and danger distinguish it greatly from what most people do for a living." (Sheehan & Cordner, 1989: 46) "The task of restructuring is more complex with police because the workflow of a police service differs markedly from other bureaucratic organizations in that the officer in the field has significant discretion to generate or not to generate work." (Dean, 1995: 339)

Agency Theory provides a useful new perspective for police administrators to conceptualize management problems. It has been used to examine relationships in many public bureaucracies, but until now it has not been applied to police organizations. Agency Theory will increase our understanding of relationships in police organizations.

Principal-agent models are derived from economic theory to examine hierarchical relationships (DeGeorge, 1992; Koford & Penno, 1992; Moe, 1984, 1990; Cook & Wood, 1989; Alvi, 1988; Alchian & Demsetz, 1972). The principal, with goals and objectives to accomplish, enters into contracts with agents to perform specific or general tasks. Each party to the relationship has power over some aspects of the interaction.

Principal-agent theory applies to circumstances when one person (the principal) arranges for another (the agent) to take an action that is beneficial to the principal but costly to the agent, under circumstances when the principal cannot perfectly and costlessly enforce an ex ante promise by the agent to act in the best interests of the principal. (McCubbins, Noll and Weingast, 1989: 433-434)

Each party in the relationship has power over some aspects of the interaction. A principal's effectiveness is determined by his or her ability to gain compliance from the agent.

A principal-agent model, with its focus on information usage, is particularly appropriate for the study of information-dependent organizations, such as policing. The model recognizes that information accumulates around line functions. Those who possess information may be able to manipulate the transaction cost for others, including the principal. For the agent, work effort is determined by the task, personal objectives and opportunity to shirk. For the principal, the focus and intensity of the work effort determine the need to monitor. These disparate motivations complicate the management process.

The police use paramilitary bureaucratic devices to structure their organizations. Bureaucratic organizations are designed for efficiency. When production demands in

these organizations are met without completely consuming the resources allocated, the unused resources become slack. In a classic bureaucracy, slack resources are passed on to the entrepreneur. It has long been recognized, though, that managers accumulate slack resources to more effectively manage the organization (Cyert & March, 1963). Slack provides a cushion for coping with unexpected events. Though seldom discussed, employees can also accumulate and control slack. Their use of slack bypasses the intent of bureaucratic structures. In policing, slack includes work effort, choice of activities and management of unallotted time.¹ As the goals of the principal and agent become more disparate, it becomes more difficult for the principal to direct the organization.

The principal-agent problem centers on the supervisory relationship. The principal is plagued by the problems which can be described as asymmetric information, adverse selection, moral hazard and the transaction costs of monitoring. Terry Moe (1987) best summarizes the principal-agent relationship.

The principal tries to control the behavior of his agent, but the agent is driven by his own interests, makes decisions on the basis of information only imperfectly available to the principal, and engages in behavior that the principal can only imperfectly observe. Because of these fundamental problems, the principal ordinarily must expect some and often a great deal of slippage between the performance he desires from the agent and the performance he actually receives. His task as a rational actor is to search among feasible structures for monitoring, rewarding and sanctioning the agent, and to employ those that seem most efficacious for minimizing the gap between desired and actual performance. (480-481)

¹

The Detroit Police Department recently acknowledged a problem with on-duty uniformed officers shopping in malls, sitting in movie theaters and dining in restaurants several miles from the city {Robertson, B. (1996, September 28). McKinnon blasts cheating cops. Detroit Free Press, pp. 3A, 5A.}

Each element of the principal-agent model will now be developed in greater detail. The model will then help us identify the deficiencies of the traditional hierarchal approach to management.

2.4.1 Asymmetric Information

Principal-agent models recognize the asymmetric distribution of information and the need for the principal to monitor employees (Kolt & Zupan, 1990; Alvi, 1988; Ma, 1991). Without effective monitoring, agents are likely to shirk (Azariadis, 1983). The principal must overcome the problems of an unsupervised work process and asymmetric distribution of information within the organization where monitoring is imperfect.

Each party entering a contract attempts to negotiate a good deal. As a result, the principal often encounters difficulty monitoring the contract. The unequal distribution of information makes it difficult for the principal to provide incentives and share risks (Ma, 1991). "Asymmetric information generally results in a suboptimal allocation of both risk and worker effort . . ." (Azariadis, 1983: 157). "The theory of principal-agent relationships would suggest that principals have an interest in designing incentive and penalty reward systems that optimally inhibit agent shirking." (Kolt & Zupan, 1990: 119, Also see Lazer, 1996)

Those who possess needed information hold advantage over those requiring information. The principal must overcome this information disadvantage. A principal-agent model recognizes that information accumulates around line functions. Those who possess information may be able to manipulate the transaction cost for others, including the principal. All managers face difficult challenges monitoring employee performance.

[E]ffort is unobservable to the firm. In such situations, it may be of mutual interest to the contracting parties to generate information that is unavailable otherwise . . . [A]greements between firms and workers are not merely risk-sharing and resource-allocating mechanisms but also information-revealing ones. Without this information-generating role, agreements do not make much sense under asymmetric information. (Alvi, 1988:133)

Managers must devise management strategies to overcome these disadvantages.

2.4.2 Adverse Selection

Adverse selection is an advantage agents have when entering into contracts with their principal. Agents know the extent and limits of their talent, but the principal cannot be certain of the agent's abilities until after entering into the contract (DeGeorge, 1992; Moe, 1984). It is in the principal's best interests to hire agents who share his or her goals and objectives.

A principal will attempt to employ agents who are qualified to perform necessary tasks. Agents sell their labor in a competitive market. It is in the agent's interests to seek maximum benefits (prestige, status, income, leisure) for his or her work effort. An agent is aware of his or her own talents and limitations, but the principal cannot be certain of the agent's skills until after entering into the contract. This uncertainty is known as adverse selection. It ". . . derives from unobservability of the information, beliefs, and values on which the decisions of others are based." (Moe, 1984: 754)

Anyone who has ever experienced an employment interview can readily understand the concept. Each side attempts to discern information that is not easily verifiable. It is a problem of uncertainty and limited information (Arrow, 1984). The

principal hopes, and sometimes unjustifiably assumes, that agents share his or her goals and objectives.

2.4.3 Hidden Information, Actions and Moral Hazard

Agents derive advantage when the work process is unsupervised. Decisions are made and actions taken outside the principal's direct control. Moral hazard is the term applied to an agent's advantage that ". . . arises from the unobservability of actual behavior . . ." (Moe, 1984: 755). The term's meaning has been expanded beyond its origins in the insurance industry and is now commonly substituted for hidden action. Line-level policing is typically unsupervised. Police officers function with little direct supervision and are susceptible to moral hazard. "[B]y definition the agent has been selected for his [sic] specialized knowledge, and therefore the principal can never hope to check completely the agent's performance." (Arrow, 1984: 104) The independence and discretion of street-level bureaucrats, coupled with the weakness of field supervision, translate into relatively weak control over service delivery (Yates, 1977).

Much of management's knowledge of subordinate activity is through self-reporting. This provides subordinates an advantage in contracted interaction. As the agent becomes better informed (i.e., experience), he or she has more actions available and the number of incentive schemes available to the principal decreases (Sobel, 1993).

Harmony within the organization is also important to police managers. Internal dissension can be a powerful threat to the chief (Wycoff & Kelling, 1978). Excessive complaints and low morale confound management efforts. The chief is sometimes trapped between efficiency and workplace harmony.

The nature of policing makes the principal-agent model useful to the study of police organizations. A principal-agent model more adequately accounts for information manipulation that is likely to occur. Past efforts have not fully accounted for these factors.

2.4.4 Monitoring and Transaction Costs

While the principal attempts to direct the organization toward specific goals, agents may be pursuing other objectives. "The superior who cannot monitor the subordinate may well find out after the fact that the subordinate was pursuing his or her own interests." (Knott & Miller, 1987: 159) A problem occurs when the goals of the principal and agents are greatly dissimilar. As the goals of the principal and agent become more disparate, it becomes more difficult for the principal to direct the organization (Arrow, 1984). When officers realize they can misuse their authority or neglect their responsibility, they will; and it is the manager's responsibility to monitor everyone (Sheehan & Cordner, 1989; Gouldner, 1954). If managers focus on production measures, "... employees become self-focused manipulators of production statistics." (Wadman & Bailey, 1993: 81) Rarely can police executives directly observe officers' activity, and they are forced to use indirect, surreptitious and sometimes distasteful means to monitor employees (Sherman, 1978).

Information may come from various sources. Monitoring may be through direct observing, self-reporting, or reporting by knowledgeable third parties (Lupa & McCubbins, 1994). "The primary drawback of direct monitoring is that it consumes large quantities of time and effort that could be expended towards other, perhaps more valuable, activities." (Lupa & McCubbins, 1994: 93) This leaves the principal with the

problem of selecting less costly and less effective methods. Much of the information a manager receives about subordinate activity is obtained through self-reporting of action already taken. Self-reporting suffers from the reluctance to reveal private information, while third party reporting is plagued by misrepresentation to further self-interests (Lupa & McCubbins, 1994). Therefore, the cost of monitoring limits its effectiveness (McCubbins, Noll & Weingast, 1987). The costs to the principal from contract negotiation, monitoring and enforcing are called transaction costs (Stokey, & Zeckhauser, 1978; Apgar & Brown, 1987). The opportunity cost² to monitoring includes resources, which could have gone to service delivery, as well as the time used to acquire information, assess noncompliance and devise a strategy or punishment (McCubbins, Noll & Weingast, 1987). There is also “. . . a degree of cost in enforcing the penalties.” (Arrow, 1984: 163) Transaction costs are increased by inefficiencies. Kolt and Zupan (1990) suggest that costs ensure monitoring is likely to be incomplete, thus allowing room for shirking. Restrictive budgets make this especially true in policing.

Control becomes more difficult for the principal as the agent's level of discretion and information increases. An agent's prior knowledge or expertise provides advantages and greater flexibility. “The rationality of policy under a hierarchical system is thus constantly threatened by the disjunction between power and knowledge.” (Rourke, 1984: 149)

Difficulty in monitoring the actions of subordinates, asymmetric information in the form of expertise, or transaction cost in overturning the actions of

² An economic term that includes the price forgone alternatives.

subordinates all can give agents some opportunity for discretion. (Songer et al., 1994: 674)

[A]n informed agent has more actions available than an uninformed agent. This decreases the number of incentive schemes available to the principal. (Sobel, 1993: 269)

The principal must accept the unlikelihood of completely regulating the agent's activities. Monitoring is limited by its transaction cost. The level of monitoring is generally established at the equilibrium of marginal cost and marginal benefits. Agents may structure their behavior around the effectiveness of monitoring activity. The inefficiencies of monitoring suggest the need for an alternate method of evaluating personnel.

2.4.5 Principal-Agent Model

If principals and agents shared common goals, the bureaucratic model would effectively explain behavior in organizations. The principal would develop policy and agents would dutifully carry it out. The only variable would be the effectiveness of the communication system. The traditional bureaucratic model will now be viewed from a principal-agent perspective to identify its deficiencies. The principal-agent model will demonstrate how, when the goals of the principal and agents diverge, agents are able to thwart or sabotage the principal's policy directives. Additional rules, structure or monitoring cannot completely prevent these actions. This example will demonstrate the importance of shared goals and objectives.

The relatively simple process depicted in the traditional hierarchy model fails to account for important activities of employees (See Bourns, 1995). Organizations are

replete with “. . . parochialism, possessiveness and the clutching of information as a source of power. . . .” (Sparrow, 1993: 4) “There is an area of acceptance within which the individual will behave ‘organizationally.’ When the organizational demands fall outside this area, personal motives reassert themselves . . .” (Simon, 1976: 204; Also see Perrow, 1986) A new and more effective model will now be constructed. This new model is constructed from Agency Theory, a review of police and organizational literature and observing and interacting with police officers. This model is based upon the inevitable presence of incentives and motives for agents to take actions that do not comply with their principal’s desires. In addition to the filters employed by classic bureaucratic structure, there are filters created by employees. Subordinates act strategically to protect and further their interests.

Because these filters are inconsistent with the organization’s purpose, they shall be labeled self-serving filters (See Figure 2). “Clearly, the American research literature confirms the potency of the street level police culture to subvert, deflect, and distort managerially imposed structures, directions, and practices . . .” (Dean, 1995: 346) Wycoff and Kelling (1987) documented deliberate distortions of information by officers in the chain of command. Strong resistance from the rank and file can ghettoize or eviscerate an unpopular program (Buerger, 1993). Upward communication is distorted to protect the sender (Wildavsky, 1992; Sheehan & Cordner, 1989; Scott, 1986).

Self-serving filters act to promote an individual's or group interest, rather than the organization's goals. Information is transmitted or blocked for personal rather than organizational reasons. Subordinates support or oppose programs or policy while they

Principal-Agent View of the Bureaucratic Model

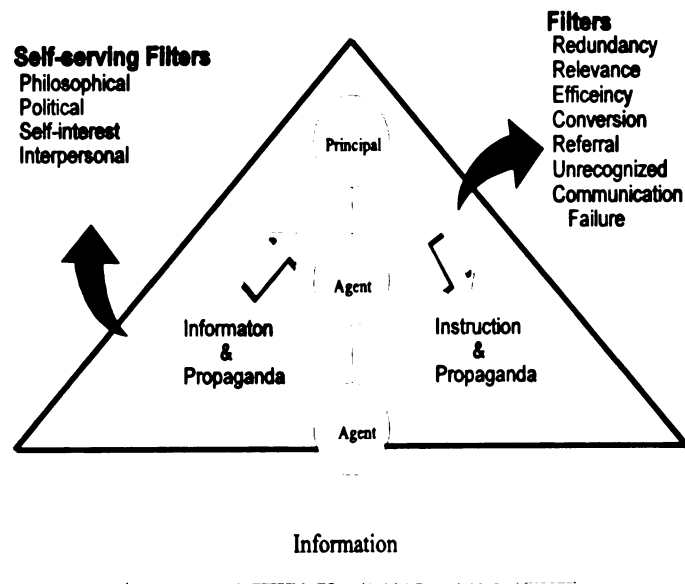


Figure 2

attempt to manipulate the organizational environment. The likelihood of improper behavior is derived from a cost calculation of possible detection, probable punishment, and divergence of principal and agent interests (McCubbins, Noll & Weingast, 1987).

Filters have various sensitivity and threshold levels to regulate the flow of information. They are more likely to be employed when the agent perceives an activity does not serve his or her personal interest (McCubbins, Noll & Weingast, 1987). To fully understand them, one must understand the goals and objectives of all the actors involved.

Because of these filters, the communication flow is not as efficient nor behavior as stable as depicted in the traditional model. Personal interests compromise the organizational communication system, which is designed to carry information up the hierarchy and direction back down. Self-serving information is used to manipulate organizational processes for nonorganizational purposes. Employees may use information as propaganda to further their interests. This propaganda takes many forms and is usually dysfunctional to organizational objectives. "Hence the superior is not likely to be given information by subordinates that would lead to decisions affecting them adversely. They not only tell the superior what he or she wants to hear, but also what they want the supervisor to know." (Whisenand & Rush, 1988: 115)

Agents may emphasize or report only information that supports their positions by intentional manipulation (See Whisenand & Rush, 1988). Employees may emphasize or report only negative information about a competitor's program or activity. They may even sabotage activities they feel undercut their interests. This organizationally

dysfunctional activity may emanate from authority struggles. These unproductive behaviors can occur when an agent perceives that someone is exceeding his or her realm and invading the agent's turf, or when a new policy requires more work or reduces the agent's status (Gouldner, 1954). If the history of the organization does not support risk taking, the agent will find little reason to support new activity.

One type of self-serving filter can be called a philosophical filter. It represents activity based on professional training, bias, ethics, equity or personal orientation. The principal and agent may differ in their philosophical orientation or beliefs. Decision making is affected by one's belief system (Schmallegger, 1995; Bennet, 1994; DeGeorge, 1992; Wilson, 1989; Rourke, 1984, Walker, 1977; Kaufman, 1973). "Gut-level value systems automatically *filter* the way we view reality." (Whisenand & Ferguson, 1996: 39) Questions of legitimacy may arise when an action does not appear consistent with past organizational practices, does not make sense to employees, or is perceived to abandon previous efforts (Clairmont, 1991; Lynch, 1986). Resisters may sincerely disagree with a policy or organizational goal (Trojanowicz & Bucqueroux, 1994; Wycoff & Kelling, 1978). Similarly, actions may be accepted as legitimate, without scrutiny, if they seem to make sense and are consistent with past activity.

A person's perspective determines if he or she will recognize or understand the importance of what is being offered by another (Gruber & Niles, 1976). The communication process may be corrupted through selective perception (Whisenand & Rush, 1988). Employees may not put forth their best effort if they perceive the activity wastes their time (McCubbins, Noll & Weingast, 1987). Obsolete performance criteria

may hamper the evaluation of new activities. The merits of the new activity may not be seen when viewed from an out-of-date perspective. Flaws may be emphasized and benefits downplayed. In these instances, ideology may supersede empirical evidence.

A second filter has a political nature. A principal and agent may have different political objectives. To gain influence, power or status, subordinates use political filters. Bureaucratic organizations are all about power and the acceptance of unequal power relationships (Perrow, 1986). Employees may attempt to manipulate the environment to their advantage (Wilson, 1989; McCubbins, Noll & Weingast, 1987; Perrow, 1986; Lipsky, 1980; Kanter, 1977; Bopp, 1977; Downs, 1967; Cyert & March, 1963; Barnard, 1962). “[I]ndividuals in organizations will always be playing political games in response to incentives that they perceive.” (Knott & Miller, 1987: 187)

Political actions include siding with the right people to punish enemies and reward friends (Sheehan & Cordner, 1989). Officers may mistrust management or fear losing power or authority (Roberg, 1994; Greene, Bergman & McLaughlin, 1994; Trojanowicz & Bucqueroux, 1990, 1994; Sherman, 1986 Lynch, 1986; Wycoff & Kelling, 1978). They may be vengeful or hope that weakening an enemy will lead to personal advancement (Wycoff & Kelling, 1978). These actions differ from philosophical filters in that they are conscious manipulations aimed at increasing personal utility. Political filters are calculated acts. Philosophical filters, on the other hand, are the result of judgments shaped by belief.

A third filter involves protecting self interest. It includes two closely related concepts: economic advancement and protecting vested interests. Agents may pursue

their self-interest to the detriment of the principal. Both types place individual interests above those of the organization.

Economic self-interest filters are used to maximize or maintain monetary compensation, opportunity for advancement, economic benefits, resource control and allocation, or minimize or maintain levels of work effort (Buerger, 1994; Koford & Penno, 1992; Wilson, 1989; Bombrink, 1988; McCubbins, Noll & Weingast, 1987; Perrow, 1986; Lipsky, 1980; Dessler, 1980; Cyert & March, 1963; Barnard, 1962). Agents examine policy actions to determine how they affect workloads, opportunity for additional compensation (i.e., overtime, compensatory time, allowances) or benefits. Agents also find opportunities to shirk their responsibilities. For police officers may include cooping (resting or hiding), cruising aimlessly, extended meal breaks, and unnecessarily long conversations with merchants or residents (McElroy, Cosgrove & Sadd, 1993). "Police officers have an interest in downgrading the classification of calls, in order to evade paperwork and accountability." (Sheehan & Cordner, 1989: 57; also see Osterloh, 1975) Officers may fear that change may lead to the elimination of their jobs, positions (Wycoff & Kelling, 1978) or supplemental incomes (Buerger, 1994). Employee incentive plans, such as Scanlon Plans (DuBrin, 1985; Ouchi, 1981), are attempts to use self-serving motivations to the benefit of the organization.

A closely related concept is protecting vested interests. Agents become vested in the organizational system (Kelling & Bratton, 1993; Moore & Stephens, 1991; Trojanowicz & Bucqueroux, 1990; Wycoff & Kelling, 1978; Sparrow, 1988; Haimann & Hilgert, 1977; Carte & Carte, 1975). Their response to change will be governed by

incentives (Wilson, 1989). Individuals may not act upon organizational information they do not perceive to support their interests (Perrow, 1986). Actions that lessen their opportunity to advance may be opposed (See Carte & Carte, 1975), as will actions that threaten current status or autonomy (Redlinger, 1994). Employees are also likely to highlight information that improves their standing in the organization. They have shown their ability to frustrate efforts to increase their accountability (Walker, 1977) or redefine their role (Sadd & Grinc, 1994). Participatory management (Shafritz et al., 1992; Holzer, 1990; DuBrin, 1985; Dessler, 1980), job enrichment (Perrow, 1986; DuBrin, 1985; Dessler, 1980; Hampton, 1977), labor-management committees (Holzer, 1990; Dawson, 1990; DuBrin, 1985), quality of work-life programs (Shafritz et al., 1992; Holzer, 1990), quality circles (Shafritz et al., 1992; DuBrin, 1985; Odaka, 1986; Ford, 1983; Ouchi, 1981), management by objective (Shafritz et al., 1992; Dessler, 1980; Hampton, 1977; Carrol & Tosi, 1973) and total quality management (Shafritz et al., 1992; Walton, 1986) are examples of attempts to bring together the interests of management and employee.

A fourth filter centers on interpersonal relationships. An agent may be influenced more by a social group than by his or her principal. "The evidence from the behavioral science indicates clearly that the human being is a social organism." (McGregor, 1966: 227) "[T]he police officer becomes subjected to intense peer group influence and control." (Barker, 1977: 50) This begins when veteran officers teach rookie officers to forget what they were taught in the academy and learn the job from experienced officers (Hunt & Magenau, 1993; Goldstein, 1977). "Peer expectations not

only affect how hard people work at their jobs; they can affect what they decide the job *is.*" (Wilson, 1989: 48)

Interpersonal filters have a social origin. They include acceptance, recognition, loyalty, group status, norms, personality conflict, and prejudice (McElroy, Cosgrove & Sadd, 1993; Walker, 1993; Holden, 1992; Wilson, 1989; Wycoff & Kelling, 1987; Sherman, 1982; Carte & Carte, 1975; Osterloh, 1975; Alchian & Demsetz, 1972; Astor, 1971; Downs, 1967; McGregor, 1966; Cyert & March, 1963; Barnard, 1962). Officers may be reluctant to pass along negative information they fear might damage another officer's career (McElroy, Cosgrove & Sadd, 1993). Agents may become so involved in outside activities it becomes detrimental to their organizational role (Cooper, 1996). Informal groups are likely to set production rates (Roethlisberger, 1941). "Probably the strongest motivating force in a police agency is in the peer-group bonds. . . ." (Osterloh, 1975: 61) Agents may not report the transgressions of other agents (McElroy, Cosgrove & Sadd, 1993; Astor, 1971). Agents may use information as currency in a market of social-economic exchange. When an agent performs a favor to help an associate, it can bind that associate in some future action. Individuals may seek to make their friends look good and competitors appear unfavorably to others of importance. T-groups (Perrow, 1986; Dessler, 1980), organizational development (Dessler, 1980; Hampton, 1977) and Japanese management techniques (Odaka, 1986; DuBrin, 1985; Ford, 1983; Ouchi, 1981) are attempts to use group socialization to facilitate organizational goals.

In conclusion, police organizational structures may not operate to keep the chief fully informed. "A major communications problem, then, of the higher levels of the

administrative hierarchy is that much of the information relevant to the decisions at this level originates at lower levels, and may not ever reach the higher levels unless the executive is extraordinarily alert.” (Simon, 1976: 163) If we view management through a principal-agent model, we can more fully understand its complexity. If subordinates share the same goals as their manager, they are more likely to comply with policy direction rather than subvert organizational activities. If agents are reasonably satisfied in their jobs, they are less likely to be disruptive. Satisfied employees who pursue organizational goals are less likely to filter organizational processes to advance dysfunctional objectives.

2.4.6 Summary

This section has introduced the principal-agent model as a tool for understanding the problems of police administration. The model was used to demonstrate the deficiencies of the traditional bureaucratic model. These deficiencies are not the product of poor implementation. The bureaucratic model will not be more successful if more rules or structure are added. A principal-agent approach to problems demonstrates the fundamental shortcomings of the traditional approach and suggests possible remedies.

2.5 Importance of Shared Values

Critics of classic organizational theory have long recognized the economic nature of organizational behavior. Douglas McGregor (1966) believed that human relationships are transactional. Elton Mayo, a founding force behind Human Relations

theory of management, believed “. . . each individual acts according to calculations of his or her own self-interests. . . .” (Perrow, 1986: 60)

“Police departments are powerfully influenced by their values.” (Wasserman & Moore, 1988: 1) “[H]ow an organizational culture responds to change will depend on the meaning and values carried by its members.” (Crank, 1996: 266) “[O]ur value system assists us in making decisions. Conversely, when two or more of us possess different values, we are apt to conflict with one another.” (Whisenand & Ferguson, 1996: 40) Values act as filters (Whisenand & Rush, 1988). The task of managers is “. . . to seek to create conditions (an organizational environment) such that members of the organization at all levels can best achieve their own goals by directing their efforts toward the goals of the organization.” (McGregor, 1966: 212)

When managers and subordinates share goals and objectives, many of the management problems are lessened. “[W]hen the exchange of values for values is simultaneous or nearly so, the contracts may almost be self-enforcing.” (Arrow, 1984: 163) “Some analysts warn that only when the formal values espoused by today’s innovative police administrators begin to match those of rank-and-file officers can any police organization begin to be high performing.” (Schmallegger, 1995: 202) “*Values clarification* is the main hope today for keeping the police workforce united.” (Whisenand & Ferguson, 1996: 17; also see Stephens, 1994; Hunt & Magenau, 1993; Couper & Lobitz, 1993; Sheehan & Cordner, 1989) When organizational values influence behavior, actions are more coherent and predictable, and there is less need for strong control (Wasserman & Moore, 1988). It should now be apparent that the

principal's management problems are greatly reduced when the principal and agent share common goals.

2.6 Conclusion

Sadd and Grinc (1996) spoke of the difficulty police managers have in communicating their goals to employees. Management initiatives are given little credibility by the rank and file. The chief needs to address this when devising management strategies. Where there is great disparity in goals between principal and agent, management becomes more challenging. It is more difficult for the principal to induce compliance and to monitor behavior. Policymakers may overlook the complexity of management if they do not consider the issue of goal congruence.

Classic bureaucratic theory does not fully explain subordinate behavior. The mechanistic efficiency envisioned by the bureaucratic model is rarely achieved. Interactions are not rigidly controlled by organizational structure. Each actor influences transactions. Reporting and communications are filtered. Organizational actors manipulate the information system. When employee evaluating and monitoring are imperfect, the challenge to managers increases.

To direct the organization and to implement policy, managers must rely upon supporters and overcome resisters. A principal-agent approach helps to identify the difficulties confronting managers. Managers who can identify areas of support and resistance can formulate more efficient and effective policies.

Adopting a principal-agent perspective allows us to reconceptualize the management problems in police organizations. The first step is to search for areas of compliance and resistance within the traditional structure of police organizations. We can then determine if job assignment is related to officers' attitudes and attachment to the organization. Is job assignment related to the level of goal congruence with the chief? Do officers in different job assignments have the same levels of commitment to the organization? Once these questions are answered, we can better address management problems. If officers in particular job assignments differ, it may be inefficient and ineffective to treat them as if they were the same.

Chapter 3

METHODOLOGY

3.1 Introduction

Police departments are complex organizations whose management requires the continual attention of police administrators. As demonstrated in the previous chapter, subordinates have the means to manipulate organizational systems (See Chapter 2). This becomes a problem for the organization if principal and agents do not share the same goals and values. Agents may be able to further their own interests at the expense of the organization, while shielding their activities from their principal. Chapter 3 defines a methodology to explore potential conflict and how it affects a police chief's management strategy.

Classic bureaucratic theory does not sufficiently explain behavior in police organizations. The assumptions of classic hierarchical theory are problematic. A hierarchical structure assumes that agents will readily provide the proper information when the principal needs it for decision making. Common experience teaches that this may not be so.

Policy resistance may include the manipulation of information. Resisters may use active methods: blocking, obstructing or sabotaging information delivery. Or, resisters

may be more passive, failing to report the noncompliance or the overt disobedience of others. The method of resistance is chosen through a calculation of benefits, risk and opportunity.

This study explores relationships between police personnel. Its purpose is to provide insight into the relationship between police chiefs and their employees. It will help guide police chiefs to manage subordinates by investigating whether policy resistance is more likely in certain job assignments. As with any inquiry, it begins with certain assumptions.

The first assumption is that actors behave rationally. A principal-agent model incorporates the concepts of economic incentives and rational behavior. Actors are assumed to be utility maximizers, although models have been developed to represent utility stabilizers (Rogerson, 1985). The use of rational actor models does not rule out altruistic behavior. Such activity appears in these models as a stochastic component. The theory proposes that altruistic behavior is exceptional and that most organizational behavior is best modeled by a rational actor metaphor. It is further assumed that when agents' goals are closely aligned with their principal's goals, there is less need to monitor behavior (Arrow, 1984). This assumption is derived from the premise that agents who are pursuing the same goals and objectives as their principal will require fewer incentives than agents who pursue goals and objectives different from those of their principal.

This inquiry begins with the null hypothesis that the goal congruence between police chiefs and subordinates is independent of job assignment. This hypothesis stems

from the Reform Model's reliance on structure and the principal-agent model's concern for control.

H₀: Job assignment is unrelated to the goal alignment of principal and agents.

If there is no relationship between job assignments and goal alignment, then the management problem for the principal may be the same for each job assignment. However, if the level of goal alignment varies significantly for different job assignments, then the principal may need to design management strategies for each group. Police managers have long recognized the need to closely monitor and control the behavior of their employees (See Wilson, 1963 and Goldstein, 1977), but community policing brings new challenges for the police chief. We know little about how to effectively manage community police officers. The chief may need to devise very different management strategies for community police officers if their attitudes and goals differ significantly from other officers.

The second hypothesis deals with employees' job satisfaction and commitment to the organization that employs them. In this study, organizational commitment refers to the employee's likelihood of remaining in the organization and the employee's perception that his or her future is linked to the organization. More committed employees are less likely to disrupt organizational activity. When commitment levels are high, officers have a larger zone of indifference for the policies of their chief. In other words, they are less likely to challenge their chief's policy. These employees are more likely to accept their chief's authority and act to further their chief's objectives. It is presumed that employees with greater attachment to the organization are less likely to jeopardize their investment

in the organization. These employees are more likely to conform to their principal's desires and are less likely to subvert or sabotage policy. An employee's commitment to an organization is often closely related to his or her level of job satisfaction. This study will combine measures of organizational commitment and of job satisfaction into a scale of employee satisfaction. The null hypothesis, proposed for subordinates in different job assignments, stems from O.W. Wilson's concern for *esprit de corps* and Agency Theory's focus on negotiating acceptable contracts.

H₀: Job assignment is unrelated to levels of organizational commitment or job satisfaction.

If no relationship is found between job assignment and levels of organizational commitment and job satisfaction, then the principal's inducement strategies may be equally effective for each job assignment. However, if commitment and satisfaction levels vary across job assignments, then the principal may need to adjust inducement schemes for each job assignment. Once again, we know little about the incentives required to motivate community police officers. The chief may need to be less concerned about the actions of community police officers if it is shown they are more satisfied and more committed to the organization. Or, the chief may need to more closely monitor and offer greater inducements to community police officers if it is shown they are less satisfied and less committed to the organization.

A principal-agent model helps to clarify the chief's management problems by bringing the effects of incentives on behavior to the forefront. The model makes certain assumptions. It assumes that common goals, values, job satisfaction and commitment to

the organization will result in less policy resistance. As employees become more motivated and contented in their jobs, they need fewer inducements and less monitoring. This study explores some of the secretive aspects of the principal-agent relationship.

3.2 Unit of Analysis

Though data are collected in two police departments, the unit of analysis of this study is individual officers. The research focuses on three job assignments: patrol, detectives and community police officers. Each category presents unique challenges for police managers. Patrol is the most prevalent classification and has received the most attention from police reformers. Detectives hold the most status in traditional organizations, and the extra perks and fringe benefits (flex-time, weekends off, decreased accountability through paper work, and increased discretion) they receive, confounds attempts to monitor them. Community police officer is a new job classification and little is known about how to effectively manage these officers. The increased discretion and decision-making power granted community police officers are a concern for many police managers.

3.3 Sites and Sample

Data were collected in two regionally diverse American police departments. The departments were selected for their reputed commitment to community policing. Both departments have community policing programs funded, in part, by the Department of Justice and are well respected in the policing community. In addition, both departments

have an adequate number of officers assigned to community policing to provide a sufficient sample for that job description. A sample of at least thirty community police officers was sought to provide a statistically large sample and avoid the inherent problems of small sample size.

3.3.1 Cities

The first research site is Cincinnati, Ohio. It is a Midwestern industrial city located on the Ohio-Kentucky border. Its location also makes it a gateway to the South. Cincinnati is racially diverse with a population of 358,170. The city is energetic and shares the complexity and challenges of other cities its size.

Colorado Springs, the second research site, is located adjacent to the Rocky Mountains in central Colorado. A city with a population of 316,48, it thrives on tourism, high technology and its close proximity to several military installations.

Similarities and differences between these two cities are evident from U.S. Census Bureau data (1996). Cincinnati is ranked 46th in population. Colorado Springs is ranked 51st in population. Cincinnati's population is contained within 77.2 square miles, while the population of Colorado Springs is spread over 183.2 square miles. In Cincinnati nearly forty percent (37.9%) of the population is African American and less than one percent (0.7%) is Hispanic. In Colorado Springs seven percent (7%) of the population is African American and nine percent (9.1%) is Hispanic. Cincinnati is experiencing a decline in population, while Colorado Springs' population is growing. Though similar in size, Cincinnati is more densely populated with a large minority population. Colorado

Springs, on the other hand, is a growing and more spacious city with a smaller minority population.

3.3.2 Police Departments

The Cincinnati Police Division has 962 sworn officers. Thirty-three officers (33) are assigned to community policing in the Community-Oriented Policing Unit. The racial composition of the department is sixty-four percent (64.3 %) white, nearly thirty-five percent (34.7 %) African American, less than one tenth percent (0.1%) Hispanic and one percent (1%) Oriental (Reaves & Smith, 1995). The gender composition is eighty-four percent (84.3%) male and nearly sixteen percent (15.7%) female (Reaves & Smith, 1995).

The Colorado Springs Police Department has 512 sworn officers. There are twenty-four (24) community policing officers assigned to the Neighborhood Policing Unit. The racial composition of the department is nearly eighty-five percent (84.8%) white, five percent (5.1%) African-American, nine percent (9.3%) Hispanic and four tenths percent (0.4%) Oriental (Reaves & Smith, 1995). The gender composition is eighty-nine percent (89.2%) male and nearly eleven percent (10.8%) female (Reaves & Smith, 1995).

The 1997 Preliminary Budget Report for the Colorado Springs Police Department uses a summary of US Census Bureau and Department of Justice information to highlight the differences between the two departments. Cincinnati has 2.72 officers per 1000 population and 82.09 crimes per 1000 population. In Colorado Springs, there are 1.49 officers per 1000 population and 65.78 crimes per 1000 population. Though similar in

population size, Colorado Springs enjoys a lower crime rate and employs fewer police officers.

3.3.3 Sampling Frame and Sample Size

The sample consists of police officers from departments engaged in community policing. These departments have distinct job descriptions for community police officers (CPO), patrol officers and investigators or detectives. Most of the data were collected during a two-week period in July 1997, to limit the influence of historical effects and other stochastic factors. Some data were also collected in August 1997 (See section 3.4.3).

Two hundred thirty-eight officers (238) were surveyed in the Cincinnati Police Department. One hundred eighty-two (182) usable surveys were returned for a response rate of seventy-six percent (76%). The race of respondents was: 126 (69.23%) white, 45 (24.73%) African American, 2 (1.1%) Hispanic, 1 (0.55%) Oriental, 3 (1.65%) other, and 5 (2.75%) did not respond to the race question. The gender of the respondents was 144 (79.12%) males, 37 (20.33%) females and 1 (0.55%) did not respond to the gender question.

Table 1– Cincinnati Response

Job Assignment	Surveys Distributed	Usable Surveys Returned
Patrol	166	118
Detectives	40	36
Community Police	32	23
Nonspecified		6
Total	238	182

One hundred sixty-six (166) surveys were sent to officers at the Colorado Springs Police Department. One hundred fifty-three (153) usable surveys were returned for a response rate of ninety-two percent (92%). The races of the respondents were 122 (79.74%) white, 7 (4.58%) African American, 17 (11.11%) Hispanic, 3 (1.96%) Oriental and 4 (2.61%) other. The gender of the respondents was 127 (83.01%) males and 26 (16.99%) females.

Table 2– Colorado Springs Response

Job Assignment	Surveys Distributed	Usable Surveys Returned
Patrol	100	93
Detectives	45	41
Community Police	21	19
Total	166	153

3.4 Data Collection Instrument

A self-administered questionnaire was used to collect data. The instrument consists of four parts. Data in the first three sections are used to create scales. The final section uses a multiple-choice format to collect demographic information. The instrument was distributed to officers at their roll calls or line-ups. Once completed, officers sealed the instruments in the provided envelope and returned them.

Sections One through Three consist of responses on Likert-style scales or feelings thermometer. Section One consists of the officer's reaction to statements about issues in policing. It measures officers' reactions to issues confronting policing. It consists of ten questions. The questions touch on courtesy, accountability, bending rules, use of force, misleading the public, the image of policing, decision making, loyalty to the organization, uses of time and the influence of coworkers. These topics cover a wide range of policing issues.

Section Two asks the officer to respond as his or her chief to the questions in Section One. It solicits officers' perceptions of their police chief's views. This section contains the same ten questions as Section One, but the respondent is instructed to indicate his or her chief's opinion on these issues. The section provides a subtle opportunity for officers to express their support or displeasure with the views of their chief.

Section Three collects data on the individual's job satisfaction and commitment to the organization. Section Three measures job satisfaction and the officer's level of commitment to the organization. The section contains 18 questions drawn from

Schuessler's job satisfaction survey and from the Science Research Associates Attitude Survey. Both surveys have been shown to have high reliability and validity (Miller, 1991).

Section Four collects demographic information. The seven questions cover job classification, how the assignment was obtained, gender, race, level of education, length of job tenure, and tenure in current assignment. A copy of the questionnaire is included in Appendix A.

3.4.1 Pretest

The survey instrument was pretested three times with officers of the Bay County Sheriff's Department, Bay City, Michigan. Each test was timed and followed by a debriefing of the participants. These sessions helped to clarify the survey questions and remove ambiguity from the instrument. In its final form, the survey could readily be completed in less than ten minutes. It was important to limit the time required to complete the instrument. Understandably, administrators at the survey sites did not want the research process to unduly disrupt officers' duties.

3.4.2 Treatment of Data

Sections One through Three collect discrete, interval data to be used to construct scales of attitudes and values. Of interest is the difference between officers' views on the issues and their perceptions of their chief's views on the issues. Section One collects officers' views on issues. The questions in Section One were composed after a review of policing issues in the literature. Three panels of police officers examined the questions and helped to refine them. Section Two collects officers' perception of their chief's

views on these issues. The responses from Sections One and Two were used to make a scale of goal alignment. Each question in Section Two is subtracted from its counterpart in Section One. The absolute values of the difference in each question were summed to create the variable *differ*. This variable is a measure of goal alignment between officers and their chief. It is this perception of goal alignment that influences an agent's response to his or her principal's directives. "[H]uman behavior is seldom a *direct* response to objective reality, but is rather a response to the individual's perception of that reality." (McGregor, 1966: 216) These perceptions determine an agent's zone of indifference, compliance levels, and strategies.

The responses in Section Three comprise a scale of job satisfaction and commitment to the organization. The questions were drawn from previously successful surveys of job satisfaction and organizational commitment. Some of the questions were selected from the job satisfaction sections of Schuessler's Social Life Feelings Scales which have been found to have a good alpha reliability of .75 (Miller, 1991). Other questions were selected from the Science Research Associates Attitude Survey which has been found to have a good product-moment correlation of .89 (Miller, 1991). Some of the questions are written as negative indicators of commitment and job satisfaction. Questions 1-5, 12-13 and 15 were recoded to make them positive indicators. After recoding these questions, responses were totaled to become variable *satcom*.

Missing data is a problem when constructing scales. Scales are meaningless unless participants respond to the same number of questions. The researcher is confronted

with the options of disregarding cases that have missing data or coding missing responses to utilize as much data as possible. I chose the latter option.

On some questionnaires a question was skipped or, in a couple of incidents, a page missed. For these cases, the value of the mean for that department (rounded to the closest discrete value) was substituted for the missing value. Using the mean value is an appropriate substitution value for interval data (Babbie, 1979). This procedure is a conservative approach that supports the null hypotheses of no difference between job assignments. It will require a larger effect to reject the null hypotheses. A summary of the recoding of missing data can be found in Appendix B.

3.4.3 Data Collection and Administration of Instrument

Data were collected during the summer of 1997. The survey instrument, instructional sheet and a return envelope were distributed to officers (See Appendix A). Officers were asked to complete the questionnaire and place it in the provided envelope.

In Cincinnati, surveys were distributed through the interoffice mail system of the Cincinnati Police Division. Responses were gathered from each police district. Questionnaires were sent to officers assigned to work on the dates of data collection. The police division is decentralized into five stations dispersed geographically throughout the city. It would have been very difficult to attend roll calls at each division in the time allotted to collect data. The surveys were distributed and returned by the Community-Oriented Policing Unit located in the headquarters building. This method of data collection has been successfully used in previous research projects.

One hundred ninety-one (191) surveys were returned from the Cincinnati Police divisions, but nine (9) surveys were unusable. Nine (9) surveys were determined to be duplicates of an original community police officer's questionnaire. The original questionnaire was retained in the sample. The nine copies were discarded. This deception was troublesome because of the necessity of procuring a sufficient sample of community police officers.

Most of the Colorado Springs data were collected in the third week of July 1997. Questionnaires were distributed and collected at patrol roll calls or line-ups. This method proved very tedious. Officers in Colorado Springs work ten-hour shifts, and their starting times are determined by computer analysis of the projected workload. Unlike most departments that have one roll call at the beginning of a shift, in Colorado Springs each shift has multiple roll calls. Some roll calls may have nine or ten officers and other roll calls only two or three officers. Many times there were very few officers attending roll calls because of training, vacation, and court schedules. This made it difficult to obtain a sufficient sample. Despite this problem, all but two roll calls were surveyed in the three police divisions over the four-day research period. For roll calls I could not attend, questionnaires were left with the shift supervisor to distribute and collect.

The hectic pace of attending patrol roll calls made it impossible to attend detective roll calls. Surveys were left with supervisors of detective units to distribute and collect. I later retrieved these from the supervisors.

The community police officer sample was particularly difficult to collect. About a month before my research visit, the Neighborhood Policing Units (NPU) were

temporarily disbanded and their officers assigned to patrol duties. The community police officers were needed to assist patrol officers with the increased complaint volume for the summer months. Officers were scheduled to return to the NPU units two weeks after the research period. The importance of collecting a sufficient sample of community police officers necessitated adjusting the survey procedure. I arranged to have NPU supervisors distribute questionnaires to the NPU officers missed in the first survey. The NPU supervisors distributed and collected questionnaires after the units were restaffed. Sixteen (16) surveys were completed and returned to me in mid-August.

Officers of the Colorado Springs Police Department returned one hundred fifty-five (155) surveys. One blank survey was returned in a sealed envelope, and another returned with no responses to questions on pages one through five. Both surveys were discarded for a total of one hundred fifty-three (153) usable surveys.

3.4.4 Statistical Techniques

The two scale variables, *differ* and *satcom*, are the focus of data analysis. These variables are comprised of interval data collected on Likert scales. Later these variables will be collapsed into ordinal data so they can be used in contingency tables. Job assignments and the demographic data are examined to determine if they help to predict an individual's placement on these scales.

Patrol and traffic officers will comprise a baseline group. Detectives will represent elite assignments, and community police officers will compose the final group. Attitudinal responses of the groups will be compared to determine differences associated with job assignment. Data from each of the first three sections will comprise scales of

officers' views, perceptions of their chief's views, and job satisfaction and organizational commitment levels. Data from Section Four will be used as controls.

Four common techniques are used to report data: contingency tables, chi-square, measures of association (Cramer's V and Kendall's tau-b and tau-c), and t-tests. Each contributes to our understanding of the data in a unique way.

Contingency tables show relationships between two variables that have been classified into mutually exclusive categories (Pagano, 1986). Contingency tables and measures of association are appropriate techniques to study cross-sectional data (O'Sullivan & Rassel, 1995; Norusis, 1993; Babbie, 1979).

Chi-square is an appropriate statistic for examining nominal data and is usually used with contingency tables (O'Sullivan & Rassel, 1995; Norusis, 1993; Lipin, 1993; Vito & Latessa, 1989; Babbie, 1979). "The chi-square test for independence provides a standard for deciding whether two variables are statistically independent." (Reynolds, 1984: 15) It is the "... inference test most often used with nominal data..." (Pagano, 1986: 376). This technique is useful to test for independence, to compare several population proportions and to compare qualitative variables (Lipin, 1993). Chi-square measures the difference between expected and observed frequencies and allows the probability of a Type I error to be determined (Lipin, 1993). "It is an extremely popular statistic because it has very few assumptions. It's a nonparametric statistic that allows the researcher to calculate statistical significance with nominal level data." (Vito & Latessa, 1989: 96) Chi-square is appropriate for an exploratory study of this type because of its

non-parametric nature, its usefulness for comparing qualitative variables, and its usefulness in identifying the distribution of variables.

Cramer's V is a sensitive measure of association useful for exploratory studies of nominal level data (O'Sullivan & Rassel, 1995; Norusis, 1993). It is a symmetric measure used to detect the strength of associations. Though sensitive, the measure rarely obtains a level greater than .80 (O'Sullivan & Rassel, 1995).

Kendall's tau is an appropriate measure of association for ordinal level data. Tau-b is useful with square tables, and tau-c is appropriate for rectangular tables (O'Sullivan & Rassel, 1995; Norusis, 1993).

Chi-square and contingency tables can be influenced by how the data is aggregated (O'Sullivan & Rassel, 1995). To overcome the problem of collapsing interval data into ordinal data, t-tests of mean values will also be performed to confirm chi-square findings. T-tests will be conducted on the mean value of each variable attribute to determine possible significance.

This is an exploratory study and begins with no assumptions of causality, linearity or distributions of variables. However, if the data analysis suggests ordinary least squares (OLS) analysis may be productive, a regression model will be developed. OLS is useful for evaluating the influence of multiple independent variables on the dependent variable and building predictive models (Norusis, 1993; Lapin, 1993; Vito & Latessa, 1989; Pagano, 1986). It should be noted beforehand that regression analysis is most appropriate when dependent variables consist of continuous data (Babbie, 1979). The data in this study is discrete.

The primary focus of this study is the variable *job assignment* and its relationship to goal congruence and job satisfaction. However, the *job assignment* variable may reach statistical significance because of its association with some other factor. The demographic variables consist of factors commonly proposed as influencing police behavior (job selection process, gender, race, education, job tenure and length of job assignment). These variables will be used as controls. Findings will not be considered significant unless they achieve a ninety-five percent (95%) confidence level.

This study is designed to solicit sensitive information about police officers' acceptance of the policies pursued by their chief. Other methods could be used to collect this data, but they may be less efficient. Personal interviews might be revealing if one could overcome the native suspicions of the survey subjects. It would most likely take considerable time at the research site to develop the rapport necessary for the researcher to collect the data. Telephone interviews are another possibility, but it is unlikely they would be productive. Direct observation would be useful, but very time intensive. Outsiders often find it difficult to gain acceptance in police organizations. Participant observation might be useful, but the researcher would need to already be a member of the organization. The research method employed in this study allows officers to indirectly question the positions of their chief and remain anonymous.

3.5 Ethical Issues

It is important that research efforts cause no harm to the participants. This study examines employees' potential noncompliance to the policies of their managers. It is

likely that both police chiefs and officers consider this sensitive information. This necessitates protecting the confidentiality of the participants' responses.

The first precaution taken was the mandatory review of the survey procedure and instrument by the University Committee on Research Involving Human Subjects at Michigan State University. This committee examines research proposals to ensure they do not harm participants. This study was submitted to the Committee and passed its review procedures.

The instructions, attached to the survey instrument, pledged confidentiality. The responses of participants remained anonymous. An envelope was provided with each survey so participants could conceal their response after completing the questionnaire. No one in the officer's police department viewed the completed surveys. The surveys were not viewed until I opened envelopes upon returning to Michigan.

Anonymity will also be protected when reporting the data. The data have been aggregated for analysis. The data will not be reported in a manner that will allow individual respondents to be identified.

Respondents participated voluntarily. Surveys were completed while the officers were on duty to limit intruding into their private lives. No one was required to complete the survey. If an officer felt pressured by peers or supervisors to participate, he or she could place a blank survey in the sealed return envelope (as did one Colorado Springs officer).

Participants were told the nature of the research. In both the instructional sheet and my introduction, respondents were told I was a police officer conducting research for

my dissertation. I attribute the high response rate and high level of support I received from both police departments to my status as a police officer.

3.6 Conclusions

The purpose of this research is to examine areas of potential compliance and resistance to policy direction. The relationship between police chiefs and their officers is examined. This study begins with the assumption that higher levels of goal alignment and greater job satisfaction are characteristic of more policy compliant agents. It is assumed that agents' perceptions of goal alignment with their chief are associated with their level of job satisfaction and influence their levels of compliance and resistance to policy.

This study is limited by the size of the sample. Only two police departments were surveyed. More study sites are always welcome. Though nothing was found to indicate these departments are atypical of departments their size, replication of this study in other police departments is encouraged.

This research would also have benefitted from extended direct observation at the study sites and the inclusion of extensive interviews of the research subjects. The time constraints of this unfunded research did not allow for these additions.

The effect of reassigning Colorado Springs NPU officers to patrol duties is unknown. This may have caused NPU officers to respond more like patrol officers. The timing of this redeployment was one of the unfortunate consequences of real world research.

The effect that the duplicate surveys submitted by Cincinnati Police Division community police officers had on the study is unknown. More confidence could be placed in the research findings if the community police officer sample was larger. However, the incident is a useful research lesson and may say something about the need to monitor community police officers.

Chapter 4 interprets and discusses the data. A detailed account of the data analysis is presented. The major findings and their implication for police chiefs' management schemes are discussed.

Chapter 4

RESULTS AND DISCUSSION

4.1 Introduction

The discussion now turns to an analysis of the data and the implications of the findings. Evidence is found to reject the first null hypothesis of no association between officers' job assignment and their level of goal congruency with their chief. The second null hypothesis of no association between job assignment and officers' job satisfaction and commitment to the organization cannot be rejected. The entire data set is examined, and then the data for each department is examined separately. This process revealed interesting and unexpected findings.

4.2 Frequencies and Demographics

An effective supervisor finds a proper technique to manage the situation at hand. The challenge is to properly assess what is needed to motivate subordinates. This study examines the attitudes and values of police officers to help managers identify areas of potential policy compliance and resistance. Knowing where policy compliance or resistance is likely to come helps managers assess implementation problems. If the police administrator views management problems from a principal-agent perspective, the value of this information becomes clear. The police administrator can use this information to formulate more effective management strategies. Three hundred thirty-five usable

surveys were collected ($n = 335$). The data from Sections One through Three were used to construct scales of officers' attitudes, values and perceptions. Section Four of the questionnaire collected demographic information to test the null hypotheses and to control for alternative explanations.

The principal research concern is the effect of job assignment on officers' attitudes and values. Data were collected in three categories: patrol, detectives and community police officers. Table 3 shows how the job assignments were distributed among the participants in this study.

Table 3 – Job Assignments

	Frequency	Valid Percent ¹
Patrol	211	64.0
Detective	77	23.3
Community police officer	42	12.7
Total	330	100.0
Missing	5	
Total	335	

By design, most of the respondents (64.0%) were patrol officers. Patrol serves as a benchmark to compare the other two job assignments, detectives (23.3%) and community police officers (12.7%).

¹ Valid percent is the percentage of responses after missing responses are removed.

The remaining variables in Section Four are used as controls or alternative explanations to reject or support the hypotheses. For convenience, they are called demographic variables. The first variable measures how the officer acquired his or her assignment. Two possibilities were measured. Officers can be assigned their job position or acquire it upon entering the department. Or, officers can volunteer for a job position or achieve it through promotion.

Table 4 – Job Assignment Acquisition

	Frequency	Valid Percent
Assigned or entry level	205	61.4
Volunteer or promotion	129	38.6
Total	334	100.0
Missing	1	
Total	335	

Table 4 reflects the unbalanced sampling scheme. As seen in the previous table, most of the participants (64.0%) are assigned patrol. Officers begin their careers in patrol assignments and serve apprenticeships to prove their worth. It is not surprising that most of the respondents report they have an assigned or entry level position (61.4%). Nearly thirty-nine percent (38.6%) of officers volunteered or were promoted to their positions.

A person's gender may influence how he or she feels about certain issues. Males dominate the policing workforce. The sample is composed of eighty-one percent (81.1%) males and nearly nineteen percent (18.9%) females.

Table 5 – Gender

	Frequency	Valid Percent
Male	271	81.1
Female	63	18.9
Total	334	100.0
Missing	1	
Total	335	

Race may also influence views and opinions. The questionnaire asked participants to identify their race. The majority (75.2%) of the participants were

Table 6 – Race

	Frequency	Valid Percent
White/non-Hispanic	248	75.2
African American	52	15.8
Hispanic	19	5.8
Asian	4	1.2
Other	7	2.1
Total	330	100.0
Missing	5	
Total	335	

white/non-Hispanic. African Americans represented nearly sixteen percent (15.8%) of the sample. Hispanics (5.8%), Asians (1.2%), and others (2.1%) comprised the remainder of the sample population.

Education is thought to influence a person's attitudes and beliefs. Four levels of education were measured. Most of the respondents have some level of college education. Ten percent (10.2%) of the sample had only a high school education. The largest group

Table 7 – Education

	Frequency	Valid Percent
High School or GED	34	10.2
Some college/associate	180	53.9
Bachelor's degree	106	31.7
Postgraduate degree	14	4.2
Total	334	100
Missing	1	
Total	335	

of respondents (53.9%) had taken some college course or earned an associate's degree.

The next largest portion (31.7%) consists of respondents who earned a bachelor's degree.

A few of the respondents (4.2%) had earned postgraduate degrees. The data show the majority of police officers (89.8%) have taken some college classes or have earned a college degree.

The experience of policing is thought to make officers suspicious and cynical. The length of police service or job tenure was measured to examine its influence. This variable requested the respondents' total police experience, including prior experience with other police departments.

Table 8 – Job Tenure

	Frequency	Valid Percent
Less than 1 year	13	3.9
1 to 5 years	92	27.7
6 to 10 years	83	25.0
11 to 15 years	40	12.0
16 or more years	104	31.3
Total	332	100.0
Missing	3	
Total	335	

The largest segments consist of officers with either one to five years of experience (27.7%) or sixteen or more years of experience (31.3%). The next largest group had six to ten years of experience (25.0%). There were few officers with less than one year experience (3.9%), and a small group had eleven to fifteen years of experience (12.0%).

Officers' attitudes may be influenced by the length of time they spend in a job assignment. They may also be excited or apprehensive about a new assignment. They

may become comfortable or bored with a long-term job assignment. Tenure in the officers' current assignment was measured in four levels.

Table 9 – Tenure in Current Assignment

	Frequency	Valid Percent
Less than 1 year	66	19.8
1 to 2 years	81	24.3
3 to 4 years	62	18.6
5 or more years	124	37.2
Total	333	100.0
Missing	2	
Total	335	

The largest group consists of officers who have held their current assignment for five or more years (37.2%). The next largest segment has been in their assignments for one to two years (24.3%). Nearly equal groups have been in their current assignment for less than a year (19.8%) or three to four years (18.6%).

4.3 Goal Alignment

If pockets of potential policy compliance and resistance can be identified in an organization, administrators can formulate more effective management schemes. The first step is to determine goal alignment between police chiefs and officers. To measure goal alignment, officers' attitudes and opinions on important issues were measured.

Next, officers' perceptions of their chief's views were measured. Their divergence was then calculated. The variable *differ* represents the sum of the absolute values of each officer's response to questions in Section One subtracted from the corresponding question in Section Two. If there is total goal congruence between the officers and his or her chief, the values of each question in Section Two would be the same as in Section One. The difference for each question would be zero. The sum of the ten questions would be zero for the variable *differ*. If there is no goal agreement, the value of *differ* would be ninety. The maximum goal disagreement for each question is nine. That would result if the officer indicated a response of one (no agreement) and also indicated a response of ten (high agreement) for his or her chief. When the question in Section Two is subtracted from the corresponding question in Section One, the goal difference for that issue is nine. The absolute value of the difference was used to construct the scale, so the reverse of this example also equals a goal difference of nine. If the officer responded to each question in this manner, the total for the ten questions would be ninety. This constitutes a theoretical range of ninety for this variable.

Table 10 – Difference in Goal Alignment

	Total	Mean	Std.Error	Median	Std. Deviation	Range
Differ	335	20.5463	.6394	20.00	11.7025	64.00

The mean value (20.5463) and mode value (22) are in the lower end of the theoretic range. The actual range (64) is only seventy-one percent (71.1%) of the theoretical range. This data is used to test the first null hypothesis.

H₀: *Job assignment is unrelated to the goal alignment of principal and agents.*

To test this hypothesis, the interval data collected in variable *differ* must be collapsed into ordinal data to construct contingency tables. The variable *differ* was recoded into three levels. Approximately the first third of the scale (0 to 35.2% of the cumulative percentage) was categorized as *low*. The approximate upper third of the scale (65.7% to 100% of the cumulative percentage) was categorized as *high*. The approximate middle third of the scale was categorized as *moderate*. This recoded variable, *differ1*, was used for contingency tables and chi-square tests.

The next step is to determine if any of the variables in Section Four are associated with the level of goal congruence, *differ1*. Each variable was tested with *differ1* as the dependent variable.

Table 11 – Goal Alignment and Assignment

	Patrol	Detective	CPO	Total
Low	62	37	16	115
Difference	29.4%	48.1%	38.1%	34.8%
Moderate	72	16	13	101
Difference	34.1%	20.8%	31.0%	30.6%
High	77	24	13	114
Difference	36.5%	31.2%	31.0%	34.5%
Total	211	77	42	330
	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 9.714$ $df = 4$ $p < .046$ Cramer's V = .121

Returning to the focus of this study, the first variable to be tested was job assignment. The association for job assignment and goal alignment is found to be significant ($\chi^2 = 9.714$, $df = 4$, $p < .046$), though the strength of the relationship is modest (Cramer's V = .121). Nearly half of the detectives (48.1%) perceived themselves to be in close goal alignment with their chief. Detectives (48.1%) and community police officers (38.1%) were more likely than patrol officers (29.4%) to be closely aligned with their chief. Patrol officers (34.1%) and community police officers (31.0%) are more likely to have moderate levels of goal disagreement than detectives (20.8%). Patrol officers (36.5%) are slightly more likely than detectives (31.2%) and community police officers (31.0%) to have high levels of goal disagreement with their chief. Overall, detectives and

community police officers feel more closely aligned to the goals of their chief than do patrol officers.

Next, the mean values for each group were examined; patrol (21.6398), detectives (18.1039) and community police officers (19.5000). Patrol officers were found to have higher levels of goal discrepancy with their chief than did detectives ($t = 2.31$, $df = 286$, $p < .021$). The mean values of community police officers were not found to be significantly different from those of patrol officers or detectives.

In summary, detectives have a significantly higher level of goal congruence with their chief than do patrol officers. Community police officers are spread more uniformly through the goal alignment scale. Community police officers fall somewhere between detectives and patrol officers in their levels of perceived goal congruity with their chief. The null hypothesis is rejected for goal alignment and job assignment. Now it needs to be determined if other variables are associated with goal alignment.

Table 12 – Goal Alignment and Job Acquisition

	Assigned/Entry level	Volunteer/Promoted	Total
Low	72	46	118
Difference	35.1%	35.7%	35.3%
Moderate	63	39	102
Difference	30.7%	30.2%	30.5%
High	70	44	114
Difference	34.1%	34.1%	34.1%
Total	205	129	334
	100.0%	100.0%	100.0%

$\chi^2 = .013$, $df = 2$, $p < .994$

Before we can be confident of an association for goal alignment and job assignment, additional factors must be explored. There may be other variables affecting this association. The manner in which a job assignment was acquired (assigned/entry level or volunteer/promoted) was tested for an association to goal alignment. A chi-square test of this relationship showed no significance. The mean values of the *assigned/entry level* group (20.8049) and the *volunteer/promotion* group (19.7974) were not significantly different ($t = .78$, $df = 332$, $p < .436$). The manner in which appointments are made was not significantly related to the officers' levels of goal congruence with their chief.

Though their numbers continue to grow, there are still relatively few women in policing. Gender was tested for an association to goal alignment. The question is, do

men and women share similar views about policing issues, and do they have similar levels of goal congruence with their chief?

Table 13 – Goal Alignment and Gender

	Male	Female	Total
Low	96	22	118
Difference	35.4%	34.9%	35.3%
Moderate	84	18	102
Difference	31.0%	28.6%	30.5%
High	91	23	114
Difference	33.6%	36.5%	34.1%
Total	271	63	334
	100.0%	100.0%	100.0%

$$\chi^2 = .231, \quad df = 2, \quad p < .891$$

The chi-square test revealed no significant association for gender and goal alignment. The mean values for males (20.2915) was not significantly different from the mean values for females (20.9524) in the t-test ($t = -.41$, $df = 332$, $p < .681$). Gender is not associated with goal alignment.

Race was the next variable examined. Because of the small number of Asians in the sample, the race variable was recategorized to place Asian officers in the *other* category. No significance was found for race using chi-square ($\chi^2 = 7.052$,

df = 6, $p < .316$) or t-test (*White*, 20.4374; *African American*, 19.5385; *Hispanic*, 21.0000; or *Other*, 17.7273). This variable had three cells with an expected count of less than five². Race was then recoded into two categories *white* and *other*. No

Table 14 – Goal Alignment and Race

	White	Other	Total
Low	83	35	118
Difference	33.5%	42.7%	35.8%
Moderate	81	21	102
Difference	32.7%	25.6%	30.9%
High	84	26	110
Difference	33.9%	31.7%	33.3%
Total	248	82	330
	100.0%	100.0%	100.0%

$\chi^2 = 2.541$, df = 2, $p < .281$

significant association was found for race and goal alignment using chi-square

($\chi^2 = 2.541$, df = 2, $p < .281$) or t-test of mean values (*White*, 20.4274; *Other*, 19.6341; $t = .55$, df = 328, $p < .585$).

² Though it is recommended that expected frequencies be kept to 5 or more for each cell, several authors now believe that standard is too stringent and can be relaxed (Norusis, 1993; O'Sullivan & Rassel, 1995; Reynolds, 1984).

Because so few officers had postgraduate degrees (14), the variable measuring education was recoded to combine bachelor degrees and postgraduate degrees. This new variable was then examined for an association with goal alignment.

Table 15 – Goal Alignment and Education

	High School	Some College/ Associate Degree	Bachelor/ Postgraduate	Total
Low	10	70	38	118
Difference	29.4%	38.9%	31.7%	35.3%
Moderate	10	46	46	102
Difference	29.4%	25.6%	38.3%	30.5%
High	14	64	36	114
Difference	4.2%	35.6%	30.0%	34.1%
Total	34	180	120	334
	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 6.505$, $df = 4$, $p < .164$

No significant association was found for level of education and perceived goal alignment with the chief ($\chi^2 = 6.505$, $df = 4$, $p < .164$). T-test of the mean values *high school* (22.8824), *some college/associate degree* (20.2056) and *bachelor/postgraduate* (20.0333) did not significantly different from one another.

The experience of policing may change officers' perspectives. Are the stages of an officer's career associated with his or her goal alignment with the police chief?

Officers' level of experience was analyzed to determine if there was an association with goal alignment.

Table 16 – Goal Alignment and Job Tenure

	< 1 yr.	1-6 yrs	6-10 yrs	11-15 yrs	≥ 16 yrs	Total
Low	8	36	26	10	38	118
Difference	61.5%	39.1%	31.3%	25.0%	36.5%	35.5%
Moderate	5	26	29	14	27	101
Difference	38.5%	28.3%	34.9%	35.0%	26.0%	30.4%
High	0	30	28	16	39	113
Difference	.0%	32.6%	33.7%	40.0%	37.5%	34.0%
Total	13	92	83	40	104	332
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

$$\chi^2 = 11.697, \quad df = 8, \quad p < .165$$

The tenure of police officers was not found to be significantly associated with the perception of goal congruency ($\chi^2 = 11.697$, $df = 8$, $p < .165$). Though no significant association was found, it should be noted that the small sample of officers with less than one year experience showed close congruence with the police chief. The majority (61.5%) were in the *low* category and the remaining (38.5%) were in the *moderate* category. None of these officers registered in the *high* category. Next, the mean values for the five categories of experience were examined: *less than one year* (11.8462), *one to five years* (20.1196), *six to ten years* (20.9518), *eleven to fifteen years* (22.7500), and *sixteen or more years* (20.2308). The t-test determined that officers with less than one

year experience perceived themselves to be more closely aligned with their chief than did officers with one to five years ($t = -.391$, $df = 27.8$, $p < .001$), officers with six to ten years ($t = -2.89$, $df = 94$, $p < .005$), officers with eleven to fifteen years ($t = -3.36$, $df = 51$, $p < .001$) and officers with sixteen or more years ($t = -4.12$, $df = 24.28$, $p < .0001$). None of the other tests of mean values were significant. Though it cannot be determined if this is a selection or maturation effect, officers with one year of experience or more did not perceive such close goal alignment with their chief.

A similar concern can be raised for an officer's tenure in his or her job assignment. Do levels of goal alignment change as officers gain experience in a job assignment? The amount of time that an officer has occupied his or her current assignment was examined for its association to goal alignment. The purpose of this variable is to measure for a honeymoon-effect stemming from appointment to new assignments. Are officers in new assignments more receptive to the direction of their chief? Do officers become bored or frustrated in their job assignments and become less receptive to the direction provided by their chief?

Table 17 – Goal Alignment and Tenure in Current Assignment

	< 1 yr	1-2 yrs	3-4 yrs	5 or more yrs	Total
Low	31	30	22	35	118
Difference	47.0%	37.0%	35.5%	28.2%	35.4%
Moderate	17	29	21	35	102
Difference	25.8%	35.8%	33.9%	28.2%	30.6%
High	18	22	19	54	113
Difference	27.3%	27.2%	30.6%	43.5%	33.9%
Total	66	81	62	124	333
	100.0%	100.0%	100.0%	100.0%	100.0%

$$\chi^2 = 11.555, \quad df = 6, \quad p < .073$$

No significant association was found for tenure in a job assignment and the perception of goal alignment with the police chief ($\chi^2 = 11.555$, $df = 6$, $p < .073$). Nonetheless, it is interesting to note that forty-seven percent (47%) of officers with less than a year in their current assignment were in the *low difference* category, and over forty-three percent (43.5%) of the officers with five or more years in their current assignment were in the *high difference* category. The mean values for tenure in job assignment categories were examined: less than one year (17.2879), one to two years (19.6667), three to four years (20.1452), and five or more years (22.5242). Officers with less than one year in their current job assignment were aligned significantly closer to the goals of their chief than were officers with five or more years in their current job assignment ($t = -3.18$, $df = 188$, $p < .002$). Again, it cannot be determined if this is a selection or maturation effect.

However, the close goal alignment between officers in new job assignments and their chief progressively declined after the first year.

To summarize, job assignment is associated with officers' level of goal alignment with their chief. Detectives are the most closely aligned with their chief. Patrol officers have high levels of goal disparity with their chief. Community police officers' levels of goal congruity fall between detectives and patrol officers.

First-year officers and officers in their first year of a job assignment were also more closely aligned with the goals of their chief than were officers with more tenure. It should be remembered that first-year officers are assigned to patrol; so depending on the rate of hire, many of the officers in new assignments may also be in patrol.

Further analysis of the data set (See Appendix C) produced these additional findings:

- *Assigned Officers and Goal Alignment.* Officers assigned (rather than volunteer/promoted) to detective and community policing jobs have higher levels of goal congruence with their chief.
- *Race and Goal Alignment.* White detectives are the most likely to be closely aligned with the goals of their chief.
- *Education and Goal Alignment.* For officers with bachelor's or postgraduate degrees, detectives were likely to be closely aligned and patrol officers moderately aligned with the goals of their chief.

- *Tenure and Goal Alignment.* Officers with less than one year of police experience are more closely aligned to the goals of their chief than are more experienced officers.
- *Tenure in Job Assignment and Goal Alignment.* Officers in their first year of a job assignment are more closely aligned to the goals of their chief than are officers who have held their assignment for five or more years.

4.4 Job Satisfaction and Commitment to the Organization

If subordinates have high levels of job satisfaction and commitment to the organization, they are less likely to disrupt organizational activities. If they have low levels of job satisfaction and commitment to the organization, the principal may need to monitor them more closely or offer more incentives. It is likely that different management strategies are necessary for each of these situations. Section Three of the survey measured officers' job satisfaction and level of commitment to their organization. The interval data collected in Section Three was totaled to become the variable *satcom*. The theoretical range of the variable *satcom* is 18 (a lack of job satisfaction and commitment to the organization) to 180 (very satisfied with the job and committed to the organization). The observed range was 52 to 140, about fifty-four percent (54%) of the theoretical range.

Table 18 – Job Satisfaction and Commitment to the Organization

	Total	Mean	Std.Error	Median	Std. Deviation	Range
Satcom	335	96.4269	.7511	97.0000	13.7466	88.00

This variable needed to be transformed to be used in contingency tables. The variable *satcom* was then collapsed into three categories of ordinal data to create the variable *satcom1*. Approximately one third of the response totals were assigned to each category. The lower third of the range of responses was categorized as *low* (0 to 33.4% of the cumulative percentage). The middle third of the range of responses was categorized as *moderate* (35.5% to 65.4% cumulative percentage). The highest third of the range of responses was categorized as *high* (67.5% to 100%).

Next the variable *satcom1* and job assignment were examined to determine if there is an association between the job assignments of officers and their levels of job satisfaction and commitment to the organization. This data is used to test the second null hypothesis.

H₀: *Job assignment is unrelated to levels of organizational commitment or job satisfaction.*

Table 19 – Job Satisfaction and Job Assignment

	Patrol	Detectives	CPO	Total
Low	66	27	16	109
Satisfaction	31.3%	35.1%	38.1%	33.0%
Moderate	60	31	15	106
Satisfaction	28.4%	40.3%	35.7%	32.1%
High	85	19	11	115
Satisfaction	40.3%	24.7%	26.2%	34.8%
Total	221	77	42	330
	100.0%	100.0%	100.0%	100.0%

$$\chi^2 = 8.246, \text{ df} = 4, \text{ p} < .083$$

No significant association was found between job assignment and job satisfaction ($\chi^2 = 8.246, \text{ df} = 4, \text{ p} < .083$). T-tests were conducted on the mean values for patrol officers (97.3602), detectives (95.2857) and community police officers (94.5238). No significant associations were found. The second null hypothesis cannot be rejected.

The method of job acquisition was examined for its association to officers' job satisfaction and commitment to the organization. It was assumed that officers who volunteered or were promoted to their assignments would have higher levels of job satisfaction.

Table 20 – Job Satisfaction and Job Acquisition

	Assigned/Entry Level	Volunteer/Promotion	Total
Low	67	44	111
Satisfaction	32.7%	34.1%	33.2%
Moderate	59	48	107
Satisfaction	28.8%	37.2%	32.0%
High	79	37	116
Satisfaction	38.5%	28.7%	34.7%
Total	205	129	334
	100.0%	100.0%	100.0%

$$\chi^2 = 4.018, \quad df = 2, \quad p < .134$$

No significant association was found for the method of job acquisition and officers' level of job satisfaction ($\chi^2 = 4.018, df = 2, p < .134$). Volunteers and promoted officers were no more satisfied with their jobs than were entry level and assigned officers. The mean values of assigned or entry level officers (96.8488) and volunteer or promoted officers (95.8140) were compared using a t-test. Again, no significance was found ($t = .669, df = 332, p < .504$).

It is sometimes proposed that employing more female officers could help to soften the adversarial relationship many departments have with the public. At the same time, many feel that a male dominated occupation, such as policing, is a hostile work environment for women. Are women comfortable in this organizational environment?

There appears to be some support for this concern. Women do not seem to find as much satisfaction in their jobs. Gender was found to be a significant factor.

Table 21 – Job Satisfaction and Gender

	Male	Female	Total
Low	81	30	111
Satisfaction	29.9%	47.6%	33.2%
Moderate	93	14	107
Satisfaction	34.3%	22.2%	32.0%
High	97	19	116
Satisfaction	35.8%	30.2%	34.7%
Total	271	63	334
	100.0%	100.0%	100.0%

$\chi^2 = 7.636$, $df = 2$, $p < .022$, Cramer's $V = .151$

Female officers were found to be significantly less satisfied with their jobs than male officers ($\chi^2 = 7.636$, $df = 2$, $p < .022$). Nearly half (47.6%) of the female officers had low levels of job satisfaction compared to nearly thirty percent (29.9%) of male officers. Seventy percent (70.1%) of male officers had moderate or high levels of job satisfaction compared to only slightly more than half (52.4%) of female officers. The strength of this association is modest (Cramer's $V = .151$). The mean value for male officers (97.2657) was also found to be significantly higher than that of female officers (92.9365) in t-tests ($t = 2.263$, $df = 332$, $p < .024$).

Police organizations have made considerable strides since the civil unrest of the 1960s, when white males dominated policing. Today, police departments more closely reflect the racial diversity of the communities they serve. This change brings new questions. Does this diversity affect management and officers' perception? Do police organizations address the needs and aspirations of all their members? Does the organization treat everyone fairly? Race was next examined for an association to job satisfaction. Because few were found in the sample, Asians were recoded and added to the *other* category. No significance was found for race and its association with job satisfaction ($\chi^2 = 8.758$, $df = 6$, $p < .188$). T-tests were performed on the mean values of the categories *White* (96.3065), *African American* (98.1731), *Hispanic* (94.2632), and *Other* (96.0000) and no significance was found.

Table 22 – Job Satisfaction and Race

	White	African American	Hispanic	Other	Total
Low	85	13	9	2	109
Satisfaction	34.3%	25.0%	47.4%	18.2%	33.0%
Moderate	77	18	4	7	106
Satisfaction	31.0%	34.6%	21.1%	63.6%	32.1%
High	86	21	6	2	115
Satisfaction	34.7%	40.4%	31.6%	18.2%	34.8%
Total	248	52	19	11	330
	100.0%	100.0%	100.0%	100.0%	100.0%

$$\chi^2 = 8.758, \quad df = 6, \quad p < .188$$

The race variable was then recoded into two categories: *White* and *Other*. Once again, no significance was found for race and job satisfaction ($\chi^2 = .834$, $df = 2$, $p < .659$). T-tests were then conducted on the mean values of the categories *White* (96.3065) and *Other* (96.9756). No significant difference was found ($t = -.384$, $df = 328$, $p < .701$).

Since the time of August Vollmer, reformers have advocated higher levels of education to improve the competence and professionalism of the police. One purpose of education is to change the way people perceive events and problems. It remains unclear how these more educated officers fit into police organizational structure. Officers' level of education was compared to their level of job satisfaction to determine if they are associated. Levels of education did not appear to affect officers' job satisfaction.

Table 23 – Job Satisfaction and Education

	High School	Some College/ Associate	Bachelor/Post- graduate	Total
Low	11	66	34	111
Satisfaction	32.4%	36.7%	28.3%	33.2%
Moderate	11	57	39	107
Satisfaction	32.4%	31.7%	32.5%	32.0%
High	12	57	47	116
Satisfaction	35.3%	31.7%	39.2%	34.7%
Total	34	180	120	334
	100.0%	100.0%	100.0%	100.0%

$$\chi^2 = 2.700, \quad df = 4, \quad p < .609$$

No significance was found for officers' level of education and their level of job satisfaction ($\chi^2 = 2.700$, $df = 4$, $p < .609$). The mean values for the variables *High School* (96.1176), *Some College/Associate Degree* (95.8444) and *Bachelor/Postgraduate Degrees* (97.4500) were examined. No significant difference was found in t-tests of their mean values.

It is often thought that policing is a negative experience for its practitioners. The longer individuals work as police officers, the more cynical and less satisfied with their jobs they become. This observation was supported by the data.

Table 24 – Job Satisfaction and Job Tenure

	< 1 yr	1 - 5 yrs	6 - 10 yrs	11 - 15 yrs	≥16 yrs	Total
Low	0	25	32	14	39	110
Satisfaction	.0%	27.2%	38.6%	35.0%	37.5%	33.1%
Moderate	5	27	23	13	38	106
Satisfaction	38.5%	29.3%	27.7%	32.5%	36.5%	31.9%
High	8	40	28	13	27	116
Satisfaction	61.5%	43.5%	33.7%	32.5%	26.0%	34.9%
Total	13	92	83	40	104	332
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 15.249$, $df = 8$, $p < .054$, Kendall's tau-c = -.15

A significant association was found for the length of job tenure and officers' level of job satisfaction ($\chi^2 = 15.249$, $df = 8$, $p < .054$). Levels of job satisfaction decreased as years of police experience increased. None of the police officers with less than a year of experience were in the low satisfaction category compared to nearly thirty-nine percent (38.6%) of officers with six to ten years of experience and nearly thirty-eight percent (37.5%) of officers with sixteen or more years of experience. The majority of officers (61.5%) with less than one year experience reported high levels of job satisfaction compared to only twenty-six percent (26%) of officers with sixteen or more years of service. Though the strength of the association is modest (tau-c = -.150), it is consistent with the observation that police officers become more cynical and discontented from the policing experience.

This finding was confirmed by the t-tests. T-tests were performed on the mean values of the job tenure categories *Less than One Year* (105.3846), *One to Five Years* (98.5435), *Six to Ten Years* (95.0964), *Eleven to Fifteen Years* (96.3000), and *Sixteen or More Years* (94.6595). The mean values for officers with less than one year of police experience was significantly higher than in each of the other categories (significant levels .054, .013, .015, .018). There was no significant difference found in comparison of the other tenure categories. (Comparison of the means of *One to Five Years* and *Six to Ten Years* { $t = 1.751$, $p < .082$ } and *One to Five Years* and *Sixteen or More Years* { $t = 1.932$, $p < .055$ } nearly reached significant levels.)

Finally, the effect of taking a new job assignment was examined. New job assignments can bring enthusiasm or apprehension. Officers may also become bored or discontented with their assignments. An officer's length of tenure in his or her current assignment may affect his or her level of job satisfaction.

Table 25 – Job Satisfaction and Tenure in Current Assignment

	< 1 yr	1 to 2 yrs	3 to 4 yrs	5 or more yrs	Total
Low	20	26	24	41	111
Satisfaction	30.3%	32.1%	38.5%	33.1%	33.3%
Moderate	22	29	18	37	106
Satisfaction	33.3%	35.8%	29.0%	29.8%	31.8%
High	24	26	20	46	116
Satisfaction	36.4%	32.1%	32.3%	37.1%	34.8%
Total	66	81	62	124	333
	100.0%	100.0%	100.0%	100.0%	100.0%

$$\chi^2 = -2.033, \quad df = 6, \quad p < .917$$

No significant association was found for officers' tenure in their current job assignment and their level of job satisfaction. The mean values of the categories *Less Than One Year* (96.9545), *One to Two Years* (95.3457), *Three to Four Years* (96.4032), and *Five or More Years* (96.9032) were compared using t-tests; no significant difference was found. Officers' tenure in their current job assignments was not associated with their level of job satisfaction.

To summarize, no significant association was found between job satisfaction and job assignment. Hypothesis two cannot be rejected. No association was found for the method of job acquisition, race, level of education or tenure in current job assignment. Levels of job satisfaction were found to decrease as experience as a police officer

increased. Furthermore, female officers were found to have lower levels of job satisfaction than male officers.

Additional chi-square and t-test analysis (See Appendix C) produced the following findings:

- *Education and Job Satisfaction.* For officers with some college or associate's degrees, eighty-one percent (81.4%) of community police officers, nearly eighty percent (79.6%) of detectives, and nearly sixty percent (59.8%) of patrol officers, had low or moderate levels of job satisfaction. At this level of education, nearly forty-one percent (40.6%) of patrol officers, twenty percent (20.4%) of detectives, and nearly nineteen percent (18.5%) of community police officers had high levels of job satisfaction.
- *Tenure in Job Assignment and Job Satisfaction.* For officers in the first year of a new job assignment, seventy-one percent (71.4%) of community police officers and nearly forty-two percent (41.7%) of detectives had low levels of job satisfaction. Half (50.0%) of the patrol officers in the first year of a new job assignment reported high levels of job satisfaction. For officers in their current assignment for five (5) or more years, forty percent (40.2%) of patrol officers reported high levels of job satisfaction; fifty-four percent (54.2%) of detectives reported moderate job satisfaction, and nearly forty-six percent (45.5%) of community police officers reported low job satisfaction.
- *Gender and Job Satisfaction.* Female officers have lower levels of job satisfaction than do male officers.

- *Tenure and Job Satisfaction.* Levels of job satisfaction decrease as tenure increased.

4.5 Goal Alignment and Job Satisfaction

Finally, a closer look is taken at the premise that goal alignment and job satisfaction are associated. One of the theoretical assumptions of this study is that officers who are more closely aligned with the goals of their chief (low difference) will have higher levels of job satisfaction. Conversely, it is assumed that officers who are dissatisfied in their jobs are likely to have more goal disparity with their chief. It is further assumed that unhappy employees who are pursuing disparate goals are a greater challenge for police administrators. These assumptions are tested by comparing the goal alignment variable (*differtl*) and the job satisfaction variable (*satcoml*).

Table 26 – Goal Alignment and Job Satisfaction

		Low Satisfaction	Moderate Satisfaction	High Satisfaction	Total
Low Difference		26	41	51	118
	Differ1	22.0%	34.7%	43.2%	100.0%
	Satcom1	23.2%	38.3%	44.0%	35.2%
Moderate Difference		34	33	35	102
	Differ1	33.3%	32.4%	34.3%	100.0%
	Satcom1	30.4%	30.8%	30.2%	30.4%
High Difference		52	33	30	115
	Differ1	45.2%	28.7%	26.1%	100.0%
	Satcom1	46.4%	30.8%	25.9%	34.3%
Total		112	107	116	335
	Differ1	33.4%	31.9%	34.6%	100.0%
	Satcom1	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 14.980$, $df = 4$, $p < .005$ Kendall tau-b = -.181,

A significant association was found between officers' level of goal alignment with their chief and their level of job satisfaction. The direction of this relationship is consistent with the principal-agent model and the underlying assumptions of this study. Officers who have close goal alignment with their chief (*Low Difference*) are more likely to have high levels of job satisfaction (44.0%) than low levels of job satisfaction (23.2%). Officers who have little goal congruence with their chief (*High Difference*) are more likely to have low levels of job satisfaction (46.4%) than high levels of job satisfaction (25.9%). Conversely, officers with low levels of job satisfaction (*Low Satisfaction*) are more likely to have high levels of goal disagreement (45.2%) than low levels (22.0%) of disagreement with the goals of their chief. Officers with high levels of job satisfaction (*High Satisfaction*) were more likely to have low levels of goal difference (43.2%) than

high levels (26.1%) of goal difference with their chief. The strength of this relationship is modest ($\tau\text{-}b = -.181$). These findings support the theoretical assumptions of the study.

Additional analysis of the data (See Appendix C) revealed the pattern of high job satisfaction and close goal congruence held for following groups:

- Patrol officers, but not detectives. There were too few community police officers in the survey to construct an accurate chi-square test.
- Volunteer/Promoted Officers.
- Male Officers.
- Both white and minority officers.
- Officers with some college or associate's degrees.
- Officers with one to five years' tenure and officers with sixteen or more years' tenure.
- Officers in the first year of a new job assignment.

4.6 Summary

Analysis of the data set allow us to reject the first null hypothesis. Officers' goal congruence with their chief is associated with their job assignment. Detectives were found to be closely aligned with the goals of their chief. Patrol officers were found to have the most goal disparity with their chief. Community police officers occupied the middle ground between these two groups.

When the method of job acquisition was controlled, it was found that entry level or assigned detectives and community police officers had goals and values significantly closer to their chief than did patrol officers.

When race was controlled, white detectives were found to hold goals and values significantly closer to the goals of their chief than officers in other job assignments. This association was not significant for minority officers.

By controlling level of education, it was found that detectives who held bachelor's or postgraduate degrees were more closely aligned than other officers to the goals of their chief. Controlling for other levels of education did not produce significant associations.

Controlling officers' job tenure revealed two significant categories. Officers with less than one year experience were all assigned to patrol, so they were excluded from this analysis. Detectives with six to ten years of tenure were closely aligned with the goals of their chief, as were detectives with sixteen or more years of experience. No other tenure levels were found significant.

The second research question demonstrates its importance by what the analyses did not find. The issue of job satisfaction is more complex than anticipated. No support was found for an association between job satisfaction and job assignment.

Some of the demographic variables were found to be associated with job satisfaction and organizational commitment. Women officers had lower levels of job satisfaction and commitment to the organization than men. Tenure was also found to be significant. Levels of job satisfaction decreased with years of service.

Though the association between job satisfaction and job assignment was not significant, it became significant when certain factors were controlled. When education was controlled, it was found that community police officers with some college or associate's degrees had low levels of job satisfaction. When tenure in current assignment was controlled, community police officers and detectives in their first year of their assignments had low levels of job satisfaction. For officers with five or more years of service, community policing officers were least satisfied.

The complex nature of job satisfaction was further demonstrated when it was found that goal alignment and job satisfaction were significantly associated. Officers with close goal congruence with their chief tended to have high levels of job satisfaction. Officers in goal conflict with their chief tended to have low levels of job satisfaction. This association reached significance for patrol officers, but not detectives. The issue was further clouded when community police officers could not be analyzed because of small sample size. Controlling for the demographic variables found significance for officers in the following categories: volunteers and promoted, males, those with some college or associate degrees, those with one to five years of tenure and those with sixteen or more years experience, and officers in the first year of their assigned job.

4.7 Regression Models

The complexity of the findings suggests it would be useful to re-examine the data while controlling for multiple variables. Ordinary least squares (OLS) regression was used to construct models that controlled for multiple variables. Dummy variables were created and variables recoded so they could be used in regression analyses of the variables for goal alignment (*differ*) and job assignment (*satcom*). Tables of coefficient correlations can be found in Appendix D.

The analyses began by examining goal alignment. A regression model was constructed with goal alignment (*differ*) as the dependent variable and police department, job assignment and the demographic variables as independent variables. Only the variables for department, detective and tenure in current assignment achieved significance. The signs of the betas were in the expected direction. It should be noted that the dependent variable measures level of goal difference. Negative betas indicate contributing to closer goal alignment. The negative betas for detective and community police officers indicate closer goal alignment for those job assignments. The R^2 for the model was .109 and the adjusted R^2 was .084.

Table 27 – Dummy Variables & Recoding

Variable Name	Coding
Department (dept)	Cincinnati =1, Colorado Springs = 0
Detective	Detective = 1, other job assignment = 0
Community policing officer (cpo)	CPO = 1, other job assignments = 0
Volunteer/Promoted (volpro)	Volunteer/Promoted = 1, Assign/Entry = 0
Female	Female = 1, Male = 0
Minority	Minority = 1, White = 0
Education (educate)	High School = 0 Some college/associate's degree = 1 Bachelor's Degree = 2 Postgraduate Degree = 3
Job Tenure (tenure)	less than 1 year = 0 1 to 5 years = 1 6 to 10 years = 2 11 to 15 years = 3 16 or more years = 4
Tenure in Current Assignment (curasgn)	less than 1 year = 0 1 to 2 years = 1 3 to 4 years = 2 5 or more years = 3

Table 28 – Exploratory Goal Alignment Regression³

Variable	B	Std. Error	t	Significance	Tolerance
Constant	12.955	2.304	5.622	.000	
Dept	5.978	1.264	4.728	.000	.908
Detective	-3.384	1.728	-1.958	.051	.669
CPO	-1.789	1.988	-.900	.369	.812
Volpro	.891	1.532	.582	.561	.647
Female	.479	1.585	.302	.763	.956
Minority	-1.244	1.436	-.866	.387	.952
Educate	.755	.903	.836	.404	.902
Tenure	.781	.623	1.254	.211	.562
Curasgn	1.267	.641	1.976	.049	.657

The regression model was trimmed to include *department*, *detective* and *current assignment* as the independent variables. When the second model was calculated, the variable *detective* was no longer significant, and the model explained nearly as much of the relationship as the previous model. The R^2 for the second model is .099 and the adjusted R^2 is .090. This model indicates that the department and the officer's tenure in his or her current assignment are the most useful variables for predicting levels of goal alignment.

³ Tables of coefficient correlations are found in Appendix D. These tables are numbered the same as the table for the model with the addition of the suffix "A" and "B", e.g. Table 32A.

Table 29 – Goal Alignment, Department, Detective & Current Assignment

Variable	B	Std. Error	t	Significance	Tolerance
Constant	15.183	1.352	11.229	.000	
Department	5.643	1.208	4.670	.000	.994
Detective	-2.061	1.433	-1.438	.151	.980
Curasgn	1.583	.524	3.022	.003	.986

Next, the analyses turned to job satisfaction. The demographic variables were used as independent variables with job satisfaction as the dependent variable. Three variables were found to be significant: *department*, *female* and *job tenure*. This model did not explain much of the change in the dependent variable. The R^2 was only .076 and the adjusted R^2 was .049. The department remains a significant predictor of officers' goal alignment. Job assignment was not a significant predictor, although the beta signs for detective and community police officer are in the direction of lower job satisfaction. The negative beta sign for tenure indicates decreasing job satisfaction as officers gain experience. Female officers are less satisfied in their jobs than are male officers.

Table 30 – Exploratory Job Satisfaction Regression

Variable	B	Std. Error	t	Significance	Tolerance
Constant	105.089	2.788	37.687	.000	
Dept	-4.329	1.530	-2.829	.005	.908
Detective	-.136	2.091	-.065	.948	.669
CPO	-2.122	2.406	-.882	.378	.812
Volpro	1.415	1.854	.763	.446	.647
Female	-4.109	1.918	-2.143	.033	.956
Minority	-.301	1.738	-.173	.862	.952
Educate	-.764	1.093	-.699	.485	.902
Tenure	-2.785	.754	-3.696	.000	.562
Curasgn	1.153	.776	1.485	.139	.657

The model was respecified to include only the significant variables: *department*, *female* and *tenure*. The new model was less predictive than the model including all variables. The R^2 of the new model was .065 and the adjusted R^2 was .056.

Table 31 – Job Satisfaction, Department, Female and Job Tenure

Variable	B	Std. Error	t	Significance	Tolerance
Constant	104.102	1.910	54.489	.000	
Dept	-3.965	1.490	-2.661	.008	.986
Female	-5.174	1.916	-2.700	.007	.974
Tenure	-1.892	.584	-3.241	.001	.964

The most significant variables were used to construct a model to predict goal alignment. Department, tenure in current assignment and level of job satisfaction (*satcom*) were examined for their affect on level of goal alignment. This model had an R^2 of .132 and an adjusted R^2 of .124. The signs of betas were in the expected direction.

The beta for job satisfaction was negative, so increasing levels of job satisfaction mean closer goal congruency. The sign for tenure in current assignment was positive. Officers' level of goal congruence declines as tenure in a job assignment increases.

Table 32 – Goal Alignment Model

Variable	B	Std. Error	t	Significance	Tolerance
Constant	31.475	4.527	6.953	.000	
Dept	4.873	1.188	4.101	.000	.983
Curasgn	1.707	.509	3.356	.001	1.000
Satcom	-.173	.044	-3.92	.000	.982

Additional regression models were developed for goal alignment for each job assignment (See Appendix C). The most useful variables for predicting patrol officers' goal alignment were tenure in current job assignment and job satisfaction ($R^2 = .130$, adjusted $R^2 = .122$). Increased levels of job satisfaction brought closer goal congruence, and increased tenure in current job assignment brought more goal disparity. For detectives, job tenure, tenure in current assignment, and job satisfaction were the most useful predictors of goal alignment ($R^2 = .118$, adjusted $R^2 = .081$). Increasing detectives' job tenure and job satisfaction brought closer goal congruency, while increased tenure in current job assignment brought increased goal disparity. The most unexpected finding was for community police officers. The only significant predictor for community police officers was race. Minority community police officers were more closely aligned with the goals of their chief ($R^2 = .151$, adjusted $R^2 = .130$).

4.8 Using Departments as Controls

Each police department provides unique management challenges. To more closely examine the differences in departments, the data from each police department was analyzed separately. The same procedures and techniques that were used to analyze the whole data set were applied to the individual departments. Before presenting the findings, some comments are in order.

Associations found significant in the larger data set may not be replicated in the analysis of data from individual departments. One reason pertains to sample size. When reducing the data pool to individual departments, the sample of detectives and community police officers becomes very small. The paucity of the sample in some categories may reduce the power of statistical tests to achieve significance. Another possible factor is the recoding procedure. As discussed in Chapter 3, missing values for scale questions were replaced with the question's mean value for officers from that department. This procedure allowed the use of surveys with missing responses, but it increased the difficulty in finding significance. While relatively few values had to be substituted, the problem would be magnified in smaller data sets.

4.8.1 Department's Demographic Data

One hundred eighty-two usable (182) surveys were collected from the Cincinnati Police Division. Patrol officers constituted nearly sixty-seven percent (67%) of the respondents, followed by detectives (20.3%) and community police officers (13%).

The sample from Colorado Springs was slightly smaller. One hundred fifty-three (153) usable surveys were returned from the Colorado Springs Police Department. The

majority of respondents were patrol officers (60.8%). Nearly twenty-seven percent (26.8%) of the sample were detectives, and the remainder were community police officers (12.4%).

Table 33 – Job Assignments by Department

	Cincinnati Frequency	Cincinnati Valid Percent	Colorado Springs Frequency	Colorado Springs Valid Percent
Patrol/traffic	118	66.6	93	60.8
Detectives	36	20.3	41	26.8
CPO	23	13.0	19	12.4
Total	177	100.0	153	100.0
Missing	5		0	
Total	182		153	

About two thirds of Cincinnati police officers were working at assigned or entry level jobs. The remaining officers either volunteered or were promoted to their assignment. The Colorado Springs respondents were nearly equally divided between assigned or entry level positions and volunteer or promotional assignments.

Table 34 – Job Acquisition by Department

	Cincinnati Frequency	Cincinnati Valid Percent	Colorado Springs Frequency	Colorado Springs Valid Percent
Assigned/Entry level	120	66.3	85	56.6
Volunteer/Promotion	61	33.7	68	44.4
Total	181	100.0	153	100.0
Missing	1		0	
Total	182		153	

As the number of women entering the police workforce continues to grow, the occupation is still dominated by men. About eighty percent of the respondents were male. The Cincinnati Police Division sample was over seventy-nine percent (79.6%) male and twenty percent (20.4%) female. The Colorado Springs Police Department sample was composed of eighty-three percent (83.0%) male and seventeen percent (17.0%) female officers.

Table 35 – Gender by Department

	Cincinnati Frequency	Cincinnati Valid Percent	Colorado Springs Frequency	Colorado Springs Valid Percent
Male	144	79.6	127	83.0
Female	37	20.4	26	17.0
Total	181	100.0	153	100.0
Missing	1		0	
Total	1		153	

Over seventy-one percent (71.2%) of Cincinnati respondents were white and over twenty-five percent (25.4%) African American. Few Asians and Hispanics were found in the Cincinnati Police Department. The department is sixty-four percent (64.3%) white, thirty-four percent (34.7%) African American, less than one percent (.1%) Hispanic and less than one percent (1%) Asians.

Nearly eighty percent of the Colorado Springs respondents were white (79.7%), with Hispanics composing the next largest group (11.1%). African Americans comprise less than five percent (4.6%) of the sample. Only two percent (2%) of the sample were Asians. The Colorado Springs Police Department is eighty-four percent (84.8%) white, nine percent (9.3%) Hispanic, five percent (5.1%) African American, and less than one percent (0.4%) Asians.

Table 36 – Race by Department

	Cincinnati Frequency	Cincinnati Valid Percent	Colorado Springs Frequency	Colorado Springs Valid Percent
White	126	71.2	122	79.7
African American	45	25.4	7	4.6
Hispanic	2	1.1	17	11.1
Asian	1	.6	3	2.0
Other	3	1.7	4	2.6
Total	177	100.0	153	100.0
Missing	5		0	
Total	182		153	

College education for police officers has become quite common. Over eighty percent (82.9%) of the respondents from Cincinnati had taken at least some college classes. Nearly thirty percent (28.2%) have earned a bachelor's degree as their terminal degree. Few in the sample (1.7%) had postgraduate degrees.

Nearly all of the Colorado Springs respondents had taken at least some college courses (98%), and nearly thirty-six percent (35.9%) have earned bachelor's degrees as their terminal degrees. Over seven percent (7.2) have postgraduate degrees.

Table 37 – Education by Department

	Cincinnati Frequency	Cincinnati Valid Percent	Colorado Springs Frequency	Colorado Springs Valid Percent
High School or GED	31	17.1	3	2.0
Some college/associate	96	53.0	84	54.9
Bachelor's degree	51	28.2	55	35.9
Postgraduate degree	3	1.7	11	7.2
Total	181	100.0	153	100.0
Missing	1		0	
Total	182		153	

The Cincinnati respondents had a wide range of police experience. However, there were few respondents in the *less than one year* (2.8%) and the *eleven to fifteen years* (8.9%) categories. Most (60.5%) of the officers had between one and ten years' experience. The Colorado Springs sample also included officers with a wide range of police experience. There were, though, few officers (5.2%) with less than one year of experience.

Table 38 – Job Tenure by Department

	Cincinnati Frequency	Cincinnati Valid Percent	Colorado Springs Frequency	Colorado Springs Valid Percent
Less than 1 year	5	2.8	8	5.3
1 to 5 years	60	33.3	32	21.1
6 to 10 years	49	27.2	34	22.4
11 to 15 years	16	8.9	24	15.8
16 or more years	50	27.8	54	35.5
Total	180	100.0	152	100.0
Missing	2		1	
Total	182		153	

The sample contained a good distribution of officers at each tenure level. The majority of the Cincinnati respondents have been working in their current assignments for over three years (55.8%). The Colorado Springs respondents had a full range of experience in their present assignments with each category well represented.

Table 39 – Tenure in Current Job Assignment by Department

	Cincinnati Frequency	Cincinnati Valid Percent	Colorado Springs Frequency	Colorado Springs Valid Percent
Less than 1 year	31	17.1	35	23.0
1 to 2 years	49	27.1	32	21.4
3 to 4 years	37	20.4	25	16.4
5 or more years	64	35.4	60	39.5
Total	181	100.0	152	100.0
Missing	1		1	
Total	182		153	

4.8.2 Cincinnati Data Analysis

Analyses of the Cincinnati data produce few significant associations. The complete analysis can be found in Appendix C. The following is a summary of the findings:

- *Race and Goal Alignment.* Minority officers (41.2%) have the highest levels of close goal alignment with their chief, and white officers (45.7%) have the highest goal disparity with their chief.
- *Tenure and Goal Alignment.* Officers with less than one year of experience were more closely aligned with the goals of their chief than were officers with six to fifteen years of experience. Officers with one to five years of experience are more closely aligned with the goals of their chief than were officers with eleven to

fifteen years of experience. Officers with eleven to fifteen years of experience were more closely aligned with the goals of their chief than were officers with sixteen or more years of experience.

- *Gender and Job Satisfaction.* Female officers had lower levels of job satisfaction than did male officers.
- *Goal Alignment and Job Satisfaction.* For patrol officers, levels of goal alignment with their chief were associated with job satisfaction. Officers closely aligned with their chief's goals were likely to have high levels of job satisfaction. Officers with low levels of job satisfaction were likely to have high levels of goal disparity with their chief.

The Cincinnati data was also examined using regression analysis. Once again, few significant findings arose from this data set. An OLS model was constructed for the dependent variable for goal alignment (*differ*). Job assignment and the demographic variables were regressed on the dependent variable. None of the betas for the independent variables were significant.

The models for job satisfaction were somewhat more successful. The independent variables were regressed on the dependent variable for job satisfaction (*satcom*). Only the beta for the job tenure variable was found to be significant. The beta for female officers was nearly significant (.083). The R^2 was .094 and the adjusted R^2 was .050.

Table 40 – Exploratory Job Satisfaction Model for Cincinnati

Variable	B	Std. Error	t	Significance	Tolerance
Constant	104.246	3.365	30.978	.000	
Detective	.339	2.937	.115	.908	.688
CPO	-4.424	3.115	-1.420	.158	.874
Volpro	-1.701	2.562	-.664	.508	.663
Female	-4.405	2.524	-1.745	.083	.951
Minority	1.509	2.260	.668	.505	.944
Educate	-2.141	1.459	-1.467	.144	.924
Tenure	-2.227	1.036	-2.149	.033	.575
Curasgn	-.197	1.142	-.173	.863	.607

The model was respecified with *female* and *tenure* as the independent variables. The new model had an R^2 of .057 and an adjusted R^2 of .046. The best predictors of job satisfaction in the Cincinnati Police Division are gender and job tenure. The betas for both variables are negative, meaning both variables work to reduce the level of job satisfaction.

Table 41 – Job Satisfaction, Female Officers and Tenure in Cincinnati

Variable	B	Std. Error	t	Significance	Tolerance
Constant	100.496	2.238	44.910	.000	
Female	-1.925	.819	-2.351	.020	.978
Tenure	-6.556	2.547	-2.574	.011	.978

4.8.3 Colorado Springs Data Analysis

Analysis of the Colorado Springs data produced significant associations for goal alignment but not for job satisfaction (See Appendix C). The analysis produced the following findings:

- *Job Assignment and Goal Alignment.* Officers' goal congruency with their chief was associated with their job assignment. The majority of detectives (65.9%) and community police officers (52.6%) were closely aligned with the goals of their chief. Nearly thirty percent (28.0%) of patrol officers, compared to twelve percent (12.2%) of detectives and nearly sixteen percent (15.8%) of community police officers, had high levels of goal disparity with their chief.
- *Tenure in Current Assignment and Goal Alignment.* Goal congruency with the chief is greatest in the first year of a new job assignment and declines each year after.
- *Education and Goal Alignment.* For officers with bachelor's or postgraduate degrees, nearly sixty-nine percent (68.6%) of detectives, fifty percent (50.0%) of community police officers, and nearly thirty percent (29.8%) of patrol officers are closely aligned with the goals of their chief.
- *Tenure and Goal Alignment.* For officers with sixteen (16) years or more of experience, over sixty-eight percent (68.4%) of detectives, nearly sixty-seven percent (66.7%) of community police officers, and nearly twenty-eight percent (27.6%) of patrol officers, were closely aligned with their chief.

As expected, the OLS models for Colorado Springs were more productive. The independent variables were regressed against the dependent variable for goal alignment, *differ*. The model had an R^2 of .126 and an adjusted R^2 of .077. Only the variable for the job assignment of the detective was found significant. The sign of the beta was in the expected direction, indicating detectives are more closely aligned with their chief. The variable for tenure in officers' current assignment was nearly significant and indicated diminishing goal alignment as tenure increases.

Table 42 – Exploratory Model for Goal Alignment in Colorado Springs

Variable	B	Std. Error	t	Significance	Tolerance
Constant	14.579	2.612	5.582	.000	
Detective	-5.576	2.054	-2.714	.007	.636
CPO	-3.246	2.631	-1.234	.219	.698
Volpro	.488	1.919	.254	.800	.581
Female	1.254	2.007	.625	.533	.955
Minority	-1.328	1.868	-.711	.478	.956
Educate	-.199	1.142	-.174	.862	.962
Tenure	.989	.760	1.302	.195	.540
Curasgn	1.331	.730	1.824	.070	.684

When the model was respecified with the variables for detective and tenure in current assignment, both betas were found significant. Signs for the betas were in the expected direction. The detective job assignment was an indicator of closer goal alignment. Each year in job assignment increased levels of goal disparity. The R^2 was .100 and the adjusted R^2 was .088.

Table 43 – Goal Alignment, Detectives and Tenure in Assignment Colorado Springs

Variable	B	Std. Error	t	Significance	Tolerance
Constant	14.916	1.353	11.026	.000	
Detective	-3.617	1.630	-2.218	.028	.998
Curasgn	1.981	.601	3.297	.001	.998

When the variable for job satisfaction was added to this model, it slightly increased the predictive value of the model. The R^2 of the new model was .128 and the adjusted R^2 was .111. Higher level of job satisfaction was a predictor of closer goal alignment.

Table 44 – Goal Alignment, Detectives, Tenure in Assignment and Job Satisfaction in Colorado Springs

Variable	B	Std. Error	t	Significance	Tolerance
Constant	26.556	5.450	4.873	.000	
Detective	-3.880	1.614	-2.404	.017	.992
Curasgn	2.040	.594	3.434	.001	.996
Satcom	-.119	.054	-2.203	.029	.992

An examination of a scatter plot of the error residuals and variable curve estimates suggested that this model could be improved if the variable for job satisfaction was adjusted. The variable was cubed and the respecified model reanalyzed. The R^2 improved to .135 and the adjusted R^2 to .117.

Table 45 – Goal Alignment in Colorado Springs

Variable	B	Std. Error	t	Significance	Tolerance
Constant	18.894	2.102	8.987	.000	
Detective	-3.862	1.607	-2.403	.017	.994
Curasgn	2.070	.592	3.495	.001	.994
Satcom3	-4.0E-06	.000	-2.445	.016	.992

The analysis again returned to the issue of job satisfaction. Job assignment and the demographic variables were regressed against the dependent variable for job satisfaction. Job tenure and tenure in current assignment were the only variables found to be significant. The R^2 for the model was .094 and the adjusted R^2 was .043. Unexpectedly, the results were contradictory. Tenure decreased levels of job satisfaction, while tenure in current assignment increased levels of job satisfaction.

Table 46 – Exploratory Job Satisfaction Model for Colorado Springs

Variable	B	Std. Error	t	Significance	Tolerance
Constant	100.931	3.808	26.503	.000	
Detective	-.208	2.995	-.069	.945	.636
CPO	1.585	3.336	.413	.680	.698
Volpro	4.390	2.797	1.569	.119	.581
Female	-3.881	2.926	-1.326	.187	.955
Minority	-4.032	2.724	-1.480	.141	.956
Educate	1.366	1.666	.820	.414	.962
Tenure	-3.642	1.108	-.3287	.001	.540
Curasgn	2.364	1.064	2.221	.028	.684

When the model was recast to include only the significant variables, the R^2 dropped to .046 and the adjusted R^2 to .034. The beta for tenure in current assignment was no longer significant.

Table 47 – Job Satisfaction, Tenure and Tenure in Assignment for Colorado Springs

Variable	B	Std. Error	t	Significance	Tolerance
Constant	101.620	2.432	41.784	.000	
Curasgn	1.713	.993	1.725	.087	.794
Tenure	-2.410	.928	-2.624	.010	.794

Removing the variable for tenure in current assignment did not improve the model. The R^2 became .027 and the adjusted R^2 was .021. The negative beta for tenure means that increasing tenure remains a factor in decreasing job satisfaction.

Table 48 – Job Satisfaction and Tenure in Colorado Springs

Variable	B	Std. Error	t	Significance
Constant	102.736	2.360	43.534	.000
Tenure	-1.690	.824	-2.052	.042

4.9 Summary

Goal Alignment and Job Assignment. There appears to be some support for the proposition that goal alignment is associated with job assignment. This was confirmed by both the chi-square and regression analysis. Detectives are more closely aligned with the goals of their chief. The detective job classification remained a useful predictor of goal

alignment in many of the regression models, though job assignment quickly fell out of the regression model once nonsignificant variables were removed. Patrol officers have the greatest goal discrepancies with their chief. Community police officers fall between these two groups. This pattern was also seen in the Colorado Springs data, but not the Cincinnati data. These discrepancies in goal alignment may have important implications for police chiefs' management strategies.

Goal Alignment and Demographic Variables. Many of the other variables are important for their direct effect or lack of effect on goal alignment. Knowing the department the officers were from was an important factor in all the regression models. In the chi-square analysis, the method of job acquisition, entry level/assigned or volunteer/promoted, had no effect in any of the data sets. Gender was not significant in any of the data sets. Race was only significant for the Cincinnati data where minority officers more closely aligned with their chief's goals. Education had no effect, except for a small sample of Colorado Springs officers whose highest level of education was a high school degree. These officers had higher goal disparity with their chief than did more educated officers.

In each data set, job tenure was associated with goal alignment for new officers. Officers with less than a year of experience had goals significantly closer to their chief than did officers with long tenure.

Officers in new assignments were more closely aligned with the goals of their chief than were long-tenured officers. Tenure in the officers' current assignment was an

important factor for predicting goal alignment with the chief in all the regression models. Along with the variable for department, it was the most revealing variable.

Goal Alignment and Job Assignment Controlled. When the demographic variables were used to control the association between goal alignment and job assignment, other interesting associations were found in chi-square analysis. In the large data set, assigned detectives and community police officers were more closely aligned with the goals of their chief than were volunteers and promoted officers. This association was not found in the data for individual departments. Gender was not found to be significant in any of the data sets. White detectives were more closely aligned with the chief in the aggregated data set. White detectives and community police officers were more closely aligned with their chief in the Colorado Springs data. Race was not significant in Cincinnati. In the aggregated data set, detectives with bachelor's/postgraduate degrees were more closely aligned with the chief. Detectives and community police officers with bachelor's/postgraduate degrees in Colorado Springs were closely aligned with their chief. In the whole data set and in Colorado Springs, more tenured detectives and, in some cases, community police officers were more closely aligned with their chief. In contrast to its importance in the regression models, an officer's tenure in his or her current assignment was not significant in any of the data sets.

Job Satisfaction. Job satisfaction was not found to be associated with job assignment, job acquisition, race, education or tenure in the current assignment for any of the data sets. Women were found to have lower levels of job satisfaction in the aggregated data set and in Cincinnati. Gender was a useful predictor in regression models

for the entire data set and for Cincinnati, but not for Colorado Springs. New officers were found to have higher levels of job satisfaction in the aggregated data and in Colorado Springs. In the regression models, tenure in the officers' current assignment was only a useful predictor of job satisfaction for Colorado Springs. Overall, tenure and department were the most significant indicators of job satisfaction in the regression models.

Job Satisfaction and Job Assignment Controlled. Re-examining job satisfaction and job assignment with the demographic variables controlled provided little new information in the chi-square analysis. The method of job acquisition, gender, race, and tenure were not significant. For officers with some college or associate's degrees in the aggregated data set, community police officers had low job satisfaction; detectives were moderately satisfied, and patrol officers more highly satisfied. Tenure in the current assignment was significant. For officers with less than one year in their assignment, community police officers and detectives had low job satisfaction, while patrol officers had high levels of job satisfaction. For officers with five or more years in their job assignment, community police officers had low levels of job satisfaction, detectives had moderate levels of job satisfaction, and patrol officers were likely to have high or low levels of job satisfaction.

Goal Alignment and Job Satisfaction. When goal alignment was compared to job satisfaction, significant associations were found in all but the Colorado Springs data. Officers closely aligned with the goals of their chief were also likely to have high levels of job satisfaction. Officers who had high levels of goal disparity with their chief were

likely to have low levels of job satisfaction. When this association was examined with job assignment controlled, the same pattern was found in the aggregated and Cincinnati data for patrol officers. In the regression models, job satisfaction was found to be a useful predictor of goal alignment for the entire data set and for Colorado Springs.

4.10 Discussion

What do these findings mean for police chiefs attempting to manage their officers? Each job classification has different management problems. Detectives are the most closely aligned with the goals of their chief. Patrol officers have the most disparate goals. Community police officers are somewhere in between. A brief composite can now be drawn of each job assignment.

Patrol Officers. The association between job satisfaction and goal congruence with the chief holds only for patrol officers. We cannot determine cause from effect. However, low levels of job satisfaction are indicators of high levels of goal disparity for patrol officers. One of the most useful predictors of goal congruence for patrol officers was level of job satisfaction. Goal congruency diminished the longer an officer was in this assignment. New officers reported high levels of job satisfaction. Since new officers begin their careers in patrol, we should expect patrol officers to begin with high levels of job satisfaction. These officers may be more receptive to direction from their chief.

Long-tenured patrol officers, though, report high levels of goal disparity with their chief. These officers are likely to be the most knowledgeable about organizational procedures and processes. The principal-agent literature tells us that the more

knowledgeable agents become, the more difficult negotiating and monitoring become for the principal. These officers may be less receptive to direction.

The effect of education is mixed and did not achieve significance in any of the regression models. Patrol officers with some college or associate's degrees had higher levels of job satisfaction. This was not found for patrol officers with bachelor's or postgraduate degrees. Nevertheless, higher levels of education may improve goal alignment. Officers with bachelor's or postgraduate degrees were likely to have moderate levels of goal alignment with their chief. Officers with higher levels of education who move from patrol to other job assignments were more satisfied.

Detectives. Detectives were the most closely aligned with their chief's goals. White detectives were more closely aligned with their chief than were minority detectives. Officers assigned to detective duties (as opposed to volunteers or promoted officers) had greater goal congruency with their chief than did other officers. More tenured detectives (six or more years) were more closely aligned with their chief's goals.

Job satisfaction was not a significant factor in detectives' goal alignment in the chi-square analysis, but emerged as important in the regression model for detectives. Detectives with five or more years in their assignment had moderate levels of job satisfaction. In the model, increasing levels of job satisfaction and tenure were useful predictors of closer goal congruence. It appears that officers' resolve is challenged in the early years in this job assignment. In the first few years of the assignment, detectives undergo a difficult transition. It seems to take officers several years to work through the frustrations of this period.

Education is associated with detectives' attitudes. Detectives with some college or associate's degrees had moderate (40.8%) or low (38.8%) levels of job satisfaction. Detectives with bachelor's or postgraduate degrees were more closely aligned with the goals of their chief (56.5%).

Detectives share close goal congruence with their chief. This study cannot determine whether this is caused by selection bias, a result of performing the detective's role, or a function of increased status in the organization. Some factors suggest that status plays a role. The closer congruency of assigned detectives (rather than volunteer or promoted) suggests that these officers may feel rewarded by their assignments. The closer congruence of more highly educated officers suggests that detective assignments are perceived to enhance officers' careers. Both suggest that officers who have acquired detective assignments may be motivated to preserve their vested interests. This may mean that detectives are more receptive to manager's direction.

Community Police Officers. Community police officers fall between patrol officers and detectives in their levels of goal congruity with their chief. Though the association between goal alignment and job satisfaction could not be fully analyzed for community police officers, it provided some interesting paradoxes. Low levels of job satisfaction were found for the majority (71.4%) of officers in the first year of their assignment and for many (45.5%) officers with five or more years of tenure. At the same time, officers assigned to community policing (as opposed to volunteers or promoted officers) were closely aligned with their chief's goals. More tenured officers were more closely aligned with the goals of their chief than officers with less tenure. Community

police officers with six to ten years of experience were moderately (46.7%) or closely (40.0%) aligned with their chief. Officers with sixteen or more years of tenure were equally likely to have high or low levels of goal alignment. The regression model for community police officers found that minority officers were more closely aligned with their chief's goals. Overall, community police officers were more evenly distributed throughout the alignment scale.

Education level is also associated with a community police officer's level of goal alignment. Detectives with bachelor's or postgraduate degrees have closer congruency with their chief's goals, and patrol officers have moderate levels of goal congruency. However, similarly educated community police officers were equally likely to have high or low levels of goal congruency.

Community police officers remain a step somewhere between patrol and detectives. Regardless of whether community policing transforms officers or whether atypical officers find themselves in community policing jobs, the findings of this study indicate community police officers are more closely aligned with the goals of their chief than are other uniformed officers assigned to patrol. There are indications that managing community police officers may require different strategies than managing patrol officers and detectives.

Predicting Goal Alignment. The regression models help to clarify the effects of the many associations found in the data analyses. Goal alignment, as well as levels of job satisfaction, varies among police departments. Each department has its own norm, but it is likely this also varies with circumstances. Job assignment, tenure in the officer's

current assignment and levels of job satisfaction appear to be the most useful predictors of goal alignment with the chief.

Chapter 5

CONCLUSIONS

5.1 Introduction

An opportunity is at hand to examine police management strategies. The implementation of community policing has challenged police managers to reassess organizational processes and procedures. We can more effectively administrate community policing if we determine how it fits into the management schemes of police organizations. This study examines job assignments as a way to better understand police management problems. Specifically, can we identify areas of potential policy compliance and resistance? Does the implementation of community policing affect management strategies? Must the chief be wary of losing control because of the less structured role of community police officers? Or, can chiefs maintain control through other means? Police chiefs must come to terms with these issues to effectively manage their changing organizational environments. A better understanding of officers' goals and attitudes will help us answer these management questions.

Public managers are under increasing pressure to be effective and accountable. Police chiefs can no longer focus on iron-fisted control at the expense of productivity. Today, police chiefs are forced to be more innovative to show they are effectively

managing public resources. Managers must find ways to implement new programs while maintaining control of the organization. Now more than ever, police administrators need to be seen as effective managers.

Previous research has not addressed this issue. Police administration remains strongly rooted in the management reforms of the 1930s. Case studies of community policing have focused on implementation problems, crime rates, calls for service rates, and community and organizational perceptions. Management issues are only tangentially addressed. This study takes a step toward filling that void.

Before drawing conclusions from the data, the findings need to be placed in the proper context. Each organization is a unique collection of individuals who have specific needs, desires and motivations. Sampling accounts for some of the differences found between departments and participants in this study. Other discrepancies reflect true differences in the organizations and individuals. Research conclusions must be cautiously applied to people and organizations outside the research sample. Despite these limitations, some cautious generalizations can be made to assist managers and to develop administrative theory.

5.2 Conclusions About Hypotheses and Research Questions

Officers' goal alignment and job satisfaction were examined in four areas: job assignment and goal alignment, job assignment and job satisfaction, goal alignment and job satisfaction, and other demographic factors.

The independent variables represent factors commonly believed to influence interactions in police organization. Even so, the research shows there is still much to learn about relationships between police officers and their supervisors. The independent variables fall short of explaining changes in the dependent variables, indicating the complexity of these relationships. Low Cramer's V, Kendall's tau and R^2 statistics indicate the results are muddled and somewhat confusing.¹ With these cautions, the discussion now turns to a summary and explanation of the findings for each hypothesis.

5.2.1 Goal Alignment and Job Assignment

Police officers' goal congruency with their chief is a complex issue that is only partially explained by their job assignments. Both chi-square analysis and regression models indicate that levels of goal alignment are associated with officers' job assignment. It is also clear that there are other important factors not identified in this study that affect goal congruency. These findings provide a first step toward a better understanding of police management problems.

Officers' goals and motivation are important elements of policy implementation and organizational management. Previous research ignores the role goals and motivations play in management and policy resistance. Community policing was a response to a stagnating and self-absorbed style of policing that emerged from bureaucratic reforms. Advocates encouraged freeing officers from structural constraints

¹ The R^2 s might have been slightly higher if the instrument had been designed to collect data for regression analysis. The OLS models were added to the analyses after it became apparent a multivariate approach was needed.

to be more effective problem solvers. Once again, it is assumed that officers will pursue the goals of their chief.

This study examines that assumption. Evidence is found of an association between officers' level of goal alignment and their job assignment. This association is interestingly dispersed. The most regulated officers, patrol, had the most goal disparity with their chief. Officers who are given the most discretion, detectives, had the closest goal alignment with their chief. Patrol officers who are allowed some relief from restraints, as community police officers, have higher levels of goal alignment with their chief.

It cannot be determined from the data if job assignment affects goals or if the findings emerge from selection bias. More goal congruent officers may seek job assignments as detectives or community police officers. Or, chiefs may be assigning more compliant officers to these positions – a difficult task for chiefs restricted by labor agreements. In either event, knowing where policy compliance or resistance is likely to come can assist administrators to formulate more effective management strategies.

Status and career advancement appear linked, if not the cause, of officers' level of goal alignment with their chief. Officers who could be perceived as in the organization's *fast track* had closer goal congruence with their chief. White or more highly educated detectives are closely aligned with their chief. Officers assigned, rather than volunteered or promoted, to detective or community policing assignments, also had close goal congruence. An argument could be made that these officers have positioned themselves to enjoy the benefits of the organization and continue to advance their careers.

Another factor to consider is the loosening of structural constraints. Is the closer goal congruence found for detectives and community police officers the result of freeing them from constraints? If loosening restraints brings more positively directed employees, then administrators should closely examine present management practices.

Finally, we need to learn why officers become disenchanting with their jobs. Officers in the first year of a job assignment have close goal congruence with their chief, but drift further away with each passing year. What is there in the organizational experience that transforms compliant supporters into disillusioned policy resistors? Are officers' expectations too high when they begin a new job assignment? Do police organizations fail to provide opportunities for success or self actualization? Do officers' interests shift from organizational objectives to pursuing and protecting personal interests as their tenure increases in a job assignment? We need to learn why officers become more goal disparate the longer they spend in a job assignment.

These findings have important implications for police chiefs implementing community policing. Chiefs need not fear loosening constraints. Community police officers are more likely than patrol officers to share the goals of their chief.

The association between goal alignment and job assignment is not universal. It was not found in the Cincinnati data set. This finding means that police chiefs cannot rely on job assignment alone to bring closer goal alignment. Even so, this does not necessarily mean that job assignment has no effect on goal alignment in Cincinnati. It may mean the more modest effects of job assignment are overcome by other powerful factors influencing goal alignment.

In Cincinnati, job tenure and race were the only variables significantly associated with goal alignment. Levels of goal alignment decreased as officers' years of experience increased. Minority officers were more closely aligned with the goals of their chief than were white officers. Long-tenured white officers were less likely to be closely aligned with their chief's goals. These officers may perceive that the direction the department is going offers them little opportunity.

It should be noted that in the year of the study, the Cincinnati Police Division worked through several difficult issues. Civil rights groups demonstrated to show their concern for the shooting of a black man by a white officer. A white detective was fired when he admitted planting evidence, several years earlier, in a drug investigation. A white patrol officer was fired after a violation of pursuit policy that resulted in the death of one teenager and injury to two others. Black residents protested police patrols of a local park as racially motivated. To the credit of the chief and department, these issues were handled in a manner that maintained general support from the public.

The lesson from the Cincinnati data may be that we cannot depend on job assignment alone to manage goal alignment. Levels of goal alignment are influenced by other important factors. With this in mind, chiefs need to carefully assess the motivations of officers when implementing or changing policy.

5.2.2 Job Satisfaction and Job Assignment

As found with goal alignment, there is little we know about officers' level of job satisfaction. "Unlike researchers in organizational behavior, criminal justice scholars have shown little interest in employees' job satisfaction. . . ." (Bennett, 1997) It was

expected that loosening constraints and participatory management techniques would increase the level of job satisfaction for community police officers. Trojanowicz (1982, 1985, 1990, 1994) found community police officers had higher levels of job satisfaction than did patrol officers. However, an association between job assignment and job satisfaction was not found in this study. Little relevance was found for job satisfaction.

There are several possibilities why an association could not be found for job assignment and job satisfaction, and why this research conflicts with the previous work of Trojanowicz. First, it is possible that job assignment has no effect on officers' level of job satisfaction. This is the only conclusion that can be supported by the analysis of this data. Nevertheless, there may be other explanations. It may be useful to speculate why no association was found, especially when an effect was found in other studies.

The methodology of this study may be responsible for the absence of an effect for job satisfaction. The sample may have been too small. There may not have been enough community police officers in the sample for significance to be achieved. Had the study been designed to include more officers, or if the sample from Cincinnati had completed their surveys rather than sending duplicate surveys, the results might have been different. Perhaps the survey instrument or the statistical techniques were not sufficiently sensitive to detect an effect. The method for coding missing values may have worked against an effect being discovered. These last two issues, though possible, are less likely than other explanations. The survey questions were taken from a previously successful instrument and few responses needed recoding.

In Trojanowicz's work, findings of high levels of job satisfaction were based on his seminal work in Flint, Michigan. The Flint Foot Patrol Study was a major undertaking for the Flint Police Department. It changed the way policing was performed in Flint. Because of the magnitude of that program, we must consider the possibility of a Hawthorne effect. Community police officers were the major focus of the Flint study. They may have become more satisfied in their jobs because of the increased attention they received.

Another possible reason this study conflicts with the Trojanowicz study is a difference in the programs themselves. The Trojanowicz project emphasized changing the role of the community police officers. Today, there is less emphasis on transforming officers. More frequently, assignments are made and it is assumed that officers will adapt. In addition, more departments are claiming all their officers perform community policing, blurring the distinction between roles.

A final possibility is the reassignment of officers in Colorado Springs. The temporary reassignment of community police officers to patrol may have had unintended consequences. Their transfers may have prompted community police officers to conclude their role was less important to the organization. Or, the return to patrol may have lessened gains in job satisfaction acquired through the experience of community policing.

5.2.3 Other Research Questions

Built into the design of this research was an assumption that goal alignment and job satisfaction are associated. Officers with little goal alignment with their chief are likely to have low job satisfaction. Officers closely aligned with the goals of their chief

are likely to have higher levels of job satisfaction. The data confirmed this association, but with some interesting collateral findings.

When job assignment was controlled, the association holds only for patrol officers. The levels of job satisfaction for detectives and community police officers are not associated with their levels of goal alignment with their chief. What does this mean in light of the previous finding that goal alignment and job assignment are associated? It may mean that patrol officers are more likely to blame their chief for the frustrations they encounter in their jobs. Detectives and community police officers may be more focused on long-term objectives. They could be more goal-directed and less distracted by job frustrations. They might be less concerned about intervening obstacles as they remain focused upon what they perceive is a common goal. Detectives and community police officers may see their job assignments as career opportunities. They may be more willing to cope with their current job frustration as a step toward long-term advancement. They may be more willing to accept job frustrations, rather than blame their chief or turn to personal objectives. If this is so, then detectives and community police officers are more likely to subordinate their job frustrations and remain supportive of their chief's goals.

This is an indication of the complexity of the job satisfaction issue. We cannot assume that happy employees support the boss and that frustrated employees make trouble. Knowing levels of job satisfaction can be of value in predicting goal congruency, but many situational factors alter the usefulness of this knowledge.

Though not a principal focus of this research, other findings emerged that are important to management strategies. First, goal alignment and job satisfaction both

decrease as officers' level of job tenure increases. Veteran officers tend to drift away from the organization. As officers gain experience in the organization, they become more dissatisfied and less receptive to direction. Tenure emerged as an important factor in many of the models. Secondly, female officers tend to have lower levels of job satisfaction than do male officers. Police organizations are less adept at meeting the needs of their female officers. Both of these problems present serious challenges for police administrators. Police chiefs need to recognize these problems when implementing policy and management strategies.

5.3 Conclusions About the Research Problem

This study of two police departments contributes to the body of knowledge of police administration by creating a new model for understanding the intricacies of effective police management. The research reveals factors that identify deficiencies in the reform model that is the basis of police administration. A new model is suggested that can help identify corrective measures.

The findings discussed in the previous section advance our understanding of the complexities of managing police organizations. The intricacies of police management may be more understandable when framed as problems of negotiating compliance. By viewing the problem in a principal-agent context, we can better conceptualize the challenges confronting police administrators by focusing attention on subordinates' motivations. The importance of goals and values comes to the forefront. This is a significant shift in police management perspective.

In the police departments studied, officers' job assignment was an important indicator of their goal alignment with the chief. On the other hand, job satisfaction played a minor role. Job satisfaction was a more important indicator of goal alignment for patrol officers than for detectives or community police officers. Though it is more difficult to monitor the behavior of detectives and community police officers, it appears it is less necessary. Detectives and community police officers are more likely to pursue the same goals as their chief. These findings provide an alternative perspective for management.

By identifying areas of potential compliance or resistance, police chiefs can tailor their management efforts to incentives and monitoring needs. In areas where additional incentives and monitoring are most needed, they can be intensified. In areas where subordinates are more likely to be compliant, managers can loosen constraints. This will free resources and allow for more flexible problem solving.

5.4 Implications for Theory

Examining goal alignment and job satisfaction contributes to the immediate discipline of police administration and the wider field of public administration. The relationship between goal alignment and job assignment has not previously been examined in police organizations. Until now police administrative theory has not considered job assignments as potential pockets of compliance or resistance to policy. Officers were thought to be interchangeable cogs in the organizational machine. Supervisors evaluated officers' levels of talent, but not their goals, motives or values.

Managers relied on organizational structure to maintain control. This study suggests that the traditional approach is inefficient, if not faulty.

There may be fundamental flaws in the basic assumptions of reform era management, at least for some organizational functions. The bureaucratic structures reform managers created are inefficient because they overly constrain more compliant subordinates. In addition, questions are raised about the appropriateness of traditional bureaucratic constraints. If constraints are designed to deal with the most recalcitrant employees, they are likely to unnecessarily constrain the efficiency of the more compliant. Such constraint stifles creativity and problem solving. It further diminishes productivity by wasting resources through over monitoring. Management strategies may be more efficient if tailored to the goals of officers in different job assignments. This will not be done unless organizations are viewed as cooperative enterprises where compliance is negotiated.

It remains unclear why goal alignment differs with job assignment. Some possibilities include loosening restraints, more goal-directed tasks, or factors unique to the job task. However, the evidence suggests the need to re-evaluate management schemes. It may be possible to use management resources more wisely. This starts with a reconceptualization of the interactions in police departments.

For managers to tailor policy initiatives to the various groups within their organization, they need to better understand the motivations of subordinates. Managers can more effectively communicate their message and more efficiently monitor their employees if they recognize the important differences between them. Groups vary in

their receptiveness to communication techniques, and management needs to adopt different strategies for each group (Bennett, 1996). The messages managers send need to speak to subordinates' concerns, if they are to be accepted.

An effective management strategy anticipates areas of resistance and support. Supporters can carry a larger burden if properly approached. Potential resisters may need to be won over, coopted or constrained. "[P]olice are bureaucratic workers who respond to the organizational reward structure." (Skolnick, 1993: 195-196). "Once the reasons for resistance are understood, the change agent has to work to gain acceptance." (Office of Security Programs, 1995: 81)

Managers can more effectively use their resources and time if they limit monitoring to where it is needed. Monitoring imposes cost, actual and opportunity, on the principal; and it is limited by the effectiveness of the techniques used (McCubbins, Noll & Weingast, 1987). Goal congruity expands an officer's zone of indifference for the policies of his or her chief. Officers with large zones of indifference more readily accept direction and policy. The chief needs to spend fewer resources monitoring supportive personnel. Officers with small zones of indifference are more critical of managers' actions. These officers may need additional incentives and closer monitoring. Managers should give priority to identifying supporters and resisters.

Declining levels of goal alignment and job satisfaction associated with increasing tenure in job assignments and in the organization suggest that individuals may follow rigidity cycles similar to those described for organizations by Downs (1967). New employees, much like new organizations, are energetic and focused on goals. They have

the personalities of advocates or zealots. As time passes, they lose much of their enthusiasm and focus. Their interest shifts to preserving the benefits they have accumulated. They adopt the personalities of conservers. Breaking this rigidity cycle for individuals may be a more challenging task than it is for bureaus.

A new more eclectic theory of police administration is needed. This new approach must recognize negotiating compliance and strive to develop goal-revealing mechanisms. We might begin by revisiting Barnard's (1938) visions of cooperative organizations. Nothing gets done without the cooperation of employees. The structured bureaucratic approach misleads managers into thinking productivity can be dictated. Next, managers need to reconceptualize management problems. A principal-agent approach to problem solving would help managers devise more effective strategies. Approaching a problem as a negotiation helps identify important factors. It provides a more accurate perspective of the difficulties of implementing policy. While Agency Theory has not been effective for predicting action, it remains a useful tool for explaining and understanding organizational interaction. Finally, in areas where consistency is essential, Simon's concept of *frozen decisions* may be most effective. Managers can continue to use structure and controlled information delivery to limit the range of employees' actions. Where consistency is more important than adaptability, the structured approach is still effective.

While only police organizations were studied, these findings may extend beyond the police to others in the criminal justice system and the public sector. The focus on motivational theory is applicable to many management situations. Management schemes

based upon value-driven goal motivations should be applicable throughout the public sector. Where performance is difficult to measure and monitor, it may be more productive for managers to focus on goals and motivation. If it is not certain what subordinates are doing, it may be more important to know what they are trying to do.

5.5 Implications for Police and Practice

This study focuses on the police chief, because of the importance of that role in the operation and management of police organizations. Nevertheless, the findings may be applicable to other managers in police organizations. The data identifies potential pockets of support and resistance with which managers must deal.

The research emerged from a concern for the effect of community policing on police organizations. "Community policing places greater authority and responsibility in the hands of line officers and supervisors, and will usually necessitate changes in management practices and organizational structure." (Office of Security Programs, 1995: 2) The fear that loosening constraints will jeopardize the chief's ability to control the organization appears overstated. Closer goal alignment may compensate for the weakening of structural controls. Community police officers are likely to be more closely aligned with the goals of their chief than are patrol officers.

In addition, the argument for loosening constraints is bolstered by the data on detectives. The greater discretion and fewer constraints granted to detectives appear to pay off in organizational benefits. Detectives are the most goal congruent officers in the department. Detectives are more prone to support, rather than resist, policy.

Regardless of the reason, officers in each job assignment have characteristic beliefs and goals. Managers should not assume officers in different job assignments will equally accept or comply with policy. Detectives and community police officers are more supportive of the goals of their chief than are patrol officers. At the same time, they are often less satisfied in their jobs, especially in their first year of assignment. This paradox may result from career aspirations. Happy employees are not necessarily better employees. Detectives and community police officers may be more willing to cope with their job frustrations to continue pursuing their career goals.

A note of caution is important here. Goal alignment is not the same as blind obedience. The police chief should not expect detectives and community police officers to unquestioningly follow every directive. At times, these officers may be openly critical of the chief's initiatives. Detectives and community police officers may vigorously oppose a particular policy, especially if they sense their roles have special importance. Patrol officers, on the other hand, may feel their objections will bring nothing but reprisals and resist more cautiously. What is important is that detectives and community police officers, because of their closer goal alignment, are more likely to comply with their chief's initiatives. Their actions are more likely to conform to their chief's desires. These internal forces diminish the need for external constraints.

Relying on goal alignment is much like following a compass direction. When the chief instructs the troops to march north, those with closer goal alignment will head in a northerly direction. Officers with greater goal disparity may march more to the east. The chief must monitor the direction of the troops and correct deviations from the proscribed

course. This does not mean that there is no value in heading east. It may be the most prudent course to take. However, for a manager, it can be a significant problem.

Police managers' greatest concern lies with the compliance of older patrol officers. Identifying a problem with long-term patrol officers is no revelation to police chiefs. Police chiefs and scholars (Pogrebin, 1987; Robinette, 1982; Schwartz & Schwartz, 1975) are well aware that veteran officers seldom show enthusiasm for new policy directives. The problem of motivating these officers needs to be more closely examined.

Some of the problems with long-term patrol officers stem from lack of opportunity. These officers are doing essentially the same job as entry-level personnel. There is little prospect for them to advance in the organization. They have missed their chance to move to new positions and now have nowhere to go. For lack of other options, they are often ignored, leaving the chief a dilemma. There are too many in the organization to move to other positions, but ignoring them encourages unproductive behavior.

With few solutions and other more pressing matters, these officers are often overlooked, except when creating problems. They are often very proud and easily offended. They recognize the organization holds little opportunity for them. They have become true conservers (Downs, 1967) with little incentive except to hold on to what they have. They have seen many up-and-comers, while they have been passed over. Their skills are suspect because they are still on patrol. Supervisors and younger officers question the veterans' lack of aggressiveness. These veteran officers have developed

considerable skill in manipulating the utility of every situation. Through their longevity, they have acquired experience and knowledge about surviving and manipulating organizational processes, but have been unable to advance. With little incentive, they focus on retirement and outside interests.

Long-term patrol officers are often the spokesmen for dissent and seldom leaders for constructive change. They are sages of organizational failure. These veterans can often be found holding court in the squad room about how tough policing used to be. They tell wild stories about what the old timers could do and still escape punishment.

Police chiefs are well aware of this problem. Administrators at various sites expressed a common concern. "We can't guarantee some of the old dinosaurs will participate."

When participating in the study, some of the old dinosaurs were quick to grumble, "Another survey! No one listens to us anyway!" But, they were no less likely to complete the questionnaire and smile when finished. They like to bark, but rarely bite.

It is the rare long-term patrol officer that still enthusiastically chases taillights. Long-term officers often seem less motivated and more likely to lay blame for misfortune on the victim. They remain locked into place, with nowhere to turn but inward, or to their subculture.

In a social environment with continually shifting norms, officers begin to search for stability. Officers retreat to their own value system to maintain their psychological balance. Veteran officers may see themselves as the final arbitrator in determining proper enforcement policy. It must be remembered that at one time most of these employees

were considered to be productive employees. The organization has, in many cases, changed and passed them by. If policing were to develop into the profession it aspires to be, maybe professional norms could provide for the stability officers seek.

The data consistently showed closer goal alignment for officers in new assignments. This suggests that more variety and flexibility in job assignments might overcome some of the losses associated with job tenure. If managers can tap the interests of veteran officers, they may be able to revive levels of motivation.

Obviously, this is not a simple task. It will take careful consideration and innovative thinking to devise meaningful new job opportunities for veteran officers.² The data suggests that the benefits of new assignments diminish after about a year. A plan to rotate officers to new challenges would need to continually generate new opportunities. It is doubtful police managers could accomplish this on a large scale. It is yet to be seen if community policing can motivate and reanimate the careers of veteran officers.

Conversely, police chiefs may have a special opportunity to influence new employees. New officers start with more than a clean slate. They have very high levels of job satisfaction and goal alignment with their chief. After they are hired, new officers are assigned to more experienced officers for training. Veteran officers teach the rookies the skills they will need to become proficient police officers. The data consistently shows that the most experienced officers have the most goal disparity and the lowest levels of job satisfaction. By the end of their first year on the job, new officers lose their high

² Community policing has been proposed as a way to excite and motivate veteran patrol officers, but such an effect cannot be evaluated by the data in this study.

levels of goal alignment and job satisfaction. This decline continues as years of experience increase.

If we assume that officers' levels of goal alignment and job satisfaction decline with each year of experience, we need to ask what happens to officers during that first year. What are officers learning that critical first year that so greatly changes their perceptions? Are these new officers reacting to their own experience or to that of others? Whose goals are being nurtured? Patrol officers as a group had the lowest level of goal congruence with their chief. Do current practices teach new officers to develop goal disparity with their chief? Why do officers drift continually further from their chief? Police chiefs need to examine the possibility that current practices are misdirecting new employees. They should closely scrutinize this opportunity to develop more supportive employees.

Reform era reformers, such as O.W. Wilson, stressed the science of management, but often neglected the art of management. Reformers tried to codify and formularize management. It may be time to reinvest in the art of police administration. Reconceptualizing management problems is a step in that direction. Managers need to better understand the motivations of the employees they oversee. Barnard's concept of cooperative organizations does not mean managers allow subordinates to do whatever they want. It means that effective managers find ways to get employees to want to do what managers have proposed.

Chiefs should realize they rely upon someone else for most of what they know about their organization. Each person who informs the chief also has his or her own

goals, values and objectives. Each person who carries out policy has his or her own goals, values and objectives. If chiefs do not account for these varying motivations, they may be unwittingly manipulated by others in the organization. Police managers can be more effective if they can devise methods to incorporate subordinates' goals into management strategies. In this regard, managers would be wise to develop goal-revealing strategies and mechanisms to guide their decision making.

5.6 Implications for Future Research

It is common for research to raise as many questions as it answers. That is certainly the case here. The exploratory nature of this study suggests lessons for further research.

First, this study measures police officers' perceptions of their chief's goals. It does not measure the actual goals of the chief. As previously discussed, these perceptions influence officers' behavior. By focusing on perceptions rather than the chief's actual goals, the issue of communicating goals is avoided.

Learning the true goals and attitudes of a police chief is a very difficult and time intensive undertaking.³ Police chiefs are players in their local political arena. As a political actor, the chief must ensure that he or she is properly positioned on important issues. Public proclamations may not reveal the chief's private beliefs. It becomes difficult to distinguish between the chief's goals and his or her political rhetoric. Chiefs

³

The study was designed before the research sites were selected so the following comments are not directed to the chiefs of the departments studied.

sometimes undermine symbolic policies by subtle actions or inaction on issues.

Subordinates are best able to detect these discrepancies and act accordingly.

Second, this study measures only the potential for policy resistance. We cannot say that high levels of goal disparity will result in policy resistance. Actual policy resistance was not identified. It is assumed that officers with greater goal disparity with their chief are more likely to resist policy directions and need additional incentives or closer monitoring.

Third, researchers need to consider the effect extensive study has on their subjects. Some departments receive little attention from researchers. Other departments are under almost constant scrutiny. Innovative police departments located near universities that receive federal grants can receive considerable research attention. Officers from these departments may be studied by their administration, academics, and federal agencies. Can officers become experienced study subjects and manipulate research results? Do officers learn to sanitize responses to present a better image or to avoid criticism? No evidence of such behavior was detected in this study, but researchers should nonetheless be wary of the possibility.

Fourth, this study introduces the concept of differential goal alignment as a function of job assignment. It brings a new understanding of the management problems that confront the police chief. It is only a beginning and suggests other topics and methodologies to continue this line of exploration in further research.

Fifth, the findings are based on the study of two American police departments. Replication of the study in other police departments would contribute to our

understanding of the factors studied. More data are needed to evaluate what has been found in this research.

Sixth, this research is primarily a management study. Its findings may extend beyond the police chief to other managers. Police chiefs play an important role in policy formation and formulating management strategies. Unfortunately, police chiefs do not play the same role in all police departments. The effects the chief has on subordinates' decision-making needs further exploration. Are some chiefs, through department size or management style, so remote they are no longer important influences on line-level decision-making? Does the chief lose relevance in the principal-agent relationship? Are chiefs perceived as distant politicians, such as mayors or council persons? If so, at what point does this happen?

The goal alignment approach should be examined for other levels of management. The principal-agent goal alignment focus should be applicable to managers throughout police organization.

Finally, future research needs to focus on more productive measures. Possibly the issues used to compose the goal alignment scale should be derived from the department under study, rather than the policing literature. Though the researcher would then have to overcome problems of comparability, the goal alignment scale might be more sensitive. Job assignment explains a portion of police officers' level of goal alignment. Understanding the association with job assignment is important to determining management strategies. There are other variables not identified in this study that affect

goal alignment and job satisfaction. Additional research is needed to identify these variables so we can better understand the interpersonal dynamics in police organizations.

APPENDIX A

APPENDIX A

Your participation in this survey is greatly appreciated. It should take less than 10 minutes to complete this questionnaire. As a police officer, I know how important front-line officers are in the operation of a police department. This is your opportunity to help us better understand problems in policing. The information you provide will be used in my dissertation and help to explain how police departments operate. I promise to protect the confidentiality of your responses.

Pledge of confidentiality. Your responses will remain confidential. You will remain anonymous. After you complete the questionnaire, seal it in the attached envelope. The envelopes will not be opened until I return to my office in Michigan. After the information is tabulated, the questionnaires will be destroyed. No member of your department will be shown the questionnaires or any information that could identify you by your responses. Survey data will be grouped to ensure that individuals cannot be identified. Even though I ask questions about you, the information will not be used in a way that will identify you.

Instructions

This questionnaire is designed to seek your reaction to statements about policing. Each statement is followed by a scale. Think of the scale as a thermometer or gauge of your feelings toward or your agreement with the statement. The scale runs from 0 (no support) to 10 (high support). There are no right or wrong answers. What is important is that your selection records your opinion of the statement. Please circle the number that most represents your feelings or support for the statement.

Example:

1	2	3	4	5	6	7	8	9	10
no					high				
agreement					agreement				

Participation is voluntary. Your answers will remain confidential. You indicate your voluntary agreement to participate by completing and returning this questionnaire. Your assistance is very important and greatly appreciated. Thank you.

Circle the number that best expresses your level of agreement with these statements. Your answer should reflect your feelings on the issue, not how you think your department would like you to respond. Your responses will remain confidential. No one from you department will see his questionnaire.

1. **Courtesy to the public is an important element of performance evaluation.**

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
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2. The police need to be accountable to the public and seek public input in guiding department policy and direction.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
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3. It is sometimes necessary and proper to bend the rules to be an effective police officer.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
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4. The police are best able to determine the level of force necessary to handle a situation.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
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5. It is sometimes necessary to mislead the public for their own good.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
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APPENDIX A

Part Two

In this section, indicate how you believe your current police chief would respond to these statements. Please indicate what you think are your chief's true feelings, not the answers the chief might give for public relations.

1. Courtesy to the public is an important element of performance evaluation.

1	2	3	4	5	6	7	8	9	10
no agreement									high agreement

2. The police need to be accountable to the public and seek public input in guiding department policy and direction.

1	2	3	4	5	6	7	8	9	10
no agreement									high agreement

3. It is sometimes necessary and proper to bend the rules to be an effective police officer.

1	2	3	4	5	6	7	8	9	10
no agreement									high agreement

4. The police are best able to determine the level of force necessary to handle a situation.

1	2	3	4	5	6	7	8	9	10
no agreement									high agreement

5. It is sometimes necessary to mislead the public for their own good.

1	2	3	4	5	6	7	8	9	10
no agreement									high agreement

APPENDIX A

6. It is a part of a patrol officer's job to create a good public image of the department.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
----------------------	---	---	---	---	---	---	---	---	-------------------------

7. **Street officers are often the most capable of determining the most effective method of policing.**

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
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8. **Regardless of the consequences, an officer needs to remain loyal to the department.**

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
----------------------	---	---	---	---	---	---	---	---	-------------------------

9. **Getting the job done is more important than keeping busy for the whole shift.**

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
----------------------	---	---	---	---	---	---	---	---	-------------------------

10. An officer's co-workers have an important influence on the decisions he or she makes.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
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Part Three

In this section, please respond how YOU feel about these statements.

1. There is too little variety in my job.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
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2. I tend to get bored on the job.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
----------------------	---	---	---	---	---	---	---	---	-------------------------

3. There must be better places to work.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
----------------------	---	---	---	---	---	---	---	---	-------------------------

4. I would like more freedom on the job.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
----------------------	---	---	---	---	---	---	---	---	-------------------------

5. I have too small a share in deciding matters that affect my work.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
----------------------	---	---	---	---	---	---	---	---	-------------------------

6. **My job means more to me than just money.**

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
----------------------	---	---	---	---	---	---	---	---	-------------------------

7. I am satisfied with the work I do.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
----------------------	---	---	---	---	---	---	---	---	-------------------------

- 8. My job gives me a chance to do what I do best.**

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
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9. People feel like they belong where I work.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
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10. Management here does everything it can to see that employees get a fair break on the job.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
----------------------	---	---	---	---	---	---	---	---	-------------------------

11. Management here is really trying to build the organization and make it successful.

1	2	3	4	5	6	7	8	9	10
no agreement									high agreement

12. Change is made here with little regard for the welfare of employees.

[illegible]

13. Sometimes I feel that my job counts for very little in this organization.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
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14. I have a great deal of interest in this organization and its future.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
----------------------	---	---	---	---	---	---	---	---	-------------------------

15. I have little opportunity to use my abilities in this organization.

1 no agreement	2	3	4	5	6	7	8	9	10 high agreement
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16. I have confidence in the fairness and honesty of management.

1	2	3	4	5	6	7	8	9	10
no									high
agreement									agreement

17. Long service means something in this organization.

1	2	3	4	5	6	7	8	9	10
no									high
agreement									agreement

18. The people who get promotions around here usually deserve them.

1	2	3	4	5	6	7	8	9	10
no									high
agreement									agreement

Part Four

In this section, circle the number of the selection that best describes you. This information is necessary in the statistical analysis to make sure other factors are not influencing the data. Again, your responses are strictly confidential. This information will not be use to identify you.

1. Even if your department defines community policing as a philosophy practiced by everyone, how would you describe your current job assignment/position?

1. patrol/traffic officer
2. detective or drug/vice investigator
3. community policing officer (i.e. CPO, NPO, COPS, etc.)
4. other

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2. How did you acquire your present job assignment/position?

1. assigned or entry level
2. volunteer or promotion

3. What is your sex?

1. male
2. female

4. What is your race/ethnic group?

1. White/Non-Hispanic
2. Black/African American
3. Hispanic/Latin
4. Oriental/Asian
5. Other

5. What is your level of education?

1. high school or GED
2. some college or associates degree
3. bachelors degree (4 years)
4. post graduate degree

6. How long have you been a police officer (include previous jobs)?

1. less than 1 year
2. 1 to 5 years
3. 6 to 10 years
4. 11 to 15 years
5. 16 or more years

7. How long have you held you current job assignment?

1. less than 1 year
2. 1 to 2 years
3. 3 to 4 years
4. 5 or more years

APPENDIX B

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Table 49 – Assigned Values

Section/ Qt. #	Variable Name	CPD* Mean	CPD Value	Number Missing	CSPD** Mean	CSPD Value	Number Missing
I/1	courtesy	8.2003	8	0	8.1373	8	0
I/2	account	5.8956	6	0	6.6797	7	0
I/3	bendrule	5.4176	5	0	5.2484	5	0
I/4	force	8.7802	9	0	8.2418	8	0
I/5	mislead	3.6813	4	0	3.7974	4	0
I/6	image	9.0385	9	0	8.9935	9	0
I/7	methods	8.2143	8	0	7.9216	8	0
I/8	loyalty	5.1564	5	3	5.1503	5	0
I/9	jobdone	8.0221	8	1	7.8170	8	0
I/10	coworker	6.0110	6	0	6.6405	7	0
II/1	ccourtesy	9.2265	9	1	8.9356	9	0
II/2	caccount	8.3260	8	1	8.1634	8	0
II/3	crule	2.9171	3	1	3.3922	3	0
II/4	cforce	6.5754	7	3	7.2418	7	0
II/5	cmislead	2.8177	3	1	3.2876	3	0
II/6	cimage	9.4807	9	1	9.3791	9	0
II/7	cmethods	5.0111	5	2	5.9150	6	0
II/8	cloylty	7.7095	8	3	7.4771	7	0
II/9	cjobdone	6.6648	7	3	6.9803	7	1
II/10	ccowker	6.2849	6	3	6.6340	7	0
III/1	variety	2.7207	3	3	2.9216	3	0
III/2	bored	3.1105	3	1	3.1250	3	1
III/3	betjob	5.0442	5	1	4.3816	4	1
III/4	freedom	5.2155	5	1	4.7368	5	1
III/5	input	6.0994	6	1	5.1579	5	1
III/6	value	7.6464	8	1	7.3841	7	2
III/7	satfy	8.0110	8	1	8.1579	8	1
III/8	best	7.4278	7	2	7.6645	8	1
III/9	belong	5.7735	6	1	6.4867	6	3
III/10	goodman	3.8772	4	2	5.0915	5	0
III/11	success	4.2222	4	2	6.0654	6	0
III/12	welfare	6.2056	6	2	5.5197	6	1
III/13	worth	5.6188	6	1	5.2810	5	0
III/14	future	6.9392	7	1	7.5033	8	0
III/15	fulfill	4.1833	4	2	3.9281	4	0
III/16	fair	3.9444	4	2	5.3289	5	1
III/17	tenure	4.5444	5	2	4.7237	5	1
III/18	promo	4.1657	4	1	4.9803	5	1

* Cincinnati Police Department ** Colorado Springs Police Department

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Supplementary Data Analysis

Additional Analysis of the Entire Data Set

Goal Alignment

The association between levels of goal alignment and job assignment was examined using the demographic variables as controls. When the method of job acquisition was controlled, a significant association was found for entry level or assigned officers. No significant association was found for officers who volunteered or were promoted to their job assignment. Entry level or assigned detectives and community police officers are more closely aligned with the goals of their chief than are patrol officers ($\chi^2 = 9.366$, $df = 4$, $p = .053$). This association is modest in strength (Cramer's $V = .152$). The majority of detectives (57.9%) and community police officers (57.1%) had low levels of difference with their chief compared to 30.2% of patrol officers.

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Table 50 – Goal Alignment and Assigned/Entry Level Officers by Assignment

	Patrol	Detectives	CPO	Total
Low	51	11	8	70
Difference	30.2%	57.9%	57.1%	34.7%
Moderate	56	3	3	62
Difference	33.1%	15.8%	21.4%	30.7%
High	62	5	3	70
Difference	36.7%	26.3%	21.4%	34.7%
Total	169	19	14	202
	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 9.366$, $df = 4$, $p < .053$, Cramer's $V = .152$

Gender was not found to be a significant factor in the goal congruence and job assignment association. Men ($\chi^2 = 8.284$, $df = 4$, $p < .082$) are no more likely than women ($\chi^2 = 6.654$, $df = 4$, $p < .155$) to have high or low levels of goal alignment with their chief.

Race was found to be a significant factor in the goal alignment and job assignment association. For white officers, detectives were significantly ($\chi^2 = 14.529$, $df = 4$, $p < .006$) more likely to have low levels of goal difference with their chief (52.5%) compared to patrol officers (26.1%) and community police officers (28.6%). White community police officers also had high levels of goal difference (39.3%).

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Table 51 – White Officers and Goal Alignment by Job Assignment

	Patrol	Detective	CPO	Total
Low	41	32	8	81
Difference	26.1%	52.5%	28.6%	32.9%
Moderate	59	13	9	81
Difference	37.6%	21.3%	32.1%	32.9%
High	57	16	11	84
Difference	36.3%	26.2%	39.3%	34.1%
Total	157	61	28	246
	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 14.529$, $df = 4$, $p < .006$, Cramer's $V = .243$

The strength of this association is modest (Cramer's $V = .172$). The effect could be explained by the large number of white officers in detective positions. It may also reflect white officers' disillusionment with appointment to community policing positions.

Minority officers were not found to have a significant effect on this goal alignment and job assignment association ($\chi^2 = 4.468$, $df = 4$, $p < .346$).

Level of education only reached significance for officers who achieve bachelor's or postgraduate degrees ($\chi^2 = 11.854$, $df = 4$, $p < .018$). Detectives with higher levels of education (56.5%) were likely to have closer goal congruence with their chief. Patrol officers were more likely to have moderate levels of difference (46.5%) with the goals of their chief. The small sample of community police officers was equally distributed. This association is of moderate strength (Cramer's $V = .222$) and needs to be interpreted with

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caution because of low levels of expected frequency in some of the table's cells. (Three cells have an expected frequency of less than five.)

Table 52 – Bachelor/Postgraduate Degrees and Goal Alignment by Assignment

	Patrol	Detective	CPO	Total
Low	21	13	4	38
Difference	24.4%	56.5%	36.4%	31.7%
Moderate	40	3	3	46
Difference	46.5%	13.0%	27.3%	38.3%
High	25	7	4	36
Difference	29.1%	30.4%	36.4%	30.0%
Total	86	23	11	120
	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 11.854$, $df = 4$, $p < .018$, Cramer's $V = .222$

Job tenure has a mixed association with the relationship between officers' job assignment and their goal alignment with their chief. Officers with less than one year experience were all assigned to patrol so no comparison could be made. The effect of one to five years' experience was not significant ($\chi^2 = 5.415$, $df = 4$, $p < .247$). Significance was found for officers with six to ten years' experience ($\chi^2 = 10.003$, $df = 4$, $p < .040$). Patrol officers were likely to have high goal discrepancies with their chief (44.7%). Detectives were likely to have close goal congruence with their chief's goals (50.0%). Community police officers were likely to have moderate (46.7%) or low (40.0%) levels

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of difference with their chief's goals. This association is moderate in strength (Cramer's $V = .247$).

Table 53 – Six to Ten Years' Experience by Goal Alignment and Assignment

	Patrol	Detective	CPO	Total
Low	9	10	6	25
Difference	19.1%	50.0%	40.0%	30.5%
Moderate	17	5	7	29
Difference	36.2%	25.0%	46.7%	35.4%
High	21	5	2	28
Difference	44.7%	25.0%	13.3%	34.1%
Total	47	20	15	82
	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 10.003$, $df = 4$, $p < .040$, Cramer's $V = .247$

No significance was found for officers with eleven to fifteen years' experience ($\chi^2 = 8.581$, $df = 4$, $p < .072$). A significant association was again found for officers with sixteen or more years of experience ($\chi^2 = 9.494$, $df = 4$, $p < .050$). Once again, detectives were more likely (51.4%) to have low levels of difference with the goals of their chief, and patrol officers likely (40.0%) to have higher levels of goal disparity with their chief. Community police officers were likely to have either close congruency (41.7%) or high disparity (41.7%) with the goals of their chief. The strength of this association is moderate (Cramer's $V = .216$). These results need to be interpreted cautiously because of

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low expected values in some of the table's cells. (Three cells have expected counts of less than five.)

Finally, officers' tenure in their current assignment was controlled and the association between goal alignment and job assignment examined. No significant association was found for tenure in assignment.

To review, when controlling the association between goal alignment and job assignment, new aspects were found. Detectives and community police officers had higher levels of goal congruence with their chief. White detectives were more closely aligned with their chief than were white community police officers or white patrol officers. Detectives with higher levels of education were more closely aligned with their chief than were similarly educated community police officers and patrol officers. For moderately tenured officers, six to ten years of tenure, detectives were likely to be closely aligned with their chief's goals; community police officers were likely to have low or moderate goal alignment, and patrol officers were likely to have high goal disparity with their chief. A similar pattern was found for officers with sixteen or more years of tenure. (Community police officers were equally likely to have high or low levels of goal congruence with their chief.)

Job Assignment and Job Satisfaction

The analysis turns to the issue of job assignment and job satisfaction. Though no significant association was found between job assignment and job satisfaction, these variables were retested with the demographic variables used as controls. This analysis attempted to find conditions to reject the second null hypothesis. No significant

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association was found when the method of job acquisition, gender, race or job tenure was controlled. A significant association was found for officers with some college or associate degrees when education was controlled ($\chi^2 = 9.547$, $df = 4$, $p < .049$).

Table 54 – Some College/Associate Degree by Job Satisfaction and Assignment

	Patrol	Detective	CPO	Total
Low	33	19	13	65
Satisfaction	32.7%	38.8%	48.1%	36.7%
Moderate	27	20	9	56
Satisfaction	26.7%	40.8%	33.3%	31.6%
High	41	10	5	56
Satisfaction	40.6%	20.4%	18.5%	31.6%
Total	101	49	27	177
	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 9.547$, $df = 4$, $p < .049$, Cramer's V = .164

Among officers with some college or associate's degrees, community police officers were likely to have low levels of job satisfaction (48.1%). Detectives were likely to have moderate (40.8%) or low (38.8%) levels of job satisfaction. Patrol officers were likely to have high (40.6%) levels of job satisfaction. The strength of this association was modest (Cramer's V = .164). Other levels of education were not found to be significant.

Significance was also found when controlling tenure in current job assignment for officers with less than one year experience ($\chi^2 = 13.539$, $df = 4$, $p < .009$) and officers

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with five or more years' experience ($\chi^2 = 9.546$, $df = 4$, $p < .049$). No other level of job tenure in a current assignment was found significant.

Table 55 – New Job Assignments and Job Satisfaction by Job Assignment

	Patrol	Detective	CPO	Total
Low	4	10	5	19
Satisfaction	11.8%	41.7%	71.4%	29.2%
Moderate	13	8	1	22
Satisfaction	38.2%	33.3%	14.3%	33.8%
High	17	6	1	24
Satisfaction	50.0%	25.0%	14.3%	36.9%
Total	34	24	7	65
	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 13.539$, $df = 4$, $p < .009$, Cramer's $V = .323$

Community police officers with less than one year in their assignment had the lowest level of job satisfaction (71.4%). Surprisingly, first year detectives also had low levels (41.7%) of job satisfaction, and first year patrol officers had high levels (50.0%) of job satisfaction. It should be remembered that most of these patrol officers are new officers. Community police officers and detectives have longer tenure in the department. The high satisfaction of patrol officers reflects the high proportion of new officers in the patrol category. The low satisfaction levels for community police officers and detectives could indicate transition problems or unfulfilled expectations in new assignments. The strength of this association is moderate (Cramer's $V = .323$). Caution should be used in

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drawing conclusions from this table because of low values in some of the cells. (Three cells have expected counts of less than five.)

Table 56 – Long-Term Job Assignment and Job Satisfaction by Assignment

	Patrol	Detective	CPO	Total
Low Satisfaction	31 35.6%	4 16.7%	5 45.5%	40 32.8%
Moderate Satisfaction	21 24.1%	4 54.2%	2 18.2%	36 29.5%
High Satisfaction	35 40.2%	7 29.2%	4 36.4%	46 37.7%
Total	87 100.0%	24 100.0%	11 100.0%	122 100.0%

$\chi^2 = 9.546$, $df = 4$, $p < .049$, Cramer's $V = .198$

A different trend emerges for officers with five or more years in their current assignment. Community police officers again are the least satisfied (45.5%) and patrol officers are the most satisfied (40.2%). Detectives were most likely (54.2%) to be moderately satisfied. Community police officers may become more satisfied with their duties as they gain experience and detectives may become more moderate. The strength of this association is modest (Cramer's $V = .198$). Again, interpretations of this data must be cautious because of low values in some cells. (Three cells have expected counts of less than five.)

To review, when the demographic variables were used to control the relationship between job satisfaction and job assignment, no significant association was found for the method of job acquisition, gender, race or job tenure. For officers with some college or

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associate degrees, community police officers had low levels of job satisfaction; detectives had low to moderate levels of job satisfaction, and patrol officers had higher levels of job satisfaction. Tenure in the officer's current job assignment was significant for officers with less than one year experience and for officers with five or more years' experience. In their first year in new job assignments, community police officers had very low levels of job satisfaction; detectives had low levels of job satisfaction, and patrol officers had high levels of job satisfaction. For officers with five or more years' tenure in their current assignment, community police officers were the least satisfied; detectives were moderately satisfied, and patrol officers were the most satisfied. New detectives and community police officers find little satisfaction in their jobs, but their levels of satisfaction moderate as years pass.

Goal Alignment and Job Satisfaction by Job Assignment

The association between goal alignment and job satisfaction was reexamined with job assignment controlled. No significance was found for detectives. The analysis of community police officers was plagued by low expected values in too many cells. (Seven cells have an expected count of less than five. However, the contingency table showed officers relatively evenly distributed throughout the table.) A significant association was found for patrol officers ($\chi^2 = 16.563$, $df = 4$, $p < .002$). The strength of this association was moderate (Kendall's tau-b = -.237).

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Table 57 – Patrol Officers and Goal Alignment by Job Satisfaction

		Low Satisfaction	Moderate Satisfaction	High Satisfaction	Total
Low Difference	Differ1	10	19	33	62
	Satcom1	16.1%	30.6%	53.2%	100.0%
		15.2%	31.7%	38.8%	29.4%
Moderate Difference	Differ1	20	22	30	72
	Satcom1	27.8%	30.6%	41.7%	100.0%
		30.3%	36.7%	35.3%	34.1%
High Difference	Differ1	36	19	22	77
	Satcom1	46.8%	24.7%	28.6%	100.0%
		54.5%	31.7%	25.9%	36.5%
Total		66	60	85	211
	Differ1	31.3%	28.4%	40.3%	100.0%
	Satcom1	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 16.536$, $df = 4$, $p < .002$, Kendall's tau-b = -.237

This table mirrors the previous table reporting the association of goal alignment and job satisfaction. Officers with close goal congruence with their chief (low difference) were more likely to have high levels of job satisfaction. Officers with high levels of goal discrepancy with their chief (high difference) were more likely to have low job satisfaction. Forty percent (40.3%) of patrol officers had high levels of job satisfaction and nearly thirty percent (29.4%) were closely aligned with the goals of their chief.

Next the association between goal alignment and job satisfaction was examined with the method of job acquisition controlled. Significance was found for officers who volunteered or were promoted to their assignments.

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Table 58 – Volunteers/Promoted Officers and Goal Alignment by Job Satisfaction

	Low Satisfaction	Moderate Satisfaction	High Satisfaction	Total
Low	7	21	18	46
Difference	15.2%	45.7%	39.1%	100.0%
Satcom1	15.9%	43.8%	48.6%	35.7%
Moderate	16	14	9	39
Difference	41.0%	35.9%	23.1%	100.0%
Satcom1	36.4%	29.2%	24.3%	30.2%
High	21	13	10	44
Difference	47.7%	29.5%	22.7%	100.0%
Satcom1	47.7%	27.1%	27.0%	34.1%
Total	44	48	37	129
Differ1	34.1%	37.2%	28.7%	100.0%
Satcom1	100.0%	100.0%	100.0%	100.0%

$$\chi^2 = 12.068, \text{ df} = 4, \text{ p} < .017, \text{ Kendall's tau-b} = -.235$$

The association between goal alignment and job satisfaction continues to follow the pattern established previously. The association is moderate in strength (Kendall's tau-b = -.235). Nearly thirty-six percent (35.7%) of officers who volunteered or were promoted to their job assignment were closely aligned with the goals of their chief. Of officers closely aligned with their chief, nearly forty-nine percent (48.6%) had high job satisfaction compared to under sixteen percent (15.9%) who had low job satisfaction. Thirty-four percent (34.1%) had low levels of job satisfaction. Of these officers, nearly forty-eight percent (47.7%) had high goal disparity with their chief, compared to less than sixteen percent (15.2%) who were closely aligned with their chief.

The association was examined with gender controlled. Significance was found for male officers, but not for female officers. This pattern is similar to the one found for the

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entire data set. Over thirty-five percent (35.4%) of male officers were closely aligned with the goals of their chief and nearly thirty-six percent (35.8%) had high levels of job satisfaction. The association is moderately strong (Kendall's tau-b = -.206).

Table 59 – Males Officers and Goal Alignment by Job Satisfaction

	Low Satisfaction	Moderate Satisfaction	High Satisfaction	Total
Low	16	38	42	96
Difference	16.7%	39.6%	43.8%	100.0%
Differ1				
Satcom1	19.8%	40.9%	43.3%	35.4%
Moderate	25	27	32	84
Difference	29.8%	32.1%	38.1%	100.0%
Differ1				
Satcom1	30.9%	29.0%	33.0%	31.0%
High	40	28	23	91
Difference	44.0%	30.8%	25.3%	100.0%
Differ1				
Satcom1	49.4%	30.1%	23.7%	33.6%
Total	81	93	97	271
Differ1	29.9%	34.3%	35.8%	100.0%
Satcom1	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 17.501$, $df = 4$, $p < .002$, Kendall's tau-b = -.206

Race was found to be a significant factor in the goal alignment and job satisfaction association. Significant levels were reached for both white and minority officers. The familiar pattern between goal alignment was found for both white and minority officers. Nearly forty-three percent (42.7%) of minority officers compared to nearly thirty-four percent (33.5%) of white officers were closely aligned with their chief. Both were as likely to have high job satisfaction. The strength of the association was

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modest for white officers (Kendall's tau-b = -.148) and moderate for minority officers (Kendall's tau-b = -.258).

Table 60 – White Officers and Goal Alignment by Job Satisfaction

	Low Satisfaction	Moderate Satisfaction	High Satisfaction	Total
Low	20	29	34	83
Difference	24.1%	34.9%	41.0%	100.0%
Satcom1	23.5%	37.7%	39.5%	33.5%
Moderate	26	28	27	81
Difference	32.1%	34.6%	33.3%	100.0%
Satcom1	30.6%	36.4%	31.4%	32.7%
High	39	20	25	84
Difference	46.4%	23.8%	29.8%	100.0%
Satcom1	45.9%	26.0%	29.1%	33.9%
Total	85	77	86	248
Difference	34.3%	31.0%	34.7%	100.0%
Satcom1	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 9.960$, $df = 4$, $p < .041$, Kendall's tau-b = -.148

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Table 61 – Minority Officers and Goal Alignment by Job Satisfaction

	Low Satisfaction	Moderate Satisfaction	High Satisfaction	Total
Low Difference	6	12	17	35
Differ1	17.1%	34.3%	48.6%	100.0%
Satcom1	25.0%	41.4%	58.6%	42.7%
Moderate Difference	8	5	8	21
Differ1	38.1%	23.8%	38.1%	100.0%
Satcom1	33.3%	17.2%	27.6%	41.7%
High Difference	10	12	4	26
Differ1	38.5%	46.2%	15.4%	100.0%
Satcom1	41.7%	41.4%	13.8%	31.7%
Total	24	29	29	82
Differ1	29.3%	35.4%	35.4%	100.0%
Satcom1	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 9.433$, $df = 4$, $p < .051$, Kendall's tau-b = -.258

When level of education was controlled, officers with some college or associate's degrees were found significant in the goal alignment and job satisfaction association ($\chi^2 = 15.652$, $df = 4$, $p < .004$). These officers were nearly as likely to be closely aligned with their chief (38.9%) as to have highly disparate goals (35.6%). They were slightly more likely to have low levels of job satisfaction (36.7%) than high levels of job satisfaction (31.7%). The pattern of high job satisfaction and low goal difference was again established. The strength of this association was moderate (Kendall's tau-b = -.242). An analysis of officers with high school educations could not be performed because of the small sample size. Controlling for bachelor's and postgraduate degrees was not found significant.

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Table 62 – Some College/Associate Degree and Goal Alignment by Job Satisfaction

	Low Satisfaction	Moderate Satisfaction	High Satisfaction	Total
Low Difference	14	25	31	70
Differ1	20.0%	35.7%	44.3%	100.0%
Satcom1	21.2%	26.3%	54.4%	38.9%
Moderate Difference	20	15	11	46
Differ1	43.5%	35.7%	23.9%	100.0%
Satcom1	30.3%	26.3%	19.3%	25.6%
High Difference	32	17	15	64
Differ1	50.0%	26.6%	23.4%	100.0%
Satcom1	48.5%	29.8%	26.3%	35.6%
Total	66	57	57	180
Differ1	36.7%	31.7%	31.7%	100.0%
Satcom1	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 15.652$, $df = 4$, $p < .004$, Kendall's tau-b = -.242

When job tenure was controlled, the association between goal alignment and job satisfaction was significant for officers with one to five years of tenure ($\chi^2 = 12.684$, $df = 4$, $p < .013$) and officers with sixteen or more years' tenure ($\chi^2 = 12.573$, $df = 4$, $p < .014$). Of the officers with one to five years of tenure, over forty-three percent (43.5%) had high levels of job satisfaction, and nearly forty percent (39.1%) had close goal alignment with their chief. Over forty percent (40.0%) of officers with high levels of job satisfaction had low levels of difference with the goals of their chief. Sixty percent (60.0%) of officers with low job satisfaction had high levels of difference with their chief's goals. Of the officers with sixteen or more years of tenure,

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Table 63 – One to Five Years' Tenure and Goal Alignment by Job Satisfaction

	Low Satisfaction	Moderate Satisfaction	High Satisfaction	Total
Low Difference Differ1 Satcom1	6 16.7% 24.0%	14 38.9% 51.9%	16 44.4% 40.0%	36 100.0% 39.1%
Moderate Difference Differ1 Satcom1	4 15.4% 16.0%	8 30.8% 29.6%	14 53.8% 35.0%	26 100.0% 28.3%
High Difference Differ1 Satcom1	15 50.0% 60.0%	5 16.7% 18.5%	10 33.3% 25.0%	30 100.0% 32.6%
Total Differ1 Satcom1	25 27.2% 100.0%	27 29.3% 100.0%	40 43.5% 100.0%	92 100.0% 100.0%

$\chi^2 = 12.684$, $df = 4$, $p < .013$, Kendall's tau-b = -.242

twenty six percent (26.0%) had high levels of job satisfaction, and over thirty-six percent (36.5%) were closely aligned with their chief. Nearly fifty percent (48.7%) of officers with low levels of job satisfaction had high goal difference with their chief. Over fifty percent (51.9%) of officers with high levels of job satisfaction had low levels of goal difference with their chief. The strength of this association was modest for officers with one to five years of tenure (Kendall's tau-b = -.173) and moderate for officers with sixteen or more years of tenure (Kendall's tau-b = -.253).

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Table 64 – Sixteen or More Years' Tenure and Goal Alignment by Job Satisfaction

	Low Satisfaction	Moderate Satisfaction	High Satisfaction	Total
Low Difference Differ1 Satcom1	6 15.8% 15.4%	18 47.4% 47.4%	14 36.8% 51.9%	38 100.0% 36.5%
Moderate Difference Differ1 Satcom1	14 51.9% 35.9%	7 25.9% 18.4%	6 22.2% 22.2%	27 100.0% 26.0%
High Difference Differ1 Satcom1	19 48.7% 48.7%	13 33.3% 34.2%	7 17.9% 25.9%	39 100.0% 37.5%
Total Differ1 Satcom1	39 37.5% 100.0%	38 36.5% 100.0%	27 26.0% 100.0%	104 100.0% 100.0%

$\chi^2 = 12.573$, $df = 4$, $p < .014$, Kendall's tau-b = -.253

Finally, officers' tenure in their current job assignment was controlled and the association between goal alignment and job satisfaction re-examined. Significance was found for officers with less than one year in their current assignment ($\chi^2 = 13.111$, $df = 4$, $p < .011$). Forty-seven percent (47.0%) of officers in new assignments were closely aligned with their chief and thirty-six percent (36.4%) had high levels of job satisfaction. Over sixty-one percent (61.1%) of officers with high goal disparity with their chief had low job satisfaction. Over fifty-four percent (54.2%) of officers with high job satisfaction levels were closely aligned with the goals of their chief. The strength of this association was moderate (Kendall's tau-b = -.256).

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Table 65 – New Assignments and Goal Alignment by Job Satisfaction

	Low Satisfaction	Moderate Satisfaction	High Satisfaction	Total
Low Difference	7	11	13	31
Differ1	22.6%	35.5%	41.9%	100.0%
Satcom1	35.0%	50.0%	54.2%	47.0%
Moderate Difference	2	6	9	17
Differ1	11.8%	35.3%	52.9%	100.0%
Satcom1	10.0%	27.3%	37.5%	25.8%
High Difference	11	5	2	18
Differ1	61.1%	27.8%	11.1%	100.0%
Satcom1	55.0%	22.7%	8.3%	27.3%
Total	20	22	24	66
Differ1	30.3%	33.3%	36.4%	100.0%
Satcom1	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 13.111$, $df = 4$, $p < .011$, Kendall's tau-b = -.256

To review, goal alignment and job satisfaction are significantly associated.

Officers with high levels of job satisfaction were likely to be closely aligned with the goals of their chief. Officers with low levels of job satisfaction tended to have high levels of goal differences with their chief. Using the demographic variables to control the goal alignment and job satisfaction association revealed additional information. When job assignment is controlled, patrol officers exhibit the same high satisfaction and close goal congruency pattern. The association between high job satisfaction and close goal congruence was also found for volunteers and promoted officers, male officers, both white and minority officers, officers with some college or associate degrees, officers with either one to five years' tenure or officers with sixteen or more years' tenure, and officers in new job assignments.

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Job Assignment Regression Models

The data set was divided into the three job assignments. Regression models were developed for the most productive variables.

Table 66 – Patrol Data Model

	B	Std. Error	t	Significance	Tolerance
Constant	44.082	5.974	7.379	.000	
Satcom	-.270	.058	-4.589	.000	.993
Curasgn	1.890	.684	2.758	.006	.993

The most useful predictors of patrol officers' goal alignment were their level of job satisfaction and tenure in current assignment ($R^2 = .130$, adjusted $R^2 = .122$). As levels of job satisfaction increased, goal congruence with the chief increased. As tenure in current assignment increased, goal congruence diminished.

Table 67 – Detective Data Model

	B	Std. Error	t	Significance	Tolerance
Constant	41.270	8.901	4.636	.000	
Tenure	-3.130	1.395	-2.240	.028	.596
Satcom	-.187	.083	-2.249	.028	.954
Curasgn	2.805	1.171	2.396	.019	.581

For detectives, levels of job satisfaction, job tenure and tenure in current assignment were the best predictors of goal congruence with the chief ($R^2 = .118$, adjusted $R^2 = .081$). Increasing levels of job satisfaction and job tenure brought closer

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goal congruence with the chief. Increased tenure in current job assignment brought more goal disparity.

Table 68 – Community Policing Data Model

	B	Std. Error	t	Significance	Tolerance
Constant	22.463	1.925	11.670	.000	
Minority	-8.893	3.334	-2.667	.011	1.000

The only significant predictor of the goal alignment of community police officers was race ($R^2 = .154$, adjusted $R^2 = .111$). Minority officers have closer goal alignment with their chief.

Additional Cincinnati Data Analysis

Analysis of the data from the Cincinnati Police Division revealed few significant associations. Job assignment was not significantly associated with goal alignment or job satisfaction. Both null hypotheses were maintained. Only one chi-square test of associations with goal alignment or job satisfaction achieved significance. The sole significant association was between goal alignment and race ($\chi^2 = 6.083$, $df = 2$, $p < .048$). White officers had higher levels of goal disagreement (45.2%). Minority officers had the highest levels of goal congruence with their chief (41.2%). The strength of this association is modest (Cramer's $V = .185$).

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**Table 69– Goal Alignment and Race
Cincinnati Police Division**

	White	Other	Total
Low	29	21	50
Difference	23.0%	41.2%	28.2%
Moderate	40	11	51
Difference	31.7%	21.6%	28.8%
High	57	19	76
Difference	45.2%	37.3%	42.9%
Total	126	51	177
	100.0%	100.0%	100.0%

$\chi^2 = 6.083$, $df = 2$, $p < .048$, Cramer's $V = .185$

The association between goal alignment and job satisfaction just missed the significant level ($\chi^2 = 9.212$, $df = 4$, $p < .056$). Because of the theoretical importance of this association and its near significance, it is included here. The strength of this association is moderate (Kendall's tau-b = $-.200$). Goal alignment and job satisfaction follow the same pattern as seen in the larger data set.

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**Table 70 – Goal Alignment and Job Satisfaction
Cincinnati Police Division**

		Low Satisfaction	Moderate Satisfaction	High Satisfaction	Total
Low Difference	Differ1	12	16	22	50
	Satcom1	24.0%	32.0%	44.0%	100.0%
		17.6%	28.1%	38.6%	27.5%
Moderate Difference	Differ1	18	16	17	51
	Satcom1	35.3%	31.4%	33.3%	100.0%
		26.5%	28.1%	29.8%	28.0%
High Difference	Differ1	38	25	18	81
	Satcom1	46.9%	30.9%	22.2%	100.0%
		55.9%	43.9%	31.6%	44.5%
Total		68	57	57	182
	Differ1	37.4%	31.3%	31.3%	100.0%
	Satcom1	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 9.212$, $df = 4$, $p < .056$, Kendall's tau-b = -.200

Though few chi-square tests reached significance, t-tests were more productive. Several t-tests for the variables job tenure and goal alignment were significant. The mean value for officers with less than one year experience (12.000) was significantly lower (closer goal congruence) than were mean values for officers with six to ten years' experience (23.2857, $t = -2.15$, $df = 52$, $p < .036$), and officers with eleven to fifteen years of experience (29.5000, $t = -3.05$, $df = 19$, $p < .007$). The mean value for officers with one to five years of experience (22.2167) was significantly lower (closer goal congruence) than were mean values for officers with eleven to fifteen years of experience (29.0000, $t = -2.00$, $df = 74$, $p < .049$). The mean value for officers with eleven to fifteen

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years of experience (29.0000) was significantly higher than that for officers with sixteen or more years of experience (22.2800, $t = 2.05$, $df = 64$, $p < .045$).

Female officers were less satisfied in their job than male officers. The mean value for male officers (95.9306) was significantly higher than that for female officers (90.2973, $t = 1.97$, $df = 49.26$, $p < .054$). No other variable was found to be significantly associated with officers' level of job satisfaction.

Next the association between goal alignment and job satisfaction was re-examined with job assignment controlled. An association of significance was found for patrol officers ($\chi^2 = 12.6100$, $df = 4$, $p < .013$). The same inverse pattern of association between goal difference and job satisfaction was found. Sixty-one percent (61.0%) of officers with low job satisfaction had high levels of goal discrepancy with their chief. Over fifty-eight percent (58.1%) of officers closely aligned with the goals of their chief had high levels of job satisfaction. The strength of this association is moderate (Kendall's tau-b = -.290). No other attributes were found to be significant.

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**Table 71 – Patrol Officers and Goal Alignment by Job Satisfaction
Cincinnati Police Division**

	Low Satisfaction	Moderate Satisfaction	High Satisfaction	Total
Low Difference	5	8	18	31
Differ1	16.1%	25.8%	58.1%	100.0%
Satcom1	12.2%	24.2%	40.9%	26.3%
Moderate Difference	11	11	14	36
Differ1	30.6%	30.6%	38.9%	100.0%
Satcom1	26.8%	33.3%	31.8%	30.5%
High Difference	25	14	12	51
Differ1	49.0%	27.5%	23.5%	100.0%
Satcom1	61.0%	42.4%	27.3%	43.2%
Total	41	33	44	118
Differ1	34.7%	28.0%	37.3%	100.0%
Satcom1	100.0%	100.0%	100.3%	100.0%

$$\chi^2 = 12.6100, \quad df = 4, \quad p < .013, \quad \text{Kendall's tau-b} = -.290$$

Finally, the association between goal alignment, job satisfaction and job assignment was re-analyzed with the demographic variables used as controls. No significant associations were found.

In summary, the data from Cincinnati did not reject the null hypotheses. No significant associations were found between job assignment and goal alignment or job satisfaction. Of all the demographic variables, only the chi-square analysis of race was found to be significantly associated to goal alignment. White officers had high levels of goal disparity with their chief. Minority officers had the highest levels of goal alignment with their chief.

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The evaluation of goal alignment and job satisfaction missed the significant level by .002. The pattern of low levels of goal difference and high levels of job satisfaction was once again found. This relationship was re-examined with job assignment controlled. The pattern of low goal differences and high job satisfaction as well as low job satisfaction and high goal difference reached significance for patrol officers. Controlling for the other job assignments did not produce significant associations. None of the demographic variables were found significant when used as controls.

More was determined by analyzing the mean values of variable attributes with t-tests. Differences were found between officers with varying levels of tenure. Officers with less than one year experience were found to be more closely aligned with the goals of the chief than were officers with six to ten years of experience and officers with eleven to fifteen years of experience. In addition, officers with one to five years of experience were more closely aligned with the goals of their chief than were officers with eleven to fifteen years of experience. Officers with eleven to fifteen years' experience had a greater level of goal disparity with the chief than did officers with sixteen or more years of experience.

Female officers had lower levels of job satisfaction than male officers. No other variable was found to be associated with job satisfaction in t-test analysis.

Additional Colorado Springs Data Analysis

The Colorado Springs data produced findings much different from the Cincinnati data. There are several possible explanations for this aside from obvious differences in

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the two police departments. As previously discussed, the smaller sample size, resulting from separating the data base, affects the statistical tests. With less data, it becomes more difficult to achieve statistical significance. Another likely possibility is the representativeness of the sample. The Colorado Springs responses included a wider range of variable attributes. Due to this dispersion, some categories had larger numbers of responses even though the Colorado Springs data set was smaller than that of Cincinnati.

A significant association was found between goal alignment and job assignment for the officers of the Colorado Springs Police Department ($\chi^2 = 13.1008$, $df = 4$, $p < .011$). Detectives (65.9%) and community police officers (52.6%) were more likely than patrol officers (33.3%) to have close goal congruence with their chief. Patrol officers (28.0%) had the highest level of goal difference with their chief. The strength of this association is moderate (Cramer's $V = .207$).

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**Table 72 – Goal Alignment and Job Assignments
Colorado Springs Police Department**

	Patrol	Detectives	CPO	Total
Low	31	27	10	68
Difference	33.3%	65.9%	52.6%	44.4%
Moderate	36	9	6	51
Difference	38.7%	22.0%	31.6%	33.3%
High	26	5	3	34
Difference	28.0%	12.2%	15.8%	22.2%
Total	93	41	19	153
	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 13.1008$, $df = 4$, $p < .011$, Cramer's $V = .207$

The mean values of patrol officers (19.2796), detectives (14.5366) and community police officers (15.3684) were compared. Detectives were significantly more closely aligned with the goals of their chief than were patrol officers ($t = 2.67$, $df = 132$, $p < .009$).

No significant association was found for goal alignment and the method of job acquisition ($\chi^2 = 1.5618$, $df = 2$, $p < .458$). The mean values for *assigned or entry level* (18.1647) and *volunteer or promoted* (16.7206) were not significantly associated ($t = .93$, $df = 151$, $p < .353$).

Gender was not found to be significantly associated with goal alignment ($\chi^2 = .7182$, $df = 2$, $p < .698$). T-tests of the mean values of males (17.3150) and females (18.5385) did not significantly differ ($t = -.60$, $df = 151$, $p < .553$).

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Race was not found to be significantly associated with officers' level of goal alignment ($\chi^2 = .0202$, $df = 2$, $p < .990$). The mean values for white officers (17.6967) and minority officers (16.8387) did not significantly differ ($t = .45$, $df = 151$, $p < .656$).

It is impossible to properly judge the effect of education on levels of officers' goal alignment. Only three officers were in the *High school/GED* category. Education levels were not found to be significantly associated with officers' goal congruence with their chief ($\chi^2 = 6.040$, $df = 4$, $p < .196$). However, the mean value for officers with a high school education (32.6667) was significantly higher than that for officers who attended some college classes or had associate's degrees (17.2381, $t = 2.83$, $df = 85$, $p < .006$) and officers with a bachelor's or postgraduate degree (17.1970, $t = 2.77$, $df = 67$, $p < .007$). Though the mean value for officers with a high school education is nearly twice as high as officers with some college classes, we must be cautious in drawing conclusions from such a small sample.

Officers' total police experience (job tenure) was not significantly associated with their level of goal congruence with their chief ($\chi^2 = 8.6022$, $df = 8$, $p < .377$). T-tests of the mean values for officers with experience levels *less than one year* (11.7500), *one to five years* (16.1875), *six to ten years* (17.5882), *eleven to fifteen years* (18.2500) and *sixteen years or more* (18.3333) revealed significant differences. Officers with less than one year of experience had significantly closer goal congruence with their chief than officers with eleven to fifteen years of experience ($t = -2.13$, $df = 30$, $p < .042$) and officers with sixteen or more years of experience ($t = -2.48$, $df = 13.30$, $p < .027$). This close goal congruence disappeared for officers with one year or more of experience.

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Officers' tenure in their current assignments was found to be associated with their goal congruence with the chief ($\chi^2 = 17.7619$, $df = 6$, $p < .007$). Officers in the first year of a new job assignment were closely aligned with the goals of their chief. Officers' goal congruency decreased with each additional year in their assignment. The strength of this association is moderate (Kendall's tau-c = .224). This association could not be compared to job tenure because of low expected counts in too many cells.

**Table 73 – Goal Alignment and Tenure in Current Job Assignment
Colorado Springs Police Department**

	< 1 yr	1-2 yrs	3-4 yrs	5 or more yrs	Total
Low	22	15	10	21	68
Difference	62.9%	46.9%	40.0%	35.0%	44.7%
Moderate	7	15	11	18	51
Difference	20.0%	46.9%	44.0%	30.0%	33.6%
High	6	2	4	21	33
Difference	17.1%	6.3%	16.0%	35.0%	21.7%
Total	35	32	25	60	152
	100.0%	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 17.7619$, $df = 6$, $p < .007$, Kendall's tau-c = .224

T-tests confirmed a pattern of declining goal congruence for officers in their current assignment for *less than one year* (14.7429) *one to two years* (14.7500), *three to four years* (17.0000), and *five or more years* (20.4167). The mean values for officers with less than one year experience ($t = -2.81$, $df = 93$, $p < .006$) and officers with one to

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two years' experience ($t = -3.20$, $df = 83.85$, $p < .002$) were significantly lower than for officers with five or more years of experience. These findings suggest that officers see the organization heading in the right directions when they start their careers, but begin to question organizational direction as they settle into their assignment.

The association for goal alignment and job assignment was revisited with the demographic variables used to control the analysis. The method of job acquisition, gender of the officer, and tenure in current assignment were not significant. Race was significant for white officers. White detectives (68.6%) and community police officers (50.0%) were more likely than patrol officers (32.0%) to have low goal conflict with their chief ($\chi^2 = 13.2912$, $df = 4$, $p < .010$). This association was moderate in strength (Cramer's $V = .234$).

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**Table 74 – White Officers and Goal Alignment by Job Assignment
Colorado Springs Police Department**

	Patrol	Detective	CPO	Total
Low	24	24	6	54
Difference	32.0%	68.6%	50.0%	44.3%
Moderate	30	7	4	41
Difference	40.0%	20.0%	33.3%	33.6%
High	21	4	2	27
Difference	28.0%	11.4%	16.7%	22.1%
Total	75	35	12	122
	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 13.2912$, $df = 4$, $p < .010$, Cramer's $V = .233$

Education affects the goal alignment and job assignment association for officers with bachelor's or postgraduate degrees ($\chi^2 = 10.3329$, $df = 4$, $p < .035$). Over three quarters (76.9%) of detectives and half (50%) of community police officers with a bachelor's or postgraduate degree were closely aligned with the goals of their chief. The strength of this association is moderate (Cramer's $V = .280$), but should be interpreted cautiously because of low cell counts. (Four cells had expected cell counts of less than five.)

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**Table 75 – Bachelor/Postgraduate Degrees and Goal Alignment by Job Assignment
Colorado Springs Police Department**

	Patrol	Detectives	CPO	Total
Low	14	10	3	27
Difference	29.8%	76.9%	50.0%	40.9%
Moderate	23	1	2	26
Difference	48.9%	7.7%	33.3%	39.4%
High	10	2	1	13
Difference	21.3%	15.4%	16.7%	19.7%
Total	47	13	6	66
	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 10.3330$, $df = 4$, $p < .035$, Cramer's V = .280

The association for goal alignment and job assignment is affected by officers' tenure. First-year officers are excluded because they are all assigned to patrol. No significance was found for officers with one to five years' experience. A significant association was suggested for officers with six to ten years' experience ($\chi^2 = 10.9354$, $df = 4$, $p < .027$), but the table was plagued with an excessive number of cells with low cell counts. (Seven cells had an expected count of less than five.) A significant association was found for officers with sixteen or more years of service ($\chi^2 = 10.6756$, $df = 4$, $p < .030$). Detectives (68.4%) and community police officers (66.7%) with sixteen or more years of experience were more closely aligned with the goals of their

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chief than similar patrol officers (27.6%). The strength of this association is moderate (Cramer's $V = .314$). (Four cells had an expected count less than five.)

**Table 76 – Long Tenured Officers and Goal Alignment by Job Assignment
Colorado Springs Police Department**

	Patrol	Detective	CPO	Total
Low	8	13	4	25
Difference	27.6%	68.4%	66.7%	46.3%
Moderate	11	2	0	13
Difference	37.9%	10.5%	.0%	24.1%
High	10	4	2	16
Difference	34.5%	21.1%	33.3%	29.6%
Total	29	19	6	54
	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 10.6756$, $df = 4$, $p < .030$, Cramer's $V = .314$

Next, job satisfaction was examined. No significant association was found for job assignment and job satisfaction ($\chi^2 = 3.1693$, $df = 4$, $p < .530$). T-tests of the mean values for patrol officers (98.9677), detectives (96.7561) and community police officers (99.3684) also failed to find any significant associations. Job satisfaction and job assignment were re-examined with the demographic variables controlled, and no significant associations were found.

The manner of job acquisition was not found to be significantly associated with the level of job satisfaction ($\chi^2 = .9923$, $df = 2$, $p < .609$). The mean values for entry level

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or assigned officers (98.2588) and volunteer or promoted officers (98.6324) were not significantly different ($t = -.17$, $df = 151$, $p < .864$).

Gender was not significantly associated with officers' level of job satisfaction ($\chi^2 = 5.1561$, $df = 2$, $p < .076$). Male (98.7795) and female (96.6923) officers were compared and no significant difference was found ($t = .73$, $df = 151$, $p < .468$).

Race was not significantly associated with level of job satisfaction ($\chi^2 = 1.6207$, $df = 2$, $p < .445$). There was no significant difference between the mean job satisfaction level for white (98.9836) and minority (96.2258) officers ($t = 1.03$, $df = 151$, $p < .305$).

Officers' level of education was not found to be significantly associated with their level of job satisfaction ($\chi^2 = 4.3351$, $df = 4$, $p < .363$). The mean job satisfaction values for education categories *High School/GED* (91.6667), *Some College/Associate Degrees* (97.5238), and *Bachelor/Postgraduate Degree* (99.8788) were not significantly different.

Job tenure as a police officer was not significantly related to officers' level of job satisfaction ($\chi^2 = 9.5138$, $df = 8$, $p < .301$). The mean job satisfaction values for the job tenure categories *Less than One Year* (106.3750), *One to Five Years* (100.5000), *Six to Ten Years* (98.3824), *Eleven to Fifteen Years* (97.7500), and *Sixteen or More Years* (96.3333) were compared using t-tests. Only the comparison between officers with less than a year of experience and officers with eleven to fifteen years of experience was found significant ($t = 2.00$, $df = 30$, $p < .054$). Officers with less than one year of experience had higher levels of job satisfaction than officers with eleven to fifteen years.

APPENDIX C

The length of officers' tenure in their current assignment was not significantly associated with their level of job satisfaction ($\chi^2 = 4.9512$, $df = 6$, $p < .550$). Officers in their current assignment for *Less than One Year* (97.8571), *One to Two Years* (98.1563), *Three to Four Years* (96.8000) and *Five or More Years* (99.6557) were not significantly different.

Officers' goal alignment with their chief was compared to their level of job satisfaction. No significant association was found ($\chi^2 = 5.2774$, $df = 4$, $p < .260$). Controlling for job assignment, gender, race, education, job tenure, and tenure in current assignment did not produce any significant associations.

To summarize, several significant associations were found in the Colorado Springs data. Officers' goal alignment with their chief was associated with job assignments. Detectives and community police officers were more closely aligned with the goals of the chief than were patrol officers.

An analysis of educational levels and goal alignment was hampered by the lack of officers whose education was limited to high school degrees. In a very small sample, officers with only high school degrees had significantly higher levels of goal disparity with their chief than did officers with some college or college degrees.

Tenure as a police officer was associated with officers' level of goal congruence with their chief. Officers with less than one year of experience were more closely aligned with their chief's goals than were officers with eleven or more years of experience.

APPENDIX C

Officers' tenure in job assignment was associated with goal alignment. Officers in the first year of a job assignment were the most closely aligned with their chief. Goal congruence declined with each additional year of service.

When the association between goal alignment and job assignment was controlled, several other associations were found. Race was significant for white officers, but not minority officers. White detectives and community police officers were more closely aligned with their chief than were patrol officers. Education was significant for officers with bachelor or post graduate degrees. Three quarters of detectives and half of the community police officers with higher levels of education were closely aligned with the goals of their chief. Job tenure was significant for officers with sixteen or more years of service. The long-tenured detectives and community police officers were closely aligned with their chief's goals.

No significant associations were found for job satisfaction. Neither job assignment nor control variables reached significant levels. T-test confirmed the absence of significant associations.

APPENDIX D

APPENDIX D

Correlation Tables

Table 32A – Pearson Correlations for Table 32

	differ	dept	detective	cpo	volpro	female	minority	educate	tenure
differ	1.000	.243	-.108	-.027	-.040	.007	-.040	-.031	.089
dept	.243	1.000	-.072	.012	-.109	.049	.100	-.244	-.118
detective	-.108	-.072	1.000	-.215	.414	.052	-.046	-.020	.280
cpo	-.027	.012	-.215	1.000	.218	-.018	.081	-.079	.047
volpro	-.040	-.109	.414	.218	1.000	-.007	-.101	.005	.330
female	.007	.049	.052	-.018	-.007	1.000	-.048	.072	-.150
minority	-.040	.100	-.046	.081	-.101	-.048	1.000	-.077	-.122
educate	-.031	-.244	-.020	-.079	.005	.072	-.077	1.000	-.114
tenure	.089	-.118	.280	.047	.330	-.150	-.122	-.114	1.000
curasgn	.178	.004	-.120	-.068	-.151	-.067	-.010	-.113	.453

	curasgn
differ	.178
dept	.004
detective	-.120
cpo	-.068
volpro	-.151
female	-.067
minority	-.010
educate	-.113
tenure	.453
curasgn	1.000

APPENDIX D**Table 32B – Coefficient Correlations for Table 32**

	curasgn	dept	cpo	female	minority	detective	educate	volpro	tenure
curasgn	1.000	-.021	.109	-.043	-.041	.214	.059	.232	-.555
dept	-.021	1.00	-.001	-.056	-.064	.017	.253	.042	.095
cpo	.109	-.001	1.000	-.026	-.112	.361	.088	-.303	-.090
female	-.043	-.056	-.026	1.000	.068	-.100	-.065	-.010	.158
minority	-.041	-.064	-.112	.068	1.000	-.062	.055	.078	.114
detective	.214	.017	.361	-.100	-.062	1.000	.052	-.357	-.262
educate	.059	.253	.088	-.065	.055	.052	1.000	-.034	.080
volpro	.232	.042	-.303	-.010	.078	-.357	-.034	1.000	-.294
tenure	-.555	.095	-.090	.158	.114	-.262	.080	-.294	1.000

Table 33A – Pearson Correlations for Table 33

	differ	dept	detective	curasgn
differ	1.000	.253	-.115	.171
dept	.253	1.000	-.078	.005
detective	-.115	-.078	1.000	-.119
curasgn	.171	.005	-.119	1.000

Table 33B Coefficient Correlations for Table 33

	curasgn	dept	detective
curasgn	1.000	.005	.119
dept	.005	1.000	.078
det	.119	.078	1.000

APPENDIX D**Table 34A – Pearson Correlations for Table 34**

	satcom	dept	detective	cpo	volpro	female	minority	educate	tenure
satcom	1.000	-.132	-.052	-.058	-.046	-.095	.005	.015	-.166
dept	-.132	1.000	-.072	.012	-.109	.049	.100	-.244	-.118
detective	-.052	-.072	1.000	-.215	.414	.052	-.046	-.020	.280
cpo	-.058	.012	-.215	1.000	.218	-.018	.081	-.079	.047
volpro	-.046	-.109	.414	.218	1.000	-.007	-.101	.005	.330
female	-.095	.049	.052	-.018	-.007	1.000	-.048	.072	-.150
minority	.005	.100	-.046	.081	-.101	-.048	1.000	-.077	-.122
educate	.015	-.244	-.020	-.079	.005	.072	-.077	1.000	-.114
tenure	-.166	-.118	.280	.047	.330	-.150	-.122	-.114	1.000
curasgn	-.014	.004	-.120	-.068	-.151	-.067	-.010	-.113	.453

	curasgn
satcom	-.014
dept	.004
detective	-.120
cpo	-.068
volpro	-.151
female	-.067
minority	-.010
educate	-.113
tenure	.453
curasgn	1.000

Table 34B – Coefficient Correlations for Table 34

	curasgn	dept	cpo	female	minority	detective	educate	volpro	tenure
curasgn	1.000	-.021	.109	-.043	-.041	.214	.059	.232	-.555
dept	-.021	1.000	-.001	-.056	-.064	.017	.253	.042	.095
cpo	.109	-.001	1.000	-.026	-.112	.361	.088	-.303	-.090
female	-.043	-.056	-.026	1.000	.068	-.100	-.065	-.010	.158
minority	-.041	-.064	-.112	.068	1.000	-.062	.055	.078	.114
detective	.214	.017	.361	-.100	-.062	1.000	.052	-.357	-.262
educate	.059	.253	.088	-.065	.005	.052	1.000	-.034	.080
volpro	.232	.042	-.303	-.010	.078	-.357	-.034	1.000	-.294
tenure	-.555	.095	-.090	.158	.114	-.262	.080	-.294	1.000

APPENDIX D**Table 35A – Pearson Correlations for Table 35**

	satcom	dept	female	tenure
satcom	1.000	-.131	-.126	-.137
dept	-.131	1.000	.053	-.115
female	-.126	.053	1.000	-.158
tenure	-.137	-.115	-.158	1.000

Table 35B – Coefficient Correlations for Table 35

	tenure	dept	female
tenure	1.000	.108	.153
dept	.108	1.000	-.035
female	.153	-.035	1.000

APPENDIX D**Table 36A – Pearson Correlations for Table 36**

	differ	dept	detective	cpo	volpro	female	minority	educate	tenure
differ	1.000	.243	-.108	-.027	-.040	.007	-.040	-.031	.089
dept	.243	1.000	-.072	.012	-.109	.049	.100	-.244	-.118
detective	-.108	-.072	1.000	-.215	.414	.052	-.046	-.020	.280
cpo	-.027	.012	-.215	1.000	.218	-.018	.081	-.079	.047
volpro	-.040	-.109	.414	.218	1.000	-.007	-.101	.005	.330
female	.007	.049	.052	-.018	-.007	1.000	-.048	.072	-.150
minority	-.040	.100	-.046	.081	-.101	-.048	1.000	-.077	-.122
educate	-.031	-.244	-.020	-.079	.005	.072	-.077	1.000	-.114
tenure	.089	-.118	.280	.047	.330	-.150	-.122	-.114	1.000
curasgn	.178	.004	-.120	-.068	-.151	-.067	-.010	-.113	.453
satcom	-.237	-.132	-.052	-.058	-.046	-.095	.005	.015	-.166

	curasgn	satcom
differ	.178	-.237
dept	.004	-.132
detective	-.120	-.052
cpo	-.068	-.058
volpro	-.151	-.046
female	-.067	-.095
minority	-.010	.005
educate	-.113	.015
tenure	.453	-.166
curasgn	1.000	-.014
satcom	-.014	1.000

Table 36B – Coefficient Correlations for Table 36

	dept	satcom	curasgn
dept	1.000	.132	-.003
satcom	.132	1.000	.013
curasgn	-.003	.013	1.000

APPENDIX D**Table 44A – Pearson Correlations for Table 44**

	satcom	detect	cpo	volpro	female	minority	educate	tenure	curasgn
satcom	1.000	-.049	-.128	-.131	-.113	.099	-.076	-.203	-.071
detective	-.049	1.000	-.201	.412	.096	-.006	.012	.215	-.198
cpo	-.128	-.201	1.000	.149	-.070	.018	-.059	.098	.017
volpro	-.131	.412	.149	1.000	.032	-.155	.037	.216	-.278
female	-.113	.096	-.070	.032	1.000	-.061	.117	-.134	-.074
minority	.099	-.006	.018	-.155	-.061	1.000	-.061	-.124	.000
educate	-.076	.012	-.059	.037	.117	-.061	1.000	-.231	-.170
tenure	-.203	.215	.098	.216	-.134	-.124	-.231	1.000	.460
curasgn	-.071	-.198	.017	-.278	-.074	.000	-.170	.460	1.000

Table 44B – Coefficient Correlations for Table 44

	curasgn	minority	cpo	female	educate	detective	volpro	tenure
curasgn	1.000	-.030	.041	-.044	.035	.217	.323	-.560
minority	-.030	1.000	-.073	.074	.075	-.110	.140	.131
cpo	.041	-.073	1.000	.023	.036	.305	-.227	-.111
female	-.044	.074	.023	1.000	-.075	-.111	-.019	.141
educate	.035	.075	.036	-.075	1.000	-.010	-.051	.175
detective	.217	-.110	.305	-.111	-.010	1.000	-.328	-.276
volpro	.323	.140	-.227	-.019	-.051	-.328	1.000	-.261
tenure	-.560	.131	-.111	.141	.175	-.276	-.261	1.000

Table 45A -- Pearson Correlations for Table 45

	satcom	tenure	female
satcom	1.000	-.146	-.164
tenure	-.146	1.000	-.147
female	-.164	-.147	1.000

APPENDIX D**Table 45B – Coefficient Correlations for Table 45**

	female	tenure
female	1.000	.147
tenure	.147	1.000

Table 46A -- Pearson Correlations for Table 46

	differ	detective	cpo	volpro	female	minority	educate	tenure	curasgn
differ	1.000	-.184	-.081	-.061	.010	-.074	.010	.138	.264
detective	-.184	1.000	-.230	.407	.010	-.078	-.097	.334	-.045
cpo	-.081	-.230	1.000	.300	.047	.162	-.103	-.008	-.161
volpro	-.061	.407	.300	1.000	-.042	-.014	-.093	.431	-.024
female	.010	.010	.047	-.042	1.000	-.042	.046	-.161	-.060
minority	-.074	-.078	.162	-.014	-.042	1.000	-.046	-.096	-.023
educate	.010	-.097	-.103	-.093	.046	-.046	1.000	-.050	-.053
tenure	.138	.334	-.008	.431	-.161	-.096	-.050	1.000	.454
curasgn	.264	-.045	-.161	-.024	-.060	-.023	-.053	.454	1.000

Table 46B -- Coefficient Correlations for Table 46

	curasgn	minority	volpro	female	educate	cpo	detective	tenure
curasgn	1.000	-.050	.122	-.056	.092	.191	.230	-.531
minority	-.050	1.000	.019	.067	.028	-.156	-.015	.097
volpro	.122	.019	1.000	.016	.009	-.407	-.382	-.346
female	-.056	.067	.016	1.000	-.056	-.091	-.099	.170
educate	.092	.028	.009	-.056	1.000	.128	.126	-.046
cpo	.191	-.156	-.407	-.091	.128	1.000	.419	-.048
detective	.230	-.015	-.382	-.099	.126	.419	1.000	-.247
tenure	-.531	.097	-.346	.170	-.046	-.048	-.247	1.000

Table 47A -- Pearson Correlations for Table 47

	differ	detective	curasgn
differ	1.000	-.184	.264
detective	-.184	1.000	-.045
curasgn	.264	-.045	1.000

APPENDIX D**Table 47B -- Coefficient Correlations for Table 47**

	curasgn	detective
curasgn	1.000	.045
detective	.045	1.000

Table 48A -- Pearson Correlations for Table 48

	differ	detective	curasgn	satcom
differ	1.000	-.184	.264	-.143
detective	-.184	1.000	-.045	-.076
curasgn	.264	-.045	1.000	.048
satcom	-.143	-.076	.048	1.000

Table 48B -- Coefficient Correlations for Table 48

	satcom	curasgn	detective
satcom	1.000	-.045	.074
curasgn	-.045	1.000	.042
detective	.074	.042	1.000

Table 49A -- Pearson Correlations for Table 49

	differ	detective	curasgn	satcom3
differ	1.000	-.184	.264	-.159
detective	-.184	1.000	-.045	-.065
curasgn	.264	-.045	1.000	.064
satcom3	-.159	-.065	.064	1.000

APPENDIX D**Table 49B -- Coefficient Correlations for Table 49**

	satcom3	curasgn	detective
satcom3	1.000	-.061	.062
curasgn	-.061	1.000	.041
detective	.062	.041	1.000

Table 50A -- Pearson Correlations for Table 50

	satcom	detective	cpo	volpro	female	minority	educate	tenure	curasgn
satcom	1.000	-.076	.027	.014	-.061	-.085	.055	-.165	.048
detective	-.076	1.000	-.230	.407	.010	-.078	-.097	.334	-.045
cpo	.027	-.230	1.000	.300	.047	.162	-.103	-.008	-.161
volpro	.014	.407	.300	1.000	-.042	-.014	-.093	.431	-.024
female	-.061	.010	.047	-.042	1.000	-.042	.046	-.161	-.060
minority	-.085	-.078	.162	-.014	-.042	1.000	-.046	-.096	-.023
educate	.055	-.097	-.103	-.093	.046	-.046	1.000	-.050	-.053
tenure	-.165	.334	-.008	.431	-.161	-.096	-.050	1.000	.454
curasgn	.048	-.045	-.161	-.024	-.060	-.023	-.053	.454	1.000

Table 50B -- Coefficient Correlations for Table 50

	curasgn	minority	volpro	female	educate	cpo	detective	tenure
curasgn	1.000	-.050	.122	-.056	.092	.191	.230	-.531
minority	-.050	1.000	.019	.067	.028	-.156	-.015	.097
volpro	.122	.019	1.000	.016	.009	-.407	-.382	-.346
female	-.056	.067	.016	1.000	-.056	-.091	-.099	.170
educate	.092	.028	.009	-.056	1.000	.128	.126	-.046
cpo	.191	-.156	-.407	-.091	.128	1.000	.419	-.048
detective	.230	-.015	-.382	-.099	.126	.419	1.000	-.247
tenure	-.531	.097	-.346	.170	-.046	-.048	-.247	1.000

APPENDIX D**Table 51A -- Pearson Correlations for Table 51**

	satcom	curasgn	tenure
satcom	1.000	.048	-.165
curasgn	.048	1.000	.454
tenure	-.165	.454	1.000

Table 51B -- Coefficient Correlations for Table 51

	curasgn	tenure
curasgn	1.000	-.454
tenure	-.454	1.000

Table 52A -- Pearson Correlations for Table 52

	satcom	tenure
satcom	1.000	-.165
tenure	-.165	1.000

Table 70A -- Pearson Correlations for Table 70

	differ	curasgn	satcom
differ	1.000	.204	-.314
curasgn	.204	1.000	-.084
satcom	-.314	-.084	1.000

Table 70B -- Coefficient Correlations for Table 70

	curasgn	satcom
curasgn	1.000	-.084
satcom	-.084	1.000

APPENDIX D**Table 71A -- Pearson Correlations for Table 71**

	differ	curasgn	satcom	tenure
differ	1.000	.105	-.194	-.101
curasgn	.105	1.000	.164	.625
satcom	-.194	.164	1.000	-.007
tenure	-.101	.625	-.007	1.000

Table 71B -- Coefficient Correlations for Table 71

	curasgn	satcom	tenure
curasgn	1.000	.164	.625
satcom	.164	1.000	-.007
tenure	.626	-.007	1.000

Table 72A -- Pearson Coefficients for Table 72

	differ	minority
differ	1.000	-.389
minority	-.389	1.000

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