



3 1293 10474 4416



RETURNING MATERIALS:

Place in book drop to
remove this checkout from
your record. FINES will
be charged if book is
returned after the date
stamped below.

2022
P 747
~~APR 2 1985~~
APR 25 1988
105

© Copyright by
Joel Craig Panetta
1980

A STUDY OF THE EFFECT OF EDUCATION AND
EXPERIENCE ON SUBORDINATE PERCEPTION
OF LEADERSHIP IN THE POLICE AGENCY

By

Joel Craig Panetta

A DISSERTATION

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

DOCTOR OF PHILOSOPHY

Department of Higher Education

1980

ABSTRACT

A STUDY OF THE EFFECT OF EDUCATION AND EXPERIENCE ON SUBORDINATE PERCEPTIONS OF LEADERSHIP IN THE POLICE AGENCY

By

Joel Craig Panetta

Social change has always had a pronounced impact on the values, beliefs, attitudes, and expectations of the public. It is often an expression of frustration with the current established systems. When change involves an open confrontation between interest groups, the social-legal systems are tested. This study is concerned with the occupational ambivalence and related stress that the police patrolman must deal with as the most visible representative of the established judicial system, whose responsibility it is to maintain law and order.

The general purpose of this study was to examine 189 patrolmen's role perceptions of their sergeant as an effective leader. This information was sought to increase our knowledge and understanding of the sergeant position. It was hoped that this information could be used to decrease the amount of occupational ambiguity for the individual officer and also to decrease the amount of goal displacement of the agency. The interaction facilitation of the sergeant

position which clarifies and gives direction to subordinates and superiors is an important area that is surveyed in determining leadership and influence. This study also attempts to assess the effect of experience, education, and military service on the role perceptions of patrolmen who were surveyed.

The basic assumption of the study was that a supervisor who is a highly effective leader will be helpful to subordinate officers which will enhance the goal attainment of the agency.

The data of the study were collected by means of a questionnaire that was administered to all of the patrolmen in a medium sized municipal police department. The information was processed in such a way that descriptive analyses would probe further into the findings, beyond the outcome of hypotheses.

The main findings of the study were:

- (1) A significant relationship existed between leadership ability and the interaction facilitation skills of the sergeant.
- (2) A positive but nonsignificant relationship existed between leadership ability and the support, work facilitation, and the goal emphasis skills of the sergeant.
- (3) Patrolmen with military service experience rate their sergeants' leadership ability lower than do patrolmen with no military service experience; however, the difference is not significant.
- (4) Patrolmen with some college (1-90 credits) rate their sergeants' leadership ability higher than do patrolmen with much college (graduate credits).

- (5) Patrolmen with little experience (1-4 years) rate their sergeants' leadership ability higher than do patrolmen with some experience (5-9 years).
- (6) The leadership rating by patrolmen decreases to a significant degree as their years of police experience increase when controlling for years of college education and military service experience.
- (7) There is a strong interaction affect between years of college and years of experience that tend to equalize each other's impact depending on the composition of the groups that are being contrasted.

The findings of the study suggest that interaction facilitation skill is the most important variable. Also, that it is highly related to the other performance variables and to the background variables.

Similarly, experience is the most important of the background variables and it also is highly related to the other background variables. Experience appears to have a significant effect on the perceptions of patrolmen. While education seems to effect the perceptions of patrolmen, it was not at a significant level. The interaction of these two variables indicates that in some of the groups they factor each other out by having an identical impact on the perceptions of patrolmen. This implies that higher education is important for new patrolmen, who are joining the agency, as a supplement for experience.

In memory of Dr. William Sweetland who by example and precept affirmed the important things in education. His loyalty to teaching and learning and his conviction that education is the best hope for constructive advancement gave significant meaning and optimism to me. As my chairperson, his conscientious mannerism and encouraging support was reassuring through some of my most anxious times. I remember and I miss him, I am thankful for having known him.

ACKNOWLEDGMENTS

First, I would like to thank Dr. Howard Hickey, Dr. Robert Trojanowicz, Dr. Samuel Moore, and Dr. Richard Featherstone for their willingness to serve on my doctoral committee. Their critical comments and recommendations were especially helpful in improving the clarity, understanding, and meaning of this dissertation.

Special appreciation is extended to Dr. Howard Hickey and Dr. Robert Trojanowicz. The time, work, and guidance of Dr. Hickey was enormously helpful in spurring me on through numerous rewrites. As my chairperson, his expectations were explicit, his standards were high and his advocacy was unquestionable. To Dr. Robert Trojanowicz I am glad to acknowledge my indebtedness. As my mentor he has challenged, inspired, and advised me during the past fifteen years, through three degree programs. His friendship has been a positive force that is unique and highly valued by me.

Finally, I wish to express my appreciation for the help generously given by Dr. Paul Weikert and Dr. Nora Evers. Dr. Weikert shared with me his professional knowledge and insights, and made many constructive suggestions. To Dr. Evers I am indebted for her editorial work in preparing the manuscript, her willingness to devote valuable time and the

supportive understanding that she has shown. Her involvement was above and beyond anything I had expected and for that I am grateful.

TABLE OF CONTENTS

	Page
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF APPENDICES	ix
Chapter	
I. THE PROBLEM	1
Introduction	1
The Need for Agency Leadership	5
The Needs of the Individual Officer	8
Purpose of the Study	10
Conceptual Framework	11
Definition of Terms	11
Contributions and Implications	14
Overview of the Study	15
II. SELECTED LITERATURE REVIEW	16
Introduction	16
Selected Review of Literature and Research	17
Education and role diversity	17
Performance and background characteristics	32
Leadership traits and characteristics	36
Stress and the policeman	45
Implications of the Literature for the Study	53
Summary	57
III. METHODOLOGY	61
Background of the Study	61
Hypotheses Development	63
Hypotheses	66
Instrumentation	68
Item Construction	69
Validity and Reliability of the Indices	70
Validity	70
Reliability	72
Summary of validity and reliability	73
Subjects and Data Collection	75
Limitations	76
Variables	77

Chapter	Page
Design of the Analysis	78
Summary	81
IV. ANALYSIS OF THE DATA	83
Introduction	83
Hypotheses Concerning the Factors	84
Summary of findings for hypotheses concerning factor data	89
Descriptive Presentation of the Categorical Data Set	90
Descriptive Analysis	96
Years of college variable	96
Military service variable	98
Years of experience variable	99
Hypotheses Concerning the Category Data Set	100
Hypotheses concerning years of college	101
Hypotheses concerning military service experience	103
Hypotheses concerning years of police experience	104
Hypotheses Testing EPL by a Categorical Variable while Controlling for Others	107
Summary of Category Data	110
V. SUMMARY AND CONCLUSIONS	112
Introduction	112
Summary	112
Discussion	115
Implications and Conclusions	119
APPENDICES	125
BIBLIOGRAPHY	129

LIST OF TABLES

Table	Page
2.1 Citizen complaints radioed to patrol vehicles - Syracuse Police Department, June 3-9, 1966 (based on a one-fifth sample of week's calls) . . .	24
3.1 Factor Analysis	71
3.2 Summary of index reliability	74
4.1 EPL score by education group	91
4.2 EPL score by military service group	93
4.3 EPL score by experience group	94
4.4 Summary of category variables	95

LIST OF FIGURES

Figure	Page
1.1 Conceptual Framework	12

LIST OF APPENDICES

Appendix	Page
A. Questionnaire	125

CHAPTER I

THE PROBLEM

Introduction

During the past few decades much social change has come about through minority group upheaval, beginning with the civil rights movement and continuing through anti-war demonstrations, campus riots, and the burning of large metropolitan areas. When laws were defied, police had the direct responsibility to maintain law and order in a struggle that became increasingly visible. Because police are the enforcement agency in our criminal justice system, strong anti-police sentiments often develop and are noted in public opinion polls. Stories of brutality and corruption have been reported by local and national news agencies. From this and similar experiences it became apparent that major changes should be made in the image of the police agency to assure community support and cooperation.

Resistance to social change is often predictable and can be anticipated in many situations. The unique visibility of the police as the guardians of the public peace and as a barrier to movement for change has caused

a re-examination of law enforcement philosophy and practice (Police Training and Performance Study, 1970:1). Studies indicate that the great majority of situations in which policemen intervene are not criminal situations (The Challenge of Crime in a Free Society, 1967:91). Most, however, could involve the violation of some ordinance or statute, or could lead to a serious crime. Policemen spend much of their time in preventive intervention, attempting to restore control and balance to situations so that extremes do not develop.

The occupational stress of police work in a dynamic society is hard to overstate.

Policemen deal with people when they are both most threatening and most vulnerable; when they are angry; when they are frightened; when they are desperate; when they are drunk; when they are violent; or when they are ashamed. Every police action can affect in some way someone's dignity or self respect, or sense of privacy, or constitutional rights (The Challenge, 1967:91).

A general shift in social-legal attitudes that emphasize individual rights over property and/or group rights has forced an examination of the primary purpose of the police agency and the activities of its officers. On one hand, if the primary function is law enforcement, the physical activities (i.e., chasing felons, subduing prisoners, making arrests, crowd control) require the attributes of physical strength, certain motor skills, and stamina. On the other hand, if police work is seen as largely a service function or "peace keeping," then verbal

skills, interpersonal skills, tact, discretion, human relations expertise, and abstract intelligence may be more appropriate (Vollmer, 1959). In a study on the role of the patrolman, Wilson (1968:16) found that an officer's role is defined more by responsibility for maintaining order than by responsibility for enforcing the law.

Because police work does involve inconsistent activities, it is inevitable that the public is of two minds about the police.

Most men both welcome official protection and resent official interference. How the police perform their duties affects to some extent which state of mind predominates, i.e., whether the police are thought of as protectors or oppressors, as friends or enemies. Traditionally, police training has focused on procedures, such as searching a person for weapons, transporting a suspect, taking finger-prints, writing arrest reports and testifying in court. They have received very little help or guidance in handling intricate and intimate human situations (The Challenge, 1967:92).

The inconsistencies in public perceptions about police operations have not been adequately addressed by most police agencies.

Law enforcement operations reflect economic cycles, population movements, changes in ethnic compositions, public attitudes toward law and morality and specific responses to these attitudes made by political leadership (Police Training and Performance Study, 1970:1).

Public awareness of the purpose of these operations should perhaps be considered a community relations responsibility of each police agency. In this way, officers could present the reasons for various operations and, hopefully,

create an atmosphere of public acceptance. The absence of this type of initiative by police agencies on any large scale has contributed to many internal and external problems.

For the individual officer the trauma of occupational stress is difficult. Being publicly ostracized for upholding the law and protecting the public can cause unnecessary confusion. A survey study of New York patrolmen indicated that most patrolmen felt they would receive little or no help from the public if their lives were in danger (Police Training and Performance Study, 1970:21). Police agencies must recognize the role stress on officers and accept their responsibility to tie the agencies' purpose more closely to the officers' function.

Two national commissions have reported on the extraordinary and difficult problems faced by the police. The Kerner Commission Report (1968), in discussing the role of the police, indicates that:

His role is already one of the most difficult in our society. He must deal directly with a range of problems and people that test his patience, ingenuity, character, and courage in ways that few of us are ever tested (Kerner Commission Report, 1968:157).

The Task Force Report on the Police in the President's Commission on Law Enforcement and Administration of Justice (1967:144) stated:

It is obviously difficult and often impossible for police officers to respond in an appropriate manner to numerous incidents called to their attention. They are under constant pressure to handle a volume of cases that are beyond their capacity They lack adequate training with

respect to some of the more complex social problems. And there has been little efforts to provide individual officers with the guidelines which they require if they are expected to make more effective and judicious decisions in disposing of the incidents which come to their attention. In the absence of adequate resources, training and guidance, the tendency is for the individual police officers to attempt to meet, largely by improvisation, the varied demands made upon them.

Both commissions recognized the difficulty inherent in performing the duties of a police officer, given the varied circumstances of problems and people that are encountered. Both recommended guidelines that place emphasis on the need for educational programs to prepare officers to exercise discretion properly, to understand the community, the role of the police, and what the criminal justice system can and cannot do.

These commission reports have, through recommendations and endorsements, given impetus to the rise of a police education and training movement that has spread rapidly.

The Need for Agency Leadership

The identification of primary sources of stress in police work can begin by exploring the police agencies' functions in promoting the communities' welfare. This is an important starting point in defining the purpose of a police agency. The dependence of the police agency upon community cooperation and involvement is direct inducement to recognize the relevance of police-community relations. During periods of change and unrest this relationship has

been altered by social-legal-economic actions diminishing police authority and increasing recognition of individual rights and freedoms. Most patrolmen believe that the leniency of courts has reduced their job effectiveness and that it has caused a deterioration in their relationships with the community. In response to this, police agencies are attempting to identify, develop, and implement alternate ways of enforcing and maintaining law and order (Police Training and Performance Study, 1970:21).

These efforts will require new and aggressive testing and negotiation by police agencies while attempting to define and delimit community expectations for police operations. This has not occurred in the past, but is necessary in the future if police agencies are to be effective and accountable.

In attempting to understand the primary source of stress in police work, some distinct consequences can be identified that have directly resulted from our changing social norms and values. The community goals on which police operations were built in the past have been altered. The changing social values have resulted in a community more liberal in its interpretation of law and order now than in the past. While demands on constituents are being loosened in the community, the judicial system has not clarified any changes in their expectations for the police agency that are consistent with the more liberal values. Maybe it is not possible to clarify these expectations

explicitly without a precedent setting judgment and this necessitates a developmental or case law approach. However, if an inverse relationship exists, as it seems to, between liberalized social norms and an increase in crime or its potential, then use of discretion by police will be necessary and new methods of control must be acquired by police agencies and officers.

Police agencies are confronted with a serious organizational challenge which will require a reordering of priorities to include more emphasis on continuing education and training programs. Occupational stress has been recognized as a main problem and has been addressed by many police agencies. Various approaches have been studied and undertaken (Levinson, 1975:4; Selye, 1979:7-9; Stratton, 1978:58). Police officers of today must be flexible and adaptive since they are exposed to a great range of people and many potential crime producing activities. For this reason they should be supported by a chain of command that is empathetic to their situation while at the same time responsive to the changing demands of society.

There appears to be a need for explicit, but non-restricting, role definitions for police officers. This would require a method of establishing differential role parameters for various police activities. It is important to communicate the role definitions with an appropriate rationale that can be accepted and easily internalized by the police officers. Currently, the individual officer has

the task of integrating many mixed messages when determining what is appropriate police behavior. This responsibility with its accompanying pressures must be assumed by the police agency and local community leaders. Without positive leadership, goals, operational guidance, and public support the individual policeman can only feel victimized (Kerner Report, 1968:157).

The Needs of the Individual Officer

For the individual officer changing mores and values have also changed his life as a member of the larger community. The clear-cut issues of yesterday are now gray and muddled. Conservative values have been scrutinized, questioned, compared, and contrasted with the benefits and costs of relativistic hedonism which narrowly limits individual and social responsibility to the here and now. This expands individual freedom to the point of license while acknowledging responsibility based on the results of actions, rather than the acts themselves. Exposure to this orientation is confusing to police officers, since much of their duty time is spent in preventive law enforcement where authority is important in deterring extreme actions and intervention is based on the perception of anticipated action or danger rather than on the result of the action.

One social critic has described the predominant social climate as follows:

Of all the ills that our poor criticized, analyzed, sociologized society is heir to, the focal one,

it seems to me, from which so much of our uneasiness and confusion derives is the absence of standards. We are too unsure of ourselves to assert them, to stick by them, or if necessary, in the case of persons who occupy positions of authority, to impose them. We seem to be afflicted by a widespread and eroding reluctance to take any stand on any value, moral, behavioral or aesthetic (Tuchman, 1967:3).

The uneasiness and confusion referred to grows greater and of more critical consequence as it impedes persons responsible for peace-keeping and maintenance of law and order from carrying out their jobs.

While many of these contradicting influences must be dealt with by each individual, for the police officer the role stress of unclear occupational expectations frequently place personal values in conflict. This can create feelings of disorientation due to the loss of a sense of purpose and control. In police work clear and predictable routines are helpful in the mastery of assignments. Mastery and job satisfaction are important factors in the retention of competent officers who are mentally and emotionally committed to the goals of the agency.

Thus a two fold challenge is presented to police agencies--one is the role of the agency in supporting community values and the second one is the leadership, exemplified in the agency in the support and training of police officers. It is the role relationships in the police agency which is the concern of this study.

Purpose of the Study

This study is an exploratory survey of a municipal police department. The researcher's objectives here are two fold:

(1) to assess the leadership ability and role performance of police sergeants by examining the perceptions of subordinate officers, and

(2) to analyze differences between police officers' role perceptions of the police sergeant position, using years of police experience, education, and previous military experience as variables for comparison.

The focus of the study is on the sergeant position because it is seen by many as an influential position within the agency. This position can be used to decrease the amount of occupational ambiguity for the individual officer and also to decrease the amount of goal displacement of the agency. Because of the communication function of the sergeant position, which clarifies and gives direction to subordinates and superiors, this area will be surveyed in determining leadership and influence for this study. An analysis of the role perceptions of the officers who vary in years of police experience, education, and previous military service will possibly yield information that is useful in determining the relative importance of each of these variables.

The survey of the role perceptions of the police sergeant position by fellow officers will indicate how well police sergeants are meeting the role expectations of

subordinates. The anticipated outcome will be that the police sergeant's duties and functions are congruent with the behavior expected by the subordinates. The closer a police sergeant's involvements or activities fit this expectation, the more beneficial the position is assumed to be to the organization and its staff. The less congruent the role functions are to the expectations of others, the less helpful the position is assumed to be to the organization and staff.

Conceptual Framework

The conceptual framework for this study involves the linking of many related concepts, in an attempt to address the problem of role stress while exploring the probability of a theoretical solution. These concepts are identified and elaborated upon in the review of the literature and also, in Chapter III, the development of the hypotheses that are tested in this study (see Figure 1.1).

Definition of Terms

The following definitions are provided to clarify a number of terms that are used in a particular manner in this study:

Effective Leadership*: the process of influencing the activities of an individual or a group and fulfilling their vital needs by integrating them into the efforts toward goal achievement in a given situation (Mac Gregor, 1968:65).

*The definitions with an asterisk are paraphrased from the sources indicated.

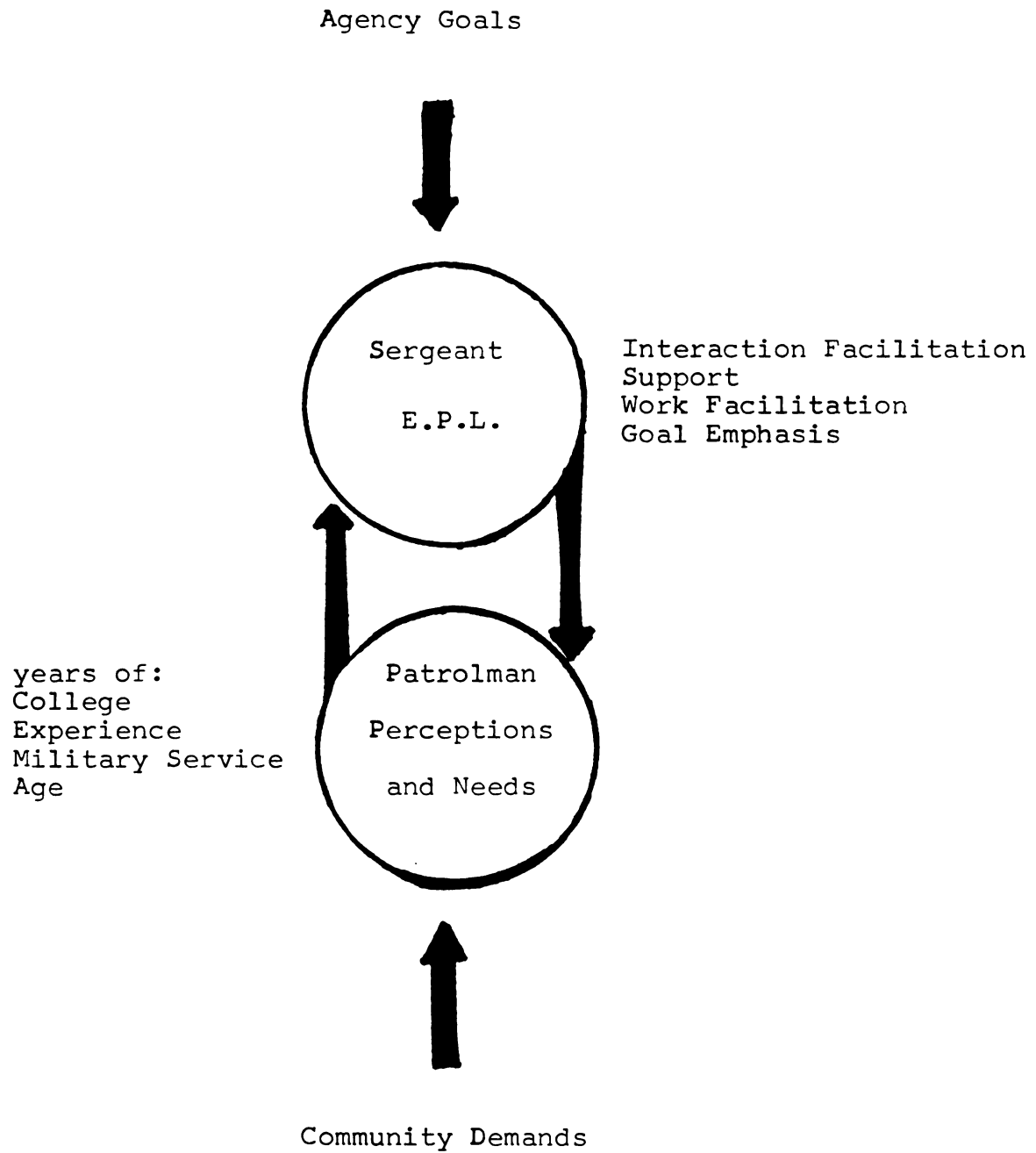


Figure 1.1.--Conceptual Framework.

Executive Professional Leadership: the efforts of an executive of a professionally staffed organization to conform to a definition of his role that stresses the obligation to improve the quality of staff performance (Gross & Herriott, 1965:22).

Expectations: beliefs and demands about what should or ought to be done and what should not or ought not be done by a role incumbent (Sterling, 1972:7).

Generalized Other: the social group with which a role incumbent identifies and gains a sense of self (Sterling, 1972:9).

Goal Emphasis: behavior that stimulates an enthusiasm for meeting the group's goal or achieving excellent performance (Bowers & Seashore, 1966:68).

Interaction Facilitation: behavior that encourages members of the group to develop close, mutually satisfying relationships (Bowers & Seashore, 1966:66).

Leadership: the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation (Hersey & Blanchard, 1977:84).

Norm of Distributive Justice*: a standard that contains the strong expectation that the "investments" one makes should be followed by returns of value in proportion to the ratio of returns over "investments" of others in similar circumstances (Webster, 1975:333).

Norm of Equity*: a standard that requires that the exchange between two persons, or between person and organization, not be unequal in value (Webster, 1975:336).

Norm of Reciprocity*: a standard based on the mutual expectation of a reasonably equivalent exchange or paying back of what one has received (Webster, 1975:964).

Position: a place in a social structure to which a collection of duties and rights are assigned and recognized by members of a society (Sterling, 1972:6).

Reference Group: a group by whom an actor sees his role performance observed and evaluated and to whose expectations and evaluations he attends (Sterling, 1972:11).

Role: the dynamic aspect of positions--what a person does as an occupant of a specified position (Sterling, 1972:6).

Role Conflict: exposure to and awareness of conflicting expectations in connection with either single or multiple role incumbencies (Sterling, 1972:11).

Role Model: someone, real or fictitious, whose behavior and attributes are accepted as a relevant model by someone else learning or redefining a role (Sterling, 1972:10).

Role Perception*: (other)-observations and judgements made by others about the adequacy of the performance of a role incumbent (Sterling, 1972:9).

Role Performance: behavior characteristics of an incumbent of one position toward the incumbent of another position (Sterling, 1972:8).

Socialization: a formal or informal learning process by which an individual becomes aware of and committed to behavioral norms which are seen as appropriate and right for specific role performances. Conversely, socialization includes the learning of expected behavioral responses to the performances of specific roles by other people (Sterling, 1972:7).

Stress*: a physical, chemical, and/or emotional factor that causes bodily or mental tension and may be a factor in disease causation (Webster, 1975:1151).

Support: behavior that enhances someone else's feeling of personal worth and importance (Bowers & Seashore, 1966:65).

Work Facilitation: behavior that helps achieve goal attainment by such activities as scheduling, coordinating, planning, and by providing resources such as tools, materials, and technical knowledge (Bowers & Seashore, 1966:65).

Contributions and Implications

Several contributions are seen as being made by this study: (1) a contribution to the literature on the police agency, (2) research information concerning the perceptions of policemen in regard to their superiors, and (3) an understanding of the influence of variables like years of police experience, education, and previous military experience of the policeman.

These implications involve the further exploration of the police officers' function in a quest for understanding of their roles. This also will involve the impetus for others to carry on and build cumulatively toward a greater understanding of the police agency as the difficulties of this occupation are comprehended.

Overview of the Study

This chapter includes an introduction to the general problem, with delineation of the specific needs for agency leadership and the needs of the individual officer. Major objectives and purposes of the study are explored, as are the contributions and implications that are seen.

Chapter II is divided into two main areas: first, a review of the literature, relevant to the purpose of the study, and second, the implications of the literature for this study.

Chapter III consists of the methodology used in the study, including the background, the development of the hypotheses, the instrumentation, limitations, and the design of the analysis.

Chapter IV contains the analysis of the data.

Chapter V presents a summary, conclusions, a discussion of the results, and some of the implications that can be drawn.

CHAPTER II

SELECTED LITERATURE REVIEW

Introduction

The number of reported studies dealing with leadership and supervision in law enforcement agencies is limited. Studies focussing upon leadership abilities are usually in areas other than police agencies but primary principles derived from these studies can be logically applied to the police work situation. However, there is some research available that is directed at the issues of whether or not higher education is beneficial for policemen. These studies focus upon the educational component along with other background characteristics of officers.

The literature review is divided into the following areas: (1) education and role diversity--this section mainly consists of opinions and judgements that have been expressed by individuals with experience and knowledge in criminal justice or related fields; (2) performance and background characteristics--empirical studies dealing with police background variables, particularly those involving or related to age, education, and experience; (3) leadership traits and characteristics--empirical studies exploring leadership and its characteristics; and (4) stress and the

policeman--studies that examine the policeman's role using the concept of stress.

Selected Review of Literature
and Research

Education and role diversity

In this section the researcher presents the positions that are held by individuals with experience and/or knowledge in criminal justice, higher education, and related fields when addressing the necessity or desirability of formal education for law enforcement officers.

Jagiello (1971:114) posed the question "College education for the patrolman--necessity or irrelevance" which expresses the central concern of this inquiry. It is important to recognize the value that is placed on education in our society; a bias is apparent in the literature that deals with the subject of education. It contains many authoritative opinions and judgements that are not necessarily based on scientific and objective data. Consequently it is difficult to find literature that is critical of education or its impact in a scientific report. Data showing education as having a detrimental affect are sparse. Most studies were written by educators and practitioners who were college educated and therefore it can be expected that this group will look to education as a way of improving police service.

Another possible bias is the tendency to over-emphasize the qualifications required for a profession

within which one is a member. This status enhancing has positive aspects that include raising standards but if it is inappropriate the negative consequences can be devastating. However, biases are inherent in any subjective study and if recognized appropriate allowances can be made. In spite of the limitations imposed by bias, the value of information and intuitive judgments is acknowledged and can be utilized through further exploration. A descriptive or historical point of view is useful in indicating the trends of changing attitudes toward education as a solution for police and community problems. This approach offers the reader a perspective on the police role in a changing society.

A first attempt was made by Fuld (1909:152) to present the principles of police administration in a systematic way; his textbook had significant influence on the development of law enforcement. In many instances Fuld reflected the social-cultural context of law enforcement in the early 1900's. The simplistic and uncomplicated role of the police is indicated as he wrote:

It is certainly true that the police officer must possess physical power rather than intellectual powers, that he must act rather than think, but a moment's reflection will convince anyone that he must think as well as act (Fuld, 1909:152).

In other instances, Fuld indicated an awareness of the need for improvement of the quality of police personnel because of the great amount of authority given to

the individual policeman in determining the application of criminal sanctions.

In discussing police officer discretion and autonomy, Fuld stated:

It is the element of individual discretion which distinguishes the police officer from the soldier The policeman ... does not always nor even generally act under the immediate supervision of his superior officer and accordingly, he must himself determine by the exercise of a sound discretion whether he shall act or not, and if he decides to act, what he shall do and how he shall do it (Fuld, 1909:152).

Fuld often indicated a distinction between the practical and the ideal. He favored higher education for police officers and encouraged the recruitment of high school graduates and "college bred" men. His emphasis upon sociology and the special problems of police duty indicate that in this early period education was seen as the best solution to apparent social problems.

Vollmer (1936:230-232) consistently expressed advocacy of better education and training for police officers. In his writing, Vollmer compares the requirements of the legal, engineering, and medical profession with those used by police. He speculates that if these "real" professions used the usual police methods of recruitment--that randomly selects members and that has no requirements for prior education--"disaster would be the inevitable consequence of such stupidity" (Vollmer, 1936:230).

Vollmer and Parker (1935) indicated that police

should be men of superior education, intelligence, character, and physique. Their education, moreover, should be made a continual process by the establishment of a state school for police and an institute for police research (Vollmer & Parker, 1936:209).

The Wickersham Report (1931:58, 79, 85) identified low educational level as a major problem in law enforcement. It pointed out that more than 60 percent of the police in the United States at that time had never entered high school. Vollmer (1959:440-442) felt that proper training and education for police was only possible by two means: "... state supported and controlled schools for police only; secondly, university cooperation." Vollmer stated also that necessity demanded the application of science to law enforcement problems. He viewed the advantages of education as multiple and indicated that it would "... fortify the students when they later contact life in the raw state, and will also help them to resist the temptations that beset law enforcement officials" (Vollmer, 1959:444).

Fosdick (1920:225), an early expert on both European and American police systems, urged the establishment of a profession for police administrators, so that "... the talent of the universities might be attracted to police services."

Brandstatter (1966:14) pointed out that

as social institutions are faced with increasingly complex social problems ... assistance would be needed in research, training, and education, and that new

knowledge and skills necessary to improve police operations would emerge primarily from college and universities through meaningful research.

Brandstatter (1966:14) expressed concern that if police work did not raise its educational standards it would begin to attract "the most marginal people coming out of high schools, the lower 30 percent." This occurs because the better qualified individual would go on to college and would not likely be attracted to police service once he had a degree.

The abilities to diagnose and to make quick but accurate decisions and judgments were emphasized by Jameson (1966:211). He indicated that the "common sense" approach which emphasizes "how to do well" skills for police officers must be changed to a "why do it" philosophy, which emphasizes an understanding of the law enforcement role in relation to the context within which it is being applied.

Clark and Chapman (1966:84) stated that experience has shown that

candidates with a minimum of two years of college are easier to train on the complexities of change in the rules of evidence, search and seizure, arrest and court techniques. They are more susceptible to training on specialty items, such as internal and external intelligence, public relations, budgeting, and auxiliary services, they are more adept at adjusting to situations that require clear thinking and precise action.

Chapman (1966:26) found that one of the most important considerations for future leaders is proper

educational background. He indicated that a continuing education program is especially important for experienced policemen, because established attitudes, values, and behaviors are challenged through questioning. Chapman (1966:26) also wrote about the "cop cultural lag." He felt that educational background was essential to overcome this situation; he pointed out that ability to make good decisions is important in police work and that college level courses in evaluation, logic, and reasoning are helpful in this regard.

In an article by Germann (1967:604) it is pointed out that police agencies used relatively uneducated men to perform simple tasks under careful supervision in the past. Today, however, police agencies are using well-educated men who independently perform complex tasks and to a greater extent exercise their own judgment. Germann also explained the increased complexity of the tasks which police perform and the direct influence on the level of education; i.e., a high level of educational achievement is not required to teach an individual the vocational mechanics of law but a broader educational base is required to understand the "psychological, sociological, anthropological, legal, ethical, and human relation aspects of work."

In upgrading American Police, Saunders (1970:89-91) stated that there is an obvious lack of research to support or refute the theory that a significant relationship exists between educational level and actual performance as

a police officer. He indicated that there is reason to believe that a greater turnover rate among better educated and more intelligent men, due to frustration and dissatisfaction, does occur. Saunders (1970) finds that this argument is often used for not recruiting college trained men. He feels, however, that a reform of the system is needed to provide greater incentives and more opportunities for educationally qualified men. Saunders indicated that the constantly rising level of education of the overall population was an important factor in raising the educational standards for police.

In 1946, only 22% of all persons between 18 and 21 were enrolled in institutions of higher education; in 1967 the figure is 46.6%. The trend is continuing: 58.7% of all males who graduated from high school in the spring of 1966 enrolled in college that fall. The median years of school completed by employed males in the civilian labor force is 16.3% for professional and technical workers and 12.5% for clerical workers as compared with 12.4% for police ... unless a serious effort is made to raise educational standards it will not be possible to even maintain the status quo let alone raise educational standards (Saunders, 1970:89).

Along with questions around educational factors, conflicts arise due to the diversity of the role activities that police officers are involved in and the expectations that are commonly held for these encounters.

Wilson (1968:30) reported on the police role in a medium-size municipal jurisdiction. Table 2.1 illustrates the types of requests for service that were made in a sample of calls; only ten percent (10%) of the calls are for service

TABLE 2.1--Citizen complaints radioed to patrol vehicles
 Syracuse Police Department, June 3-9, 1966
 (based on a one-fifth sample of a week's calls).

Calls	Number in Sample	Full count (sample multiplied by 5)	Percent
Information gathering	69	345	22.1
Book and check			
Get a report			
Service	117	585	37.5
Accidents, illnesses, ambulance calls			
Animals			
Assist a person			
Drunk person			
Escort vehicle			
Fire, power line or tree down			
Lost or found person or property			
Property damage			
Order maintenance	94	470	30.1
Gang disturbance			
Family trouble			
Assault, fight			
Investigation			
Neighbor trouble			
Law enforcement	32	160	10.3
Burglary in progress			
Check a car			
Open door, window			
Prowler			
Make an arrest			
Totals	312	1,560	100.0

Source: James Q. Wilson, *Varieties of Police Behavior*
 (Cambridge, Mass.: Harvard University Press,
 1968), p. 18.

involving control of criminal activities. Thirty percent (30%) of the calls involve the maintenance of order which would require the use of discretion in the application of police authority. Some of these disputes could result in criminal actions that lead to arrest but most of the time this is not the case. The remainder of the calls (59.6%) involve noncriminal situations.

The "order maintenance function" of the police role is difficult because it requires critical thinking that is situationally applied. The individual officer, working on the street, must make many discretionary judgments which mean the difference between fair or biased enforcement of the law. Police officers must perform situationally using their own initiative and basing judgment on a multitude of circumstances (Wilson, 1968:30).

Urbanization has complicated the role functions of the police because more people are in need of police services in an expanded number of different situations. The Education and Training Task Force Report (1958:59) commented on the impact of urbanization on the police force:

Urban life as we know it is so generally precarious that none of us can count ourselves safe, and all of us may at some time or another have to invoke the policeman's help in a striking variety of problems. Thus, a different kind of person is required to meet the needs of the bona-fide members of society.

McNamara (1962:164) indicates that in many urban areas the lower socioeconomic classes depend upon the police to

"perform the functions of family counselor, obstetrician, agents of socialization for potential delinquents." McNamara (1965:251) also commented on the training methods of the police force, stating that police training methods resembled a military model rather than professional models. This approach to training fails to recognize the autonomous nature of police work. Despite the semi military nature of the police organization, minimal field supervision is available and varied and multiple tasks are performed. The personal role identity of the police officer with the community requires a thinking individual who can apply the rules and principles of law to real life situations.

Lejins (1970:13-16) presented the various categories of disturbances that require the police officer to use mature judgment; he also indicated how educational background can enhance a police officer's ability:

1. Among the frequent disturbances to which a policeman is called are family conflicts, which often reach the level of disturbances of the peace, fights, assault and manslaughter. It stands to reason that an officer who has been exposed to some educational experience in the area of family relationships, the types of family conflict and the way they run their course, would approach this type of disturbance with a much broader and sounder perspective than someone equipped with many conventional folklore stereotypes permeated by punitive, disciplinary or ridiculing impulses
2. An even more obvious example is a disturbance anchored in the area of ethnic relations and ethnic tensions. Exposure to the university-level study of ethnic relations, contributing an historical and broader perspective ... again suggests itself, and again one would expect that such study would tend

to diminish the effect of prejudice, racial and ethnic stereotypes, erroneous and often exaggerated, rumors, etc.

3. Still another example is the handling of disturbances for which mentally abnormal people are responsible. The use of conventional and straight-forward evaluations of behavior as being or not being a violation of law, and the use of conventional law enforcement steps to arrest the ongoing violation and secure the violator for action of the criminal justice system, would often cause unnecessary harm to the perpetrator, who is viewed by contemporary society as a sick person, and to the community itself, by injecting what basically amounts to an improper solution of the problem

4. Whatever has been said with regard to the above three categories of disturbances could be properly restated with regard to the handling of drunks and drug addicts

5. And finally, let us take the so-called area of civil rights and contemporary struggles for them, which often express themselves in disturbances and so-called riots. Here again the quick and sharp discernment between permissible actions in terms of freedom of speech, and freedom of demonstration, and actions that violate the individual rights of others and have all the characteristics of plain criminal acts, presupposes alert and sophisticated individuals. Persons without any higher education, acquired either in their college-age period or subsequently by means of adult education and in-service training, can hardly be cast in the role of the wise law enforcement officer who manages to lessen the tensions between ideologically antagonistic mobs, protects the rights of innocent bystanders and would-be victims.

Police Foundation (1972:31) indicates in a task force report that the tasks performed by the police require professional ethics and skills. Since other professions are normally prepared for their role by an academic program of study, police should not be an exception.

Conflict resolution or order maintenance in an

urban society involves the use of social counseling and law enforcement techniques. These skills are acquired by the individual officer through education and experience. If they are employed at the appropriate time and in an appropriate manner they can mean the difference between successful and unsuccessful resolution of conflict. The necessity of utilizing a variety of techniques in dealing with a conflict situation requires the individual police officer to assess the facts and use discretion in determining the method to be used. The individual officer as an autonomous decision maker with the authority to make arrests has become the most critical and perhaps the most powerful component of the criminal justice system.

Niederhoffer and Blumberg (1970:3-4) state that, "In practice the average policeman exercises greater judicial discretion over cases than does a judge on the court bench." However, in situations where serious crimes that produce victims have occurred, the discretion of the police is limited. Yet, less than ten percent of all arrests are made for any of the seven serious offenses that make up the FBI Crime Index:

The vast majority of arrests, and of citizen-police contacts that involve an offense but do not lead to an arrest, are for such matters as drunkenness, disorderly conduct, assault, driving while intoxicated, gambling, vandalism, and the like. People do differ as to whether such matters are important, or such conduct are "really wrong," or even what constitutes the proscribed conduct in question (Wilson, 1968:6).

In the vast majority of cases neither social mandate nor departmental policy have any application. Discretion, as it is exercised, is almost entirely the individual police officers' (Wilson, 1968:84). The police officer on the beat or in the patrol car makes more decisions and exercises broader discretion affecting the daily lives of people, every day and to a greater extent, than a judge will ordinarily exercise in a week (Burger, 1972:2). The patrolman is almost solely in charge of enforcing the laws that are the least precise, most ambiguous, or the most sensitive. The exercise of discretion in interpreting the substantive criminal law is necessary for the police officer on the beat because no legislature and no police administrator has succeeded in formulating a criminal code or policy manual which clearly defines all conduct as either criminal or legal (LaFave, 1969:114-116). Insufficient financial resources make "complete" enforcement of all laws at all times impossible. For this reason decisions must be made regarding levels of enforcement, i.e., what resources will be devoted to enforcement of particular types and classes of criminal conduct to the exclusion of other enforcement activities.

In summary, the exercise of discretion is necessary because of limited police resources, the ambiguity and breadth of criminal status, the informal expectations of legislatures, and the often conflicting demands of the public (National Advisory Committee on Criminal Justice Standards and Goals,

Report on the Police, 1973:22).

Making the police accountable in our society is difficult **because** direct supervision is not possible. Reiss (1970:331) indicates that the only viable solution to this circumstance appears to be professionalization. Professionalization generally occurs when it is realized that the minimal standards of law, as they apply to the role responsibilities and authority in question, are inadequate (Aherm, 1972:179). Whenever supervision is not possible, one depends upon the individual's internalized social values to protect society. The internalization of a professional code of conduct is directly related to education:

With the possible exception of recruitment, nothing is more vital to the creation of the democratic policeman than education. As noted earlier, democratic attitudes and patterns of behavior increase markedly with education. Thus, the educated policeman is more likely to be the democratic policeman (Berkley, 1969:74).

Hudzik (1978:70) indicates that researchers will not be able to design studies that will validly isolate the full range of effects of college education on police officers in the immediate future. He claims that we are currently without a firm picture of which effects are attributable to formal education and which are caused by other factors. Hudzik indicates that a college education covers a variety of experiences with different impacts so that an analysis of subconcepts is necessary to determine which types of college experience produce differences. He points out

that proponents of college education for police insist that college environment produces less authoritarian, more innovative and resourceful individuals capable of dealing with problems more flexibly and with less need for supervision.

College educated officers have been found to take less sick time, receive higher evaluations from supervisors, and to have better response times in calls for service (Baehr et al., 1968:7-11; Saunders, 1970:81-92; Witte, 1969:37-58). Opponents of college education suggest that very little of a college education has actual value for on the job performance and that college training may well be irrelevant (Lewis, 1970:1; Livermore, 1971:718). Stronger opponents claim that college educated officers are more recalcitrant in the face of established police command structures, they are more likely to quit within the first few years (Wilson, 1974), and they are likely to encounter and even create disputes between themselves and non-college educated officers. A more cautious group of researchers takes a middle position in suggesting that the real effect or value of college education is difficult to measure because of intervening influences or variables, such as the nullifying effects of the police work role, or the psychological predispositions of students attending a college criminal justice program (Chevigny, 1969:276-283; Weiner, 1974:317-328).

Hudzik (1978:70) suggests that all these positions are talking past each other, even though they all point to

empirical evidence in support of their positions. He claims that most of the research that has been done has not systematically attempted to control for variables other than formal college education. The absence of effective controls in these areas makes cautious interpretation of the various findings necessary. Hudzik indicates that defining what we mean by "college education" in terms of length, curriculum, and setting is extremely important. This is necessary because the effects of different amounts of college education under different curricula and in various kinds of teaching settings will indicate the relative importance of these variables. This kind of specificity will allow us to determine whether or not college education does make a difference. Hudzik concludes that a large portion of existing research in this area may be criticized because it has failed to adequately control for extemporaneous variables and for component variables. He indicates that the mere existence of statistically significant differences among educationally defined groups does not constitute proof that education is the causative factor for any of the differences. Hudzik advises that limits should be placed on interpreting findings of differences among educationally defined groups.

Performance and background characteristics

In this section the researcher will consider studies that have attempted in a scientific or systematic manner to examine the relationships between exposure to certain variables

and actual police performance and attitudes.

A study by Levy (1967:50) used biographical data from personnel files and found a significant difference between police officers remaining on the job and those who had left police work. Officers remaining on the job had the greatest amount of tenure on previous jobs, were the oldest at time of appointment, and were most likely to have been exposed to police courses but had the least amount of education. Officers who left police work were most likely to have been fired from previous jobs, were younger at the time of appointment, had the highest level of education, had the most vehicle code violations, and the most marriages among married men.

Smith et al. (1968:132) analyzed the differences in authoritarianism between groups of men who attended college and those who did not. Highly significant differences were found to exist between some of the groups: "Police who are attracted to college are significantly less authoritarian than police who are not impelled to attend college."

From a study that involved a national sample of 4,672 policemen, Saunders (1970:89-92) concluded that there were significant differences between college and non-college officers in the perception of their role, and in approaches to the concepts of justice and law. For example, the lower the education level, the greater the tendency to view the law as fixed.

Reiss (1971:45-47) reported on a study that made observations on 5,360 mobilizations of the police. Most of the mobilizations (81%) originated with citizens telephoning the police for service. Twenty-eight percent failed to produce any transaction with citizens while 14 percent originated on the initiative of the police and five percent when a citizen mobilized the police in a field setting.

These observational studies of police activity indicate that the patrolman usually has sketchy and possibly misleading information to act upon. He enters a variety of social stages, encounters the actors, determines their roles, and figures out the "plot" and makes judgments as to what has occurred and what to do. Often the fate of the actors in such cases may reside with the police. In police work, the officer is usually confronted with a dual set of clients--those who call the police and those who are to be "policed." In most situations the police officer must establish authority because unlike other professionals the clients do not automatically accept him as an expert. The officer is dependent upon the clients and their audience for information and social support. He must assert himself and make judgments based upon reasonable expectations and reciprocal obligations that are attached to the clients and the situation.

Cohen and Chaiken (1972) conducted a study that related background characteristics with subsequent performance.

This study contained a sample of 1,915 New York City police officers, appointed to the force in 1957. Their performance was evaluated through 1968 by using "only quantifiable measures of background and performance, of a type commonly maintained in personnel files by police departments" (Cohen and Chaiken, 1972:4-6). The findings indicated that the following background characteristics were not related "in important ways" to performance measures used:

Civil service exam scores; I.Q.; arrest for a petty crime; military service; military commendations; father's occupation; number of residences; aspects of early family responsibility, including marital status, number of children, and debts; reported history of psychological disorder; place of residence; and number of summonses.

Although not significant, the strongest relationship to later performance was derived from the variables that reflected the subject's primary behavior and experience over a period of time. These included employment, military disciplinary actions, repeated appearances in civil court, education, and performance in the recruit academy and during the probationary period.

In the study of a midwestern sheriff's department (Hudzik, 1978:71-75) administered a survey questionnaire to 195 members of the department's five major divisions with 380 questionnaires returned. The data were analyzed to determine whether differences occur among the educationally defined groups. The findings of the study indicated that the more highly educated groups tended to show less job

satisfaction and tended to rate departmental effectiveness lower than do the less educated groups. It is also important to note that significant differences were found between the "associate of art holders" group and the "bachelors degree holders" group. These differences were in several instances greater than the differences occurring between those with no college education compared with those with some college education. Hudzik concluded that these generalizations are indicators of the possibility that college education and particularly different types of college education will effect the views and attitudes of individuals.

Leadership traits and characteristics

The researcher's purpose in this section of the review is to bring together the empirical findings and opinions of individuals with experience and knowledge in group dynamics, leadership, and supervisory methods. Most of these researchers have drawn conclusions based on their inquiries and have taken a position on the necessity or desirability of certain elements that increase the probability of effective leadership.

The literature on leadership indicates that many organizations are continually searching for persons who have the necessary ability to enable them to lead effectively. There seems to be a scarcity of people who are willing to assume significant leadership roles and who are capable of commitment to them. Barnard (1938) identified these

leadership concerns in the late 1930's while the early schools of thought in organizational theory reveal the same concern.

According to Terry (1960:493), "Leadership is the activity of influencing people to strive willingly for group objectives." Tannenbaum et al. (1959:24-25) defined leadership as "interpersonal influence exercised in a situation and directed, through the communication process, toward the attainment of a specialized goal or goals." Koontz and O'Donnell (1959:435) state that "leadership is influencing people to follow in the achievement of a common goal."

A review of these writers suggests that most of them agree that leadership is the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation. From this definition of leadership, it follows that the leadership process is a function of the leader, the follower, and other situational variables.

Katz and Kahn (1966:301) indicate that the term "leadership" has three major meanings: (1) an attribute of a position, (2) a characteristic of a person, and (3) a category of behavior. The three meanings are ways of recognizing that the influence potential of leaders may be related to different qualities or characteristics.

A study by Hoffman and Maier (1967:172-182)

demonstrated that an individual who is put into a leadership position has greater leverage when it comes to power and influence than the position of any other member of the group. Leaders are expected to try to influence behavior and their attempts to influence consist of role behaviors that are attached to the position of leader. Subordinates expect to be influenced by the leader and will follow this direction.

Leaders perform other roles than that of influencing the members of their group. They communicate with other existing groups on behalf of their own group; they serve as a channel of information and they help meet some of the dependency needs of group members who need a source of reassurance. A leader's ability or power to influence the behavior of others varies with prestige or status. The degree to which his or her actions are regarded as significant, relevant, and important by the group members shape the controlling actions.

Fiedler (1970:1-14) reviewed the data from three experiments and observations of eleven sets of task group supervisors in an attempt to find evidence that time spent in a leadership capacity had a relationship to effectiveness as indicated by the performance of the groups supervised. Although time on the job was correlated positively with effectiveness in some types of situations, it was correlated negatively in others. The overall median correlation between leader-experience and group effectiveness was $-.12$ which,

while not disproving the relationship, certainly indicates that experience is not as important to effectiveness as had been expected.

Mann (1959:241-270), in a survey of personality traits on leadership, noted that intelligence was the characteristic found to be most commonly associated with leadership. Kiessling and Kalish (1961:359-365) used an assessment procedure known as "leaderless group discussion" technique in which group members were observed and scored on behavior that aided or facilitated the functioning of the group. In this rating of natural leadership, the authors found a positive correlation (.35) between leader ratings and scores made on standard intelligence tests. In similar research by Lindgren (1973:389) a correlation of .41 for males and .38 for females was found between leadership potential scores and the overall college grade-point average of participants.

The Ohio State Leadership Studies were initiated in 1945 by the Bureau of Business Research to identify the dimensions of leadership behavior. One of these studies was conducted at the International Harvester Company and focused on supervisory effectiveness. The foreman position was selected as the leader-position since it was felt that the attitudes and behavior of supervisors at this level would have maximum impact on morale, worker satisfaction, and production. Two patterns of supervisory leadership were explored: (1) consideration and (2) structure initiation.

Consideration refers to behavior that is indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and the members of the staff. Initiating structure or task behavior is the leader's behavior in delineating the relationship between him or herself and members of the work group and in attempting to establish well defined patterns of organization, channels of communication, and methods of procedure. Stogdill and Coons (1957) indicated that although the two dimensions appear to be opposite they are in fact independent. The researchers found that the foremen worked in two kinds of situations. Foremen on production lines, where they were required to meet schedules, were more oriented toward structure initiation and they tended to work for supervisors who also favored structure initiation. In the other job situation foremen were not involved in direct production, but worked in stores, inspection, and maintenance. Here the scores were higher on consideration and lower on structure initiation. Most workers tended to prefer foremen who rated high in consideration and low on structure initiation. Further research by Halpin (1959:79) showed that effective leadership behavior is characterized by high performance in both initiating structure and consideration while ineffective leadership is low on both dimensions.

Likert (1961:7) studied management by high producing managers and found that managers who focused on the

human aspects of their subordinates' problems and on building an effective work group with high performance goals had the best records for high production. These were termed "employee-centered" supervisors which stands in contrast to "job-centered" supervision. The implications of Likert's study are that the ideal, productive leadership behavior is employee-centered or democratic management.

Many leadership models have been developed for exploratory studies. A Tri-Dimensional Leader Effectiveness Model was used in research conducted by Hersey and Blanchard (1977:103). The researchers developed four basic leader behavior categories that depict different leadership styles: (1) high task, low relationship; (2) high task, high relationship; (3) high relationship, low task; and (4) low relationship, low task. Each leadership style is the behavioral pattern a person exhibits when attempting to influence activities of others as perceived by those others. The leaders "self-perception" may be quite different from the subordinate's perception. An individual's leadership style is made up from a combination of task behavior and/or relationship behavior. Task Behavior is defined as the extent to which leaders are likely to organize and define the roles of the members of their group (followers); to explain what activities each is to do and when, where, and how tasks are to be accomplished; characterized by endeavoring to establish well-defined patterns of organization, channels of

communication, and ways of getting jobs accomplished. Relationship Behavior is the extent to which leaders are likely to maintain personal relationships between themselves and members of their group (followers) by opening up channels of communication, providing socioemotional support, "psychological strokes," and facilitating behaviors (Hersey and Blanchard, 1977:103).

The Tri-Dimensional Model indicates that an important skill for leaders is to know how to diagnose the environment. The environment consists of the leader, follower(s), superior(s), associates, organization(s), and job demands. This list is not all-inclusive; the environment may have other situational variables that are unique to it as well as an external environment that has an impact on it. The environment can be viewed as having two main components: (1) style, and (2) expectations. Leadership style is the consistent behavior patterns that the leader uses when working with and through other people as perceived by those other people. Expectations are the perceptions of appropriate behavior for one's own role or position or one's perceptions of the roles of others within the organization. In other words, the expectations that individuals hold define for them what they should do under various circumstances in their particular job, and how they think others--superiors, peers, and subordinates--should behave in relation to their position. Leadership style is an important element in a

leadership position; it is developed over time from experience, education, and training.

Fiedler (1967:9-15) developed the Leadership Contingency Model, in which he cites three variables that determine whether a situation is favorable to leaders: (1) leader-member relations--their personal relations with the members of their group; (2) position power--the power and authority that their position provides; and (3) task structure--the degree of structure (routine vs. challenging) in the task that the group has been assigned to perform. The relative amount of these variables that Fiedler recommends can be expressed in task or relationship terms; each situation tends to favor either a task-oriented or a relationship-oriented leader.

Gellerman (1963:265) views the leader as a facilitator who attempts to accomplish an integration of individual, group, and agency goals. The usual result of an interaction between management and subordinate goals is a compromise; actual performance is the outcome of this process.

The hope is to create an atmosphere in which one of two things occurs. The individuals in the agency either perceive their goals as being the same as the goals of the agency or, although different, see their own goals being satisfied as a direct result of working for the goals of the agency. The closer the individual's goals and objectives to the agency's goals, the greater the performance. Morale

and performance suffer when managers and workers see their goals conflicting with the organization. Effective leaders bridge the gap by creating loyalty to themselves among their followers. They do this by being an influential spokesperson for them. By communicating the agencies' goals and by associating the acceptance of these goals with accomplishment of their own need satisfaction.

Klotter (1971:69) implies that the leader is a role model for subordinates because they are the most visible members of the group and because their concern with the group goals causes them to make special efforts to see that members learn the behavioral norms that contribute to the group. Klotter indicates that learning is the process of acquiring new knowledge, skills, techniques, and appreciation which will enable the individual to do something that s/he could not do before. In applying this definition to police work, it becomes obvious that this learning is an ongoing, active process. When the sergeant observes a patrol officer making an arrest and points out to him several things that may endanger his life if repeated in another arrest situation, the new knowledge, technique, and appreciation of this instruction are active.

Carey (1975:283) explains that action initiated by the responsible head to bring subordinates into the picture on matters of mutual concern is not a sharing of prerogatives of authority; rather it is an extension of the opportunity

of participation in the development of points of view and the assembly of facts upon which decisions are made.

When comparing the performance of groups headed by participatory leaders and those headed by non-participatory leaders, Preston and Heintz (1949) found that participatory leaders were more effective in getting group consensus than were non-participatory leaders. Participatory leaders were also more able to bring about changes in the attitudes of the group members themselves, they were also more pleased with their work, more inclined to find assignments interesting, and more likely to regard themselves as effective workers.

The classical models of organization have influenced the police view of leadership as authoritarian in nature. Although the human relation approach to organization has had impact on organizational relationships, the "position" authority that is conferred by the formal organization to control the actions of its members predominates the type of relationships between superior and subordinates. The use of military ranks and the general perception that higher rank has the authority to control encourages a hierarchical orientation.

Stress and the policeman

The concept of stress was begun and developed by Selye, as a medical student in Vienna in 1929. Selye's research indicates that response to a change takes the form

of a three part pattern. The first reaction is alarm, then resistance, and finally exhaustion. Selye concluded that the key to dealing with human stress is to utilize the brain's ability to rationalize along with the cognitive process of looking down the road or preparing ones self to deal with the future (Selye, 1979:7-8).

Beecher (1978:16-18), in a study of reactions to serious and painful injuries, observed that soldiers during World War II were frequently jovial, smiling, and talking with their doctors while civilians with similar injuries and pain were often irritable and accusatory. Beecher interpreted this variance as a function of relativity. For example, the soldiers were glad to be alive and in the care of American doctors while the civilians comparison base was much different. They had been more comfortable and happy prior to their admittance to the hospital and now they were worse off than they had perceived themselves before the injury.

Beecher (1978:16-18) concluded that despite similar physical conditions, the general response pattern was widely deviant and this was due to the individual's expectations and mental processing of the circumstances.

Friedman and Roseman (1974:1-5) found that the concept of type A versus type B behavior and the effects of stress on each type of person are related to the individual's perception and expectations of circumstances. In brief, they

classified type A behavior as found in persons who were consistently hurrying, incumbering themselves with excessive deadlines, sitting on the edge of their chairs, and essentially fighting themselves. In contrast, type B behavior is more relaxed, appreciative of life's smaller treasures, and is found in people who operate on an internal time clock instead of an external, artificially imposed one. The evidence overwhelmingly concludes that type A people suffer from more psychological and other physical difficulties than type B people.

Glass (1976:53), in a study of responses by type A versus type B people, analyzed the individual's control over annoying and stressful environment. It was found that type A people become very frustrated when they are unable to control their environment; type A people were found to be more personally threatened than type B's by stress imposed by outside forces.

Anderson (1977:446), in a similar study, categorized subjects as externals and internals which closely resembled type A and B personalities. He defined internals as those individuals who assume personal responsibility for their performance, assume they can change their environment and who, by acting upon these assumptions, tend to have increased motivation toward task achievement. Conversely, externals perceive their circumstances as a function of fate, other people are viewed as the decision-makers, and

they are only reactors. Anderson's (1977) findings were (1) externals perceive greater stress than the internals in similar situations; (2) when experiencing stress, externals respond with greater defensiveness and less task achieving behavior; and (3) the task oriented coping behavior of the internals is associated with more successful solutions of problems created by the stressful event. Anderson indicated that the individual's past experiences and successful performance effect the perception of where the control in life is located.

Wolk and Bloom (1978:278-298) found that the individual's orientation is vital to task success. Researchers have found that when imposing environmental stress (defined as noisy disturbances, annoying demands, and unexpected interruptions) the internally oriented individual's belief in the ability to control the environment caused them to assert more effort than the externally oriented individual. In summary, certain people adapt constructively under stress by perceiving their performance level and focussing on personal control. The stronger the internal reward system is for achieving goal completion, the greater the probability of success. Those persons who were found to be less adaptive under stress seem to be perceiving the situation as threatening to their ego in contrast to challenging their abilities. Effective coping with stress in an organizational setting seems to be a requirement for the policeman. It requires

that the individual learn to retain as many options as possible while evaluating a situation. Methods for stress adaptation and conflict resolution are similar in that the best action is remaining versatile. The individual should not allow him or herself to become locked into any pattern, either prematurely or as a matter of course. In environmental diagnosis, there are four factors which should be considered: (1) type of personal interactions; (2) issues at stake; (3) type of stressors; and (4) environment or climate.

Levinson (1975:50-51) has developed four ways to reduce anxiety on the job: (1) utilize participative management because it will serve to lower hostility and reduce rebellion among subordinates; (2) make the goal a collective goal which will allow people to see how they will benefit by cooperating and will reduce destructive competition; (3) maintain contact with subordinates and in this way keep abreast of employees' concerns; and (4) provide channels for regular exchange on a day-to-day basis so that feedback is available.

In an article by Selye (1979:7-8) it is indicated that the typical stressors inherent in police work are the shift work, long working hours, constant fear and anticipation of death, actual confrontation with injury and violence as well as prejudice, suspicion, and hostility by the public at large. These factors invariably cause dissolution and disappointment with the job. Selye indicates that researchers

have for a long time been aware of physical and mental strain, the relationships between bodily and mental reactions, and the importance of defense-adaptive responses. Patrolmen learn what it feels like to be keyed up by nervous tension. While it can prepare them for peak accomplishment, the tingling sensations and jitteriness of being too keyed up can impair their work and even prevent rest. Selye asserts that for the policeman the most important stressors are emotional. This is because the stressor effects depend not so much upon what we do or what happens to us, but on the way we take it. He indicates that stress is usually a matter of perception and the body can be instructed to react at a proper level by educating the mind.

Caretti and Green (1979:15-16) indicate that the psychological problems of police officers are a management problem as well as a serious personal problem for the officer who is affected. The researchers feel that a more concerted effort is needed to identify, assist, and support the officer when professional psychological assistance is needed. Management must strive to improve psychological services to police officers through better communication, better education, and a more enlightened attitude toward the officer experiencing severe trauma. Caretti and Green indicate that performance is the key factor which the police administrator must focus on in recognizing the early warning signs of emotional upset.

It would be most useful if police agencies provide officers with some form of education and training to recognize the symptoms of stress and understand its ultimate effect. The agency must create a climate and a mood where officers will not be ashamed or afraid to seek professional help when psychological distress occurs.

An article by Axelberd and Valle (1979:13-14) points out a new training approach to police stress management. The training involves helping the officers learn to cope with their own stress and personal crisis in a healthy and productive manner. The authors indicate that this training is especially relevant if the present trend of utilizing police officers as professional mental health agents is to remain feasible. They argue that it is naive to expect officers, who are often under great stress themselves, to intervene effectively into someone else's crisis. The authors also indicate that the need for stress control programs in the police population is evident by "diseases of adaptation." Axelberd and Valle found that police statistics indicate that officers suffer an unusually high amount of divorce, alcoholism, coronary problems, ulcers, headaches, suicide, and emotional problems. The sources of stress that officers have to deal with are diverse and often include hostile police-community relations, police bureaucracy, shift work, and role ambiguity. The authors point out that these occupational hazards affect the

emotional and physical well-being of the officer and his ability to do the job effectively. They are also a source of financial burden to the police organization. The article shows an innovative approach to stress control that is being conducted at the city of Miami police department training center where three areas are focussed upon: (1) nutrition; (2) physical fitness; and (3) psychological well-being and methods of recognizing and controlling stress.

A study by Danto (1978:32-40) on police suicide indicates that the police system does not operate sufficiently on personal levels. Danto recommends that applicant officers should be screened using psychological tests such as the M.M.P.I. (Minn. Multiphasic Personality Inventory). Danto also recommends guidelines for police administrators that would indicate early warning signs for emotional upset. A final recommendation by Danto refers to the suggestion that each police department should hire a trained mental health specialist whose role it is to assist police officers in coping with the stress of work.

A study by Kroes and Gould (1979:9-10) consisted of clinical psychological interviews. As part of the evaluation of each police patient, an extensive report was made detailing the pressures (or lack of) in the individual's life. Three major stressors stand out: (1) lack of administrative backing and support including the relationship and rapport between patrolmen and their administrator; (2) line

of duty/crisis situation--policemen are indeed bothered by the tragedies they see; and (3) emotional reaction to injury.

Long (1978), in a lecture at Hillsdale College, indicated that certain types of stresses are necessary, inevitable, and life enhancing while other kinds of stresses are unnecessary, inappropriate, and life diminishing. He stated that each of us must find out what responses and behaviors are most effective in helping to handle or cope with stress. Long concluded that, basically, there are three sources of stress: (1) stress from authority that is exercised on others or from others; (2) stress from the system or organization; and (3) stress from yourself that is derived from your past, present, or anticipated future.

Implications of the Literature for the Study

When reviewing the literature and research on the police and the agency, the most relevant studies have been discussed in order to focus on areas of importance for this study. Two qualifications need to be made regarding the literature review: (1) very little of the data reported on leadership and supervision dealt specifically with the police and the agency; and (2) due to the paucity of the data content a corresponding theory could not be developed to predict or explain.

It was therefore necessary to divide the review of literature into the areas that fit closest to the variables used in this study: education, performance and background,

leadership traits, and stress.

Several studies have influenced the design and analysis of this study, and have guided the theoretical base and assumptions formed in it. Education, experience, and age have traditionally been used as measures for occupational "fit" and advancement. It is assumed that the exposure to literature and various situational involvement will give the individual a background of information from which further judgments, decisions, and actions can be based. Similarly, a person's age, to some degree, carries with it certain expectations of appropriateness in judgments, decisions, and actions. The close proximity of variables like experience, age, and education, as an influence in the social and personal values of officers, made their inclusion and examination in this study relevant.

The main issues that were exhibited in the education and role diversity research review have been used to guide the exploration and analysis of data in this study. This is due to the importance of education as a primary variable in the study and the acknowledgement of role diversity as a primary cause of role conflict and occupational stress for the patrolman. Because the problem addressed in this study is one of role conflict and stress; an objective is to identify variables that reduce conflict and stress. Consensus is viewed as an indicator of this because it implies shared understanding and agreement.

Cottrell (1965:39) was one of the first sociologists to recognize the theoretical utility of treating role consensus in this way. In a paper concerned with the individual's adjustment, Cottrell (1942:617-620) presented a series of hypotheses that viewed role adjustment as a function of consensus variables. He stated that role adjustment is in part dependent upon the consistency with which others in the individual's life situation exhibit the response called for in his or her own role. Cottrell recognizes role consensus as a useful variable in the analysis of social behavior.

An examination of Parsons' (1965:39-40) definitions of social systems indicates that he assumes consensus on the evaluative standards of a group is beneficial and necessary to the continuation of the group. Parsons states that stability of interaction depends on the condition that particular acts by both sides be orientated to common standards since only, in terms of such standards, is order in either the communication or the motivational context possible. Parsons (1951:37-39) recognizes consensus as a variable but also the importance of the theoretical linkage between the evaluative standards of groups, or large systems, in which they are involved and the degree of internalization in the individual.

Cottrell (1965:41) and Parsons (1965:41) suggest that consensus on the role definitions are probably related

in a positive and linear manner to the stability of the social system and to personal gratification.

In a review of psychological factors involved in group phenomena, Riecken and Homans (1954:788) indicate that the degree of consensus in a group may depend on the members' similarity in cultural and social backgrounds, and **also** on the length of time that the members have been in interaction with one another. They indicate that the norms of members probably become more similar in time, but that there are no empirical studies of this relationship. The two properties--length of interaction among members and the homogeneity in cultural and social backgrounds--are examined in the variables of education, age, experience, years in position, and military service in this study. These variables can be categorized in two areas of inquiry: (1) education and military experience can be viewed as homogeneity in culture and social background; (2) age, experience, and years in position can be viewed as the length of interaction.

In this study, the key concept and dependent variable is executive professional leadership which Gross et al. (1961:22) define as "the efforts of an executive of a professionally staffed organization to conform to a definition of his role that stresses his obligation to improve the quality of staff performance." The definition implies **certain specifications** for this study that help to

differentiate between the types of leadership research that are applicable.

The first specification is that this study will focus on the behavior exhibited by the formally designated executive of a police organization--the sergeant. This is important to note since many studies of leadership have references to informal rather than formal leaders of groups. The second specification of this study is that the formal leaders under study are executives of professionally staffed organizations. A professionally staffed organization is one whose core activities are carried out by personnel who have completed specialized training and who have been judged to possess at least a minimum competency to perform the organizational tasks in an essentially autonomous manner. The police agency is such an organization since it is staffed with patrolmen who have been certified as possessing professional qualifications required for their tasks. A third specification concerns the conceptualization of leadership in this study. The area of performance that EPL represents is the sergeant's efforts to improve the quality of staff performance. This area of leadership is referred to as effectiveness.

Summary

Chapter II contained a review of the literature and research which included sections on (a) education and role diversity, (b) performance and background characteristics,

(c) leadership traits and characteristics, and (d) stress and the policeman. Another important component of this chapter is the implications of the literature for the thesis.

The section on education and role diversity presented the opinions and positions that are held regarding education for the police by individuals with experience and knowledge in criminal justice, higher education, and related fields. The need for higher education is based on two factors: (1) changing social norms and values, and (2) the role diversity of the patrolman. Within these areas the autonomy of police work is explored. The literature suggested that the patrolman is a unique occupational position which can not be directly supervised. Also, while working alone the patrolman encounters many situations in which he cannot immediately confer with a supervisor before acting. Another factor of importance is the use of discretion by the patrolman. The application of the authority and power vested in the role of a police officer offers a strong argument for higher education. The role diversity involved in the maintenance of order and the enforcement of law requires the ability to assess and evaluate a situation and to apply the appropriate use of human relations/social counseling if order maintenance is the problem or reactive action and arrest if enforcement is the problem.

The section on performance and background characteristics contained a review of studies involving or related

to age, education, and experience. In general, the background variables of police officers have been evaluated in many studies. Over time, it has been acknowledged that the police officer as an authority figure possesses within his discretion the power to influence behavior by invoking a wide variety of actions. Background variables have for this reason been viewed as indicators of present ability and preparedness.

The third section contained studies that explore leadership and its characteristics. In this study, leadership is viewed as a motivating, enhancing, and purposeful activity. The importance of effective, middle-range leadership is emphasized because if available it can clarify the expectations of the agency and relate them to the personal values of the patrolman, thereby integrating with and for him a supportive stance upon which agency's priorities are based. This orientation provides a frame of reference for the decision-making involved in the diverse role activities.

The fourth section reviewed the literature on stress and the police officer. The typical stressors are identified. All of these authors agree that the police officer has specific types of occupational stress that can be recognized and diminished if the proper training is provided and the agency has a supportive social-emotional system for its officers.

In the final section the implications of the

literature for the study are explained. The relationship of the literature to the variables being explored is elaborated upon. This is important to note because the theoretical basis of this study is grounded in several previous studies. The logical connection of these studies and concepts derived from them is relevant to the development of the hypotheses that will be tested. Also, specifications are indicated that governed the selection of material to be reviewed.

CHAPTER III

METHODOLOGY

In this chapter the researcher describes the background of the study, the hypothesis development, the instrumentation, the validity and reliability, item and index construction, the collection of the data, and the design of the analysis.

Background of the Study

The data presented in this study came from a medium size municipal police department. It is located near a large state university (over 30,000 students) in a city of over 130,000 residents.

In 1976, an evaluative study of this police department was made in which the researchers were allowed to closely scrutinize police operations and personnel for the purpose of identifying factors that affect the role of the first line supervisor in police organizations. This research (Trojanowicz, 1976) focused on the role of the first line supervisor as perceived by the sergeants themselves, the officers they supervised, and the persons who supervised the sergeants. Trojanowicz divided the officers into five groups for the purpose of analysis: (1) patrol

officers; (2) detectives; (3) sergeants; (4) lieutenants; and (5) command officers (captains and above). All the officers in the department--except three new recruits and two sick officers--were interviewed and filled out a questionnaire. In addition, the researchers had an opportunity to be participant observers of the interactions of officers of various ranks as they performed their duties. The study was based on a previous study by Gross et al. (1961), which introduced the concept of executive professional leadership (EPL). EPL is defined as "the effort of an executive of a professionally staffed organization to conform to a definition of his role that stresses his obligation to improve the quality of staff performance" (Gross, 1961:22).

In the 1976 police department study, Trojanowicz (1976) adapted the EPL concept to a new situation by applying it to a police organization. From this "parent" study, the current patrolmen study has emerged. The patrolmen of the police department were selected for this study for the following reasons: (1) they compose the largest number of officers in the department; (2) they perform the duties that are most directly associated with the purpose of a police agency; and (3) they are in a good position to evaluate leadership in the agency.

The role of police sergeant was selected for

analysis because it is the central agency position exerting the most direct supervision over an officer. For this patrol officer study, it was felt that information is needed regarding the supportive leadership ability of police sergeants for subordinates. The method used to obtain this information is a survey of patrolmen's perceptions of their immediate supervisors' roles. This indicates the expectations they hold for him and a measure of his role performance.

Hypotheses Development

The questions addressed in this study involve the exploration of the role perceptions of the police sergeant position by patrolmen. The purpose is to determine the significant differences that can be attributed to the three background variables of the individual officer who is responding to the survey questionnaire. It is assumed that high perceptions of the sergeant will affect the adaptive ability of the patrolman by influencing attitudes, motivation, and expectations.

The first research question, more fully stated, is: How do years of experience, education, and previous military experience correlate with EPL? The rationale for exploring this question involves identifying the relationship that may be attributed to the variables indicated. If these variables are correlated with the role perceptions of police patrolmen in a significant way, then further

analysis of the relevant variables can be made to determine ways in which exposure to these variables or parts of them can be utilized in improving the supervisory role of the police sergeant. Because role perceptions are linked to role expectations, the impact of social/educational variables are important.

The relevance of this question is that the impact of exposure to formal education and other primary variables on the role perceptions of patrolmen have implications for the purpose of recruitment, advancement, implementation of training, etc. The impact of education and social variables are important if an increase in police officer's input is planned to keep the agency more goal directed. Also, if a group of officers categorized by education, years of experience, and previous military experience show a significant relationship to a specific role perception of the sergeant position then closer scrutiny may indicate that certain exposure may increase or decrease the adaptability of the individual officer. Also, it may indicate that position realignment will increase or decrease the adaptability of the individual officer. For example, assignment of responsibility and authority by experience, through educational requirements.

The second research question can be stated as follows: How does executive professional leadership (EPL) correlate to (1) interaction facilitation; (2) support;

(3) work facilitation; and (4) negative goal emphasis?

This second question is an attempt to determine the type and amount of influence that the police sergeant position holds as perceived by patrolmen. Various categories of interactional behavior are assessed. In this question it is assumed that the closer the role perceptions of a position are to role expectations, the more beneficial the position is to the patrolmen in dealing with role activities and in accomplishing the agency's objectives.

The rationale for exploring this question is to determine the type and amount of functional involvement that the sergeant position has with subordinates in a municipal police department. The relevance of this question is grounded in the need to consider the structural advantages of utilizing the functional involvements of the police sergeant position more effectively. This is necessary due to the current trend toward the loosening and/or changing of social mores and the increased value in individual rights which are changing the role of the police officer in contemporary America. Also, little emphasis has been placed upon the police sergeant position as a position of influence and as a structural or organizational point for introducing agency change even though the research on management indicates that certain types of leadership are more conducive to change than others (McGregor, 1968:73-80).

If the role perception of the various groups differ significantly, this could indicate some of the role difficulties involved in the police sergeant position and also some of the adaptive methods being used in adjusting to conflicting expectations. Shedding light on research question two will facilitate the comparative analysis of research question one, the selected social/educational variables, and how they are related to the type and amount of functional involvement perceived in the sergeant position. This then provides a measure of external variables that may affect the attitudes and self-concept of the patrolman and an internal measure of effectiveness for a central position that may also affect the individual officer's adaptive ability for his ambivalent occupational role.

On the basis of these assumptions and subsequent reasoning about the matrix of social forces in operation, a series of hypotheses will be presented and tested. They will explore the differential role perceptions of patrolmen and must show a .05 alpha value for retention.

Hypotheses

- H1 There is a positive correlation between EPL and the interaction facilitation of the sergeant.
- H2 There is a positive correlation between EPL and the support of the sergeant.
- H3 There is a positive correlation between EPL and the work facilitation of the sergeant.
- H4 There is a negative correlation between EPL and a negative goal emphasis of the sergeant.

- H5 No differences exist in the stated correlations of H1 through H4 when controlling for years of police experience, education, and military experience.
- H6 There is a greater EPL score for subjects with no years of college education than for subjects with two years of college education.
- H7 There is a greater EPL score for subjects with no years of college education than for subjects with four years of college education.
- H8 There is a greater EPL score for subjects with no years of college education than for subjects with graduate college education.
- H9 There is a greater EPL score for subjects with two years of college education than for subjects with four years of college education.
- H10 There is a greater EPL score for subjects with two years of college education than for subjects with graduate college education.
- H11 There is a greater EPL score for subjects with four years of college education than for subjects with graduate college education.
- H12 There is a greater EPL score for subjects with no military service experience than for those with this experience.
- H13 The EPL score is higher for subjects with one through four years of police experience than for subjects with five through nine years of police experience.
- H14 The EPL score is higher for subjects with one through four years of police experience than for subjects with ten through fourteen years of police experience.
- H15 The EPL score is higher for subjects with one through four years of police experience than for subjects with fifteen plus years of police experience.
- H16 The EPL score is higher for subjects with five through nine years of police experience than for subjects with ten through fourteen years of police experience.

- H17 The EPL score is higher for subjects with five through nine years of police experience than for subjects with fifteen plus years of police experience.
- H18 The EPL score is higher for subjects with ten through fourteen years of police experience than for subjects with fifteen plus years of police experience.
- H19 The EPL score of subjects will decrease as the years of college education increase, when controlling for years of police experience and previous military experience.
- H20 There is a greater EPL score for subjects with no military service when controlling for years of college and years of police experience.
- H21 The EPL score of subjects will decrease as the years of police experience increase when controlling for years of college education and previous military service experience.

Instrumentation

The instrument used to obtain the data for this study consisted of a questionnaire, comprising a series of questions, indexes, and control items all of which were originally used and developed by Gross et al. (1961). The questionnaire is primarily composed of questions with ordinal categories in which the respondents' rate their sergeant in terms of their perception (see Appendix A for complete questionnaire). The present study is mainly concerned with two types of information derived from the instrument: (1) a measure of professional leadership ability (EPL); and (2) an assessment of performance in interaction facilitation, support, work facilitation, and administrative goal emphasis roles.

Special indices for this study were constructed because few scales were available that would tap the information needed for testing the hypotheses.

Item Construction

The indices used in the study combined several items into a composite measure. In general, the indices are used to gauge an underlying continuum which cannot be measured by any single item (Nye et al., 1970). Therefore, most indices contain between three to eight items. Indices required the respondent to select an answer from the fol-

lowing responses:

1	always
2	almost always
3	frequently
4	occasionally
5	almost never
6	never

A procedure of index construction was selected and patterned after Waisaned and Durlack (1966:101-115), who listed several assumptions underlying the use of this procedure:

1. several questions designed to measure a variable are better for the purpose than a single question;
2. the degree to which these questions correlate with one another provides some tentative evidence that there may be such a variable "at work in the social world;"
3. the summed values of these inter-related items can function as the measure of that variable; and
4. the degree to which these measurements relate to other measurements- beyond the reasonable limits of chance--provides further basis for confidence that a variable has been identified and that it has some interpretative value.

Factor analysis is used in this study to reduce the data set and to be certain that EPL is one factor. The results of the factor analysis can be found in Table 3.1.

Five factors were identified as being relevant for the rotated factor matrix. Items which loaded .40 and above were selected for inclusion in a factor. Factor one is executive professional leadership (EPL). Items 14, 15, 26, 30, and 38 thru 56 (except for 45 which had a loading of .386) make up this index. Factor two is interaction facilitation and items 1, 2, 3, 4, and 10 make up this index. Support is factor three; items contributing to this index are 12, 13, and 37. Factor four is work facilitation and items 23, 24, and 25 comprise this index. The final factor, five, is leader goal emphasis and is made up of three items 19, 20, and 22 (see also Appendix A for a description of the items). These indices will be used throughout the analysis for comparison purposes.

Validity and Reliability of the Indices

Validity

Only items that appeared to measure the desired dimension were included in the construction of an index. This face validity by inspection was the initial criterion for the retention of index items.

The items derived from the study of Gross et al. (1961) and Trojanowicz (1976) had been subjected to intensive

TABLE 3.1.--Factor Analysis.

EPL	Interaction		Work		Negative
	Facilitation	Support	Facilitation	Goal	Emphasis
	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
X1	.36893	.58282	.22802	.05288	.10753
X2	.15823	.60925	.05382	.27682	.09556
X3	.20822	.34515	.03990	.00321	.08833
X4	.07675	.18346	.16555	.11727	.04455
X5	.29337	.25985	.24736	.33782	.00305
X6	.25452	.31326	.60686	.13589	.13731
X7	-.04287	.01135	-.00020	.09161	-.07875
X8	.06801	-.00169	.15644	.04281	.08306
X9	.26717	.10005	.14011	.03587	.05245
X10	.23647	.42962	.28273	.17282	.13683
X11	.17412	-.05229	.00527	.05620	.15818
X12	.22981	.15882	.59914	.14071	.19390
X13	.23914	.09485	.51121	.11586	.34401
X14	.49185	.37878	.21341	.11656	.13110
X15	.52257	.19939	.29031	.23911	.08972
X16	.14113	-.00683	.13238	.16887	.35008
X17	-.00167	.00097	.00418	.32400	.22492
X18	.19441	.13041	.31593	.39659	.01837
X19	.16915	.08105	.11743	-.08465	.62540
X20	.15496	.20577	.36980	.04771	.50407
X21	.21524	.31545	.33212	.18572	-.04051
X22	.14018	.04288	.11891	.07457	.56035
X23	.09574	.07015	.18850	.42112	.13810
X24	.19884	.10075	.07106	.70790	.08506
X25	.30478	.23108	.13632	.58188	-.09321
X26	.41401	.19448	.15440	.11241	.15045
X27	.25751	.20020	.17055	.36326	-.06148
X28	.18128	.42010	.00798	.32699	-.01924
X29	.13618	.21766	-.03311	.47603	-.05755
X30	.43062	.02854	.08026	.31532	.17812
X31	.33649	.18660	.08555	.14220	.19800
X32	.21581	.03851	.10665	.16157	.10912
X33	.29997	.03419	.15567	.09310	.22181
X34	.15909	.04329	.16402	.11612	.11882
X35	.01496	.01865	.05670	.01393	.11879
X36	.32828	.05463	.31394	.18089	.36740
X37	.16873	-.04586	.55487	.06585	.14792
X38	.53516	.20006	.14795	.20381	.05273
X39	.40397	.03224	-.03166	.03606	.09222
X40	.43702	-.02522	.10492	.07650	.09825
X41	.45373	.22236	.21771	.14049	-.02529
X42	.40060	.12704	.08766	.02763	.30426
X43	.47987	.29779	-.04640	.16655	.10102
X44	.41915	.26875	-.01667	.07301	.19225
X45	.38619	.32869	.10255	.20902	.17206
X46	.56724	.16395	.12313	.09569	.04366
X47	.74654	.13920	.23165	.02983	.11740
X48	.61365	.21108	.05419	.12035	.10376
X49	.54229	.14238	.05291	.06261	.24788
X50	.59952	.13853	.07373	.09086	.15407
X51	.77434	-.01667	.14742	.10285	-.02198
X52	.62291	.14318	.12385	.16798	.04141
X53	.55141	.13847	.03026	.03842	.07504
X54	.70977	.02458	.16052	.19970	.17088
X55	.77592	.14490	.12258	.21152	.16012
X56	.63185	.14111	.16142	.19893	.17547

TABLE 3.1.--Factor Analysis.

EPL	Interaction		Work		Negative
	Facilitation	Support	Facilitation	Goal	Emphasis
FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	
X1	.36893	.58282	.22802	.05246	.10753
X2	.15823	.60925	.05382	.27682	.09556
X3	.20822	.34515	.03990	.00321	.08833
X4	.07675	.18346	.16546	.11727	.04455
X5	.29337	.25985	.24730	.33782	.00305
X6	.25452	.31326	.60686	.13589	.13731
X7	-.04287	.01135	-.00020	.09161	-.07675
X8	.06801	-.00169	.15644	.04291	.08306
X9	.26717	.10005	.14011	.03567	.05286
X10	.23647	.42962	.28273	.17282	.13683
X11	.17412	-.05224	.00527	.05620	.15818
X12	.22981	.15882	.59914	.14071	.19390
X13	.23914	.09485	.51121	.11596	.34401
X14	.49185	.37875	.21341	.11656	.13110
X15	.52257	.19939	.29031	.23911	.08972
X16	.14113	-.00693	.13638	.16897	.35006
X17	-.00167	.00097	.00418	.32400	.22492
X18	.19441	.13041	.31523	.39659	.01637
X19	.16915	.08105	.11743	-.08465	.62540
X20	.15496	.20577	.36950	.04771	.50407
X21	.21524	.31545	.33212	.18572	-.04051
X22	.14018	.04288	.11891	.07457	.56035
X23	.09974	.07015	.18850	.42112	.13810
X24	.19884	.10075	.07156	.70790	.08596
X25	.30478	.23108	.13632	.58198	-.09321
X26	.41401	.19446	.15440	.11241	.15045
X27	.25751	.20020	.17055	.36326	-.06148
X28	.18128	.42010	.00798	.32699	-.01924
X29	.13618	.21766	-.03311	.47603	-.05755
X30	.43062	.02854	.08026	.31532	.17812
X31	.33649	.18660	.08555	.14220	.19800
X32	.21581	.03851	.10605	.16157	.10912
X33	.29997	.03419	.15567	.09310	.22181
X34	.15909	.04329	.16402	.11612	.11882
X35	.01496	.01865	.09670	.01393	.11879
X36	.32828	-.05463	.31394	.18059	.36746
X37	.16873	-.04586	.55487	.18059	.14792
X38	.53516	.20006	.14795	.20381	.05273
X39	.40397	.03224	-.03166	.03606	.09222
X40	.43702	-.02522	.10492	.07650	.09825
X41	.45373	.22236	.21771	.14049	-.02939
X42	.40060	.12704	.08766	.02763	.30426
X43	.47987	.25779	-.04640	.16655	.10102
X44	.41915	.28875	-.01667	.07301	.19225
X45	.38619	.32869	.10255	.20902	.17206
X46	.56724	.16395	.12313	.09569	.04366
X47	.74654	.13920	.23165	.02903	.11740
X48	.61365	.21108	.05419	.12035	.10376
X49	.54229	.14238	.05291	.06261	.24706
X50	.59952	.13853	.07373	.09086	.15407
X51	.77434	-.01667	.14742	.10285	-.02198
X52	.62291	.14318	.12385	.16798	.04141
X53	.55141	.13847	.03026	.03842	.07504
X54	.70977	.02498	.16052	.18970	.17088
X55	.77592	.14490	.12258	.21152	.16012
X56	.63185	.14111	.16142	.19893	.17547

review in the qualitative evaluation and revision of the wording, understanding, and intended meaning of each item. Only those items that indicated high correlations were included in the final instrument for the study by Gross et al. (1961) and Trojanowicz (1976).

Content validity for the items is reported in Gross et al. (1961) and was concurrently established by Trojanowicz (1976) by subjecting each potential item from the 1961 questionnaire to a panel of judges composed of three professional behavioral scientists, Trojanowicz, Moss, and Christian. To be included in an index, all three judges had to agree that the item measured the dimension stated. From this assessment five to ten items were constructed for each index desired.

Reliability

A reliability check was made from the Gross et al. (1961) study, in which the responses of 1303 subjects were put through an item analysis from which a Guttman scale for EPL was derived. It yielded a coefficient of reproducibility of .978. In the police department study of Trojanowicz (1976) the correlation of each item to the total sum of all potential items in each index was computed resulting in a item total index correlation.

For the purpose of the present study, a standard was established that only those items showing a corrected item total correlation between .40 and .80 were to be

included in any index. This resulted in the rejection of some items even though they were statistically significant. The lower limit of .40 was established to ensure the strength of each index. The upper limit of .80 was established because any item reaching such a high correlation with the total index is essentially measuring the same thing and inclusion of it would be redundant, thus increasing the probability of a skewed distribution.

This process of index correlation insures that the items in the index are measuring in the same direction along a dimension and at the same time it gives an indication of the strength of the index.

In conjunction with the above measures, principal component factor analysis was used to determine the patterning of items, for data reduction, and for the construction of indices. Table 3.2 shows the summary of the reliability for each index.

Summary of validity and reliability

The validity and reliability rested upon three methods of insuring that the instrument measures what it purported to measure. First, the items that were constructed were selected on the basis of face validity. That is, did the item appear to measure the dimension stated. The indices that were constructed in the Gross et al. (1961) and Trojanowicz (1976) studies had been subjected to pre-tests and indepth interviews with subjects. Second, content

TABLE 3.2.--Summary of index reliability

	EPL	Interact Facilit.	Support	Work Facilit.	Neg. Goal Emphasis	Mil.	Coll.	Yrs Exp.
EPL	1.0000 (197) S= .001	.1776 (197) S= .007	.0994 (197) S= .111	.0426 (197) S= .260	.0158 (197) S= .439	.0743 (197) S= .153	-.0213 (197) S= .352	-.1028 (197) S= .060
Interact Facilit.	.1776 (197) S= .007	1.0000 (197) S= .001	.4742 (197) S= .001	.3430 (197) S= .001	.1265 (197) S= .041	.0223 (197) S= .390	-.0050 (197) S= .111	-.1053 (197) S= .075
Support	.0894 (197) S= .111	.4742 (197) S= .001	1.0000 (197) S= .001	.3344 (197) S= .001	.3214 (197) S= .001	.0151 (197) S= .115	-.1232 (197) S= .172	-.1093 (197) S= .067
Work Facilit.	.0426 (197) S= .260	.3430 (197) S= .001	.3344 (197) S= .001	1.0000 (197) S= .001	.4509 (197) S= .001	-.0106 (197) S= .443	-.1572 (197) S= .015	.0335 (197) S= .323
Negative Goal Emphasis Mil.	.0168 (197) S= .439	.1265 (197) S= .041	.3214 (197) S= .001	.4509 (197) S= .001	1.0000 (197) S= .001	.0274 (197) S= .354	-.1228 (197) S= .316	-.1117 (197) S= .063
Coll.	.0743 (197) S= .153	.0223 (197) S= .390	.0151 (197) S= .115	-.1232 (197) S= .172	-.1093 (197) S= .067	-.1028 (197) S= .060	-.1053 (197) S= .075	-.1028 (197) S= .060
Yrs. Exp.	-.1028 (197) S= .060	-.1053 (197) S= .075	-.1093 (197) S= .067	-.1117 (197) S= .053	-.1117 (197) S= .053	-.1117 (197) S= .053	-.1117 (197) S= .053	1.0000 (197) S= .001

validity was established in previous studies by Gross et al. (1961) and Trojanowicz (1976). In the present study, factor analysis of items was used to assure continued validity.

Third, the indices were then subjected to the process of item total index correlation which requires all the items in an index to measure along the same dimension.

Subjects and Data Collection

The present patrolmen study called for the collection of data through the use of a survey questionnaire. A brief training session was presented in which each patrolman was given a questionnaire which he was asked to complete. The study also called for a review of each patrolman's level of education, experience, age, and military service. This information was taken from personnel files and records that were available. Confidentiality of the responses were insured during the training session; questions about the research were also answered at that time. Appendix A presents the complete questionnaire. The subjects were allowed to fill out the questionnaire during leisure time.

All questionnaires were collected within a three day period and each was scanned for completeness and correct marking. In constructing a method which would combine the responses of the patrolmen in a stable and unidimensional summary score, a form of factor scaling was used. This

procedure takes into account the reliability of both questions and observations and then reduces the questionnaire from a series of items to a summary score. This summary score can then be used as the definition of each subject's position on the dimension under consideration.

Limitations

The present study has several limitations. First, the data are uniquely agency bound in that each police department has its own organizational policies and social structures that encourage or discourage supervisory styles, officer involvement, agency involvements, and a multitude of other individual and agency inter and intra-actions. This means that generalization of the findings to other agencies can be made selectively based on variables that match those found in this agency.

The danger of making false assumptions exists when analyzing and interpreting the results of correlational studies. The most common of these assumptions is that a significant relationship is also a causal relationship. Such a conclusion would be premature in this study. The empirical findings will be based upon a limited analysis of the statistical significant differences uncovered between the various groups. No attempt will be made to demonstrate a cause and effect relationship between the independent and dependent variables. Rather, the aim will be to describe the relationships that emerge.

Variables

The variables in this study fell into two broad categories: (1) Performance Measures and (2) Background Variables. The performance measures consisted of survey items that were constructed into five indices:

1. Executive Professional Leadership (EPL)
2. Interaction Facilitation
3. Support
4. Work Facilitation
5. Negative Goal Emphasis

The performance measures were selected because they appear to be the best available indicators of the police officer's knowledge and judgment about the sergeant position. This conclusion was based on a review of relevant literature, factor analysis of questions from this study, and on personal observation.

The background variables consisted of demographic information on the individual respondent: education, years of police experience, and previous military experience. These background variables were identified as being the most relevant. It should be noted that years in position and age are very highly correlated with years of experience; that is, $.94129$ ($S = .0001$) for each. Other reasons for the selection of these variables are:

1. the police department was seeking to evaluate its own strength and weaknesses in an attempt to improve leadership within the department. Consequently, data on these variables were available and easily accessible;
2. the underlying assumption is that EPL is a significant indicator of position effectiveness; and

3. the agency was of sufficient size and contained sufficient stratification by education level, experience, and age to allow one to draw conclusions about the population with an acceptable degree of accuracy.

For the analysis of the data, the variables have been grouped in the following manner:

Dependent Variables . . . EPL

Independent Variables . . A. Category Variables

1. years of college
2. years of police experience
3. military experience

B. Factors

1. interaction facilitation
2. support
3. work facilitation
4. negative goal emphasis

Design of the Analysis

The present study is descriptive in that it attempts to identify significant relationships and differences between variables. The study will provide information that can illuminate agency functioning by indicating how a central agency position is perceived by subordinate officers and how these perceptions are influential.

The choice of proper data analysis techniques is governed by time, money, and level of conceptual understanding of the statistical techniques to be used, as well as the appropriateness of the techniques in relation to the data (Weikert, 1978:72). In this study, the purposes of the researcher are best met by the use of a variety of statistical tests: chi-square contingency procedures, correlation analysis (zero-order and partials), T-tests, analysis of variance, and

factor analysis. These techniques provide measures of statistical significance, strength of association, between and within group variance, variance accounted for, contrasts between groups, and the grouping of individuals from predictor variables. All of these procedures are essential to a full analysis of the data. An alpha of .05 will be the level of retention for all the hypotheses.

Contingency analysis will be used for testing relationships between years of experience, education, and military experience. Chi-square procedures will be used as a test for the existence of association.

The one-way analysis of variance is a parametric statistic which tests whether the independent samples have come from the same or different populations. Assumptions underlying the "F" ratio and all other interval statistics are (1) scores were sampled at random; (2) samples were from normal populations; (3) homogeneity of variance (homoscedasticity); (4) different samples were independent; (5) an interval level of measurement has been obtained; and (6) the hypotheses imposed for testing were true.

If the F ratio is large then one can conclude that one of the above is false. Assumptions 1, 4, and 5 are most often met and recognized. Inferences based on the F statistic are not seriously distorted by violations of assumptions 2 and 3 (normality and homoscedasticity) (Weikert, 1979:73). Therefore, most of the distortion of

the F statistic will ordinarily be produced by the false hypotheses. When F is large, one is usually safe in not retaining the hypotheses which are tested. Phillips (1966: 269) stated that:

Statistical assumptions must not be turned into prohibitions against particular kinds of experiments ... these assumptions should be borne in mind ... in matching the particular experimental situation with appropriate forms of analysis.

In this data analysis, statistical conclusions were not based solely on a significant "F." The "F" examined the relationship between the variables. The "F" ratio provides an overall measure of the data set and, as Hays (1963) has indicated, a significant "F" is a signal for further analysis.

Zero order correlation was used for initial tests of the direction and magnitude of hypotheses. This gave a measure of whether the hypotheses were in the predicted direction--positive or negative and the strength of the relationship.

Multiple and partial correlation were used to measure associations between the independent variables and the dependent variables in order to control for the relationship between the independent variables.

The purpose of the regression analysis is to predict; generally it is desirable to examine several predictor variables simultaneously in light of the consideration that their joint effect will provide a more accurate prediction

of the criterion variable. This strategy provides statistical control for confounding factors (Weikert, 1978:74).

The method of analysis will proceed through the following steps:

1. contingency analysis, chi-square will examine the association between all the independent variables;
2. one-way analysis of variance will be used with the resulting F to indicate differences in the association between the dependent variables and the independent variables;
3. T-tests will be used as contrasts with the one-way ANOVA to determine where the differences lie. An analysis of the contrasts will give comparisons of the differences between the different levels of EPL;
4. correlation analysis will give direction and strength of relationships for zero-order and partial correlation.

Summary

In Chapter III the researcher presented the methodology of the study. This study is the "outgrowth" of the previous leadership studies by Gross et al. (1961) and Trojanowicz (1976). The focus is on the patrolman's role perceptions of his first line supervisor, the sergeant.

The measure used in the study are both categorical and quantifiable data. The categorical data consist of demographic information that was available in existing police personnel files. These measures made up the predictor variables that grouped the officers for comparative analysis. Variables to be tested include: years of police experience, education, and previous military experience.

The quantifiable data are the performance measures taken from a survey form that was adapted from a leadership study (Gross et al., 1961). Each officer completed the survey form. The questions (see Appendix A) focused on the sergeant position and elicited an evaluation of the role performance for that position. The questions exploring the supervisory role characteristics were categorized as: leadership, Interaction facilitation, support, work facilitation and administrative goal emphasis.

The analysis of the data will be descriptive, in that it attempts to identify relationships and differences between variables. Statistical tests will include: chi-square contingency procedures, correlation analysis, T-tests, analysis of variance, and factor analysis.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

The analysis of the data will be presented in four parts. In the first part, the researcher presents hypotheses concerning the factor data set. Items which made up the factors being tested in the individual hypotheses are presented. The Pearson Product Moment Correlation is used to test the significance of these hypotheses.

In the second part the researcher presents a descriptive analysis of the category data set. It offers a general view of the perceptions and characteristics of specific data sets by using contingency and frequency tables. From this presentation it is hoped that the reader will become familiar with the data set, especially where similarities and differences exist between the variables. In the third part the researcher deals with the testing of individual hypotheses derived from the categorical data. The Pearson Correlation, partial correlation, one way analysis of variance, and analysis of covariance are used in testing these hypotheses. For retention, all hypotheses will be considered significant at the .05 level and always in the

predicted direction. In the fourth part, the summary, the researcher will give a short recounting of the main findings of the total study and presents a profile of the patrolman through the medial response of perceptions and characteristics of each specific category or group.

Hypotheses Concerning the Factors

Hypotheses 1 through 5 are concerned with the relationship between EPL (Executive Professional Leadership) scores and factors. To analyze this relationship the Pearson product moment correlation coefficients are computed for pairs of variables. The Pearson correlation serves a dual purpose; besides indicating how well the linear regression fits, it is a measure of association indicating the strength of the linear relationship between the two variables. Zero order correlations are produced when no controls are made for the influence of other variables. This statistic is used in this research when the strength of relationship between two interval level variables are measured.

Higher order partial correlations are used when the researcher wants a single measure of association describing the relationship between two variables while adjusting for the effects of one or more additional variables.

H1 There is a positive correlation between EPL and the interaction facilitation of the sergeant.

The patrolmen's responses to five questions about their sergeants' interaction facilitation skills

in dealing with them comprised the data for testing this hypothesis. Patrolmen were asked to report to what extent their sergeants share with them the following interactions.

1. Gives officers the feeling that their work is an "important" activity.
 2. Gets officers to upgrade their performance.
 3. Gets support from command when he makes a decision.
 4. Gives support and encouragement to formal education.
- 10.¹ Has constructive suggestions to offer officers in dealing with their major problems.

It was hypothesized that there is a positive relationship between EPL and interaction facilitation skills of the sergeant. That is, the greater the ability of the sergeant to communicate with patrolmen, the higher the patrolmen's perception of him as a leader. This relationship was in the predicted direction and was found to be significant ($r = .18$) ($S = .01$). The hypothesis was therefore retained.

H2 There is a positive correlation between EPL and the support of the sergeant.

To test hypothesis 2, the factor support was used. Data upon which the factor is based were obtained from replies of the patrolmen to three questions about how frequently their sergeants perform in these areas.

¹Numbers are congruent with numbers in the questionnaire.

12. Takes a strong interest in the professional development of the officers he supervises.
13. Takes an interest in the personal welfare of the officers he supervises.
37. Evaluates supervisees fairly.

The factor scores of the patrolmen for their sergeants were averaged to obtain the best estimate of his interpersonal support. The extent to which this index measures the sergeant's relationship with his patrolmen is tested with the EPL score.

Hypothesis 2 states that those patrolmen who rated their sergeant high in leadership also rated them high in giving support. This relationship was in the predicted direction but it was not found to be significant ($r = .09$) ($S = .11$), and the hypothesis was therefore not retained.

- H3 There is a positive correlation between EPL and good work facilitation by the sergeant.

Hypothesis 3 is tested with the factor work facilitation which relates the degree to which the sergeant effectively uses his patrolmen in relation to the agency's goals. The patrolmen were asked three questions about how frequently their sergeants perform these functions.

23. Maximizes the different skills found in his supervisees.
24. Helps officers to understand the sources of important problems they are facing.
25. Displays a strong interest in improving the quality of the LPD.

The scale scores of the patrolmen were then averaged to obtain the best estimate of the work facilitation skills of the sergeant.

Hypothesis 3 posits that those patrolmen who perceived their sergeant as high in leadership would also perceive him as a good work facilitator of the agencies goals. This relationship was in the predicted direction but was not found to be significant ($r = .043$) ($S = .28$), and the hypothesis was therefore not retained.

H4 There is a negative correlation between EPL and negative goal emphasis by the sergeant.

Hypothesis 4 was based on the responses of the patrolmen to three questions. Patrolmen were asked: How frequently does your sergeant

19. Require officers to engage in unnecessary paper work.
20. Display inconsistency in decision making.
22. Reprimand officers whose ideas disagree with his own.

Again, the factor scores of the patrolmen were averaged to obtain the best estimate of the sergeant's negative goal emphasis.

Hypothesis 4 states that those patrolmen who view their sergeant as high in leadership ability will rate him low in negative goal emphasis. That is, if a sergeant lacks clarity in his leadership roles he will be rated low in EPL. This relationship was in the predicted direction but was

not found to be significant ($r = .02$) ($S = .41$), and the hypothesis was not retained.

- H5 No differences exist in the stated correlations of H1 through H4 when controlling for years of police experience, education, and military experience.

Hypothesis 5 indicates that no differences will exist in the stated relationships of H1 through H4 when controlling for the category variables of years of experience, years of college, and military service. Partial correlations were performed using these variables and four factors: (1) interaction facilitation; (2) support; (3) work facilitation; and (4) negative goal emphasis. When controlling for military service the outcome produced significance for the interaction facilitation factor ($r = .17$) ($S = .01$). Although the remaining factors were in the predicted direction, they were not significant at the required level. Support ($r = .08$) ($S = .11$) was not significant; work facilitation ($r = .04$) ($S = .27$) was not significant; negative goal emphasis ($r = .01$) ($S = .42$) was not significant. From these data it is concluded that when controlling for military service the interaction facilitation factor continues to be the only one with a significant relationship to EPL.

When controlling for years of college, the data yielded the following outcomes: interaction facilitation ($r = .17$) ($S = .01$) was significant; support ($r = .08$)

($S = .11$) was not significant; work facilitation ($r = .04$) ($S = .29$) was not significant; negative goal emphasis ($r = .02$) ($S = .41$) was not significant. This data indicates that when controlling for years of college the EPL score is significantly related to the interaction facilitation skill factor. While the other remaining factors are related to the EPL score, the relationship is not strong enough to be significant.

When controlling for years of experience, the data indicates the following outcomes: interaction facilitation skill ($r = .17$) ($S = .01$) was significant; support ($r = .08$) ($S = .14$) was not significant; work facilitation ($r = .04$) ($S = .26$) was not significant; negative goal emphasis ($r = .01$) ($S = .47$) was not significant. From the above data it is indicated that the interaction facilitation skill factor is the only significant relationship with EPL when controlling for years of experience.

Hypothesis 5 was retained on the basis of data from partial correlations that indicated no change from the findings of the Pearson correlation that were performed from H1 through H4.

Summary of findings for hypotheses concerning factor data

The analysis of the factor data set has as main findings:

1. There is a positive and significant relationship between EPL and the interaction facilitation skills of the sergeant.
2. There is a positive but nonsignificant relationship between EPL and the support of the sergeant.
3. There is a positive but nonsignificant relationship between EPL and the work facilitation of the sergeant.
4. There is a negative but nonsignificant relationship between EPL and the negative goal emphasis of the sergeant.
5. The relationship of the factor data set to EPL remains constant regardless of years of experience, years of education, or military service.

The EPL score and the interaction facilitation skill factor are positive with a significant relationship. The remaining three factors are nonsignificant but they are positively related to the EPL score.

Descriptive Presentation of the Categorical Data Set

Each category is descriptively analyzed. This particular section includes years of college, years of military service, years of experience, and a total summary that highlights the interaction effects of these three variables.

Years of college are analyzed as a variable using frequency tables that indicate the distributions shown in Table 4.1. A natural grouping of subjects occurred and was used in the comparing and contrasting of groups. The subjects with no college numbered 23 which represents 12.2 percent of the population. The next

grouping was at the two years of college level where there were 85 subjects, which represents 45 percent of the population. The next cluster of subjects is at the four years of college level with 72 subjects at 38 percent of the population. The group with graduate credits, in which there are nine subjects, represents 4.8 percent of the total population. The mean was 98.6 quarter hour credits; the median was 90.2 and the standard deviation was 61.7.

TABLE 4.1.--EPL score by educational group.

Quarter hour credits of college	Group	Number of Respondents	%	EPL Mean
None	1	23	12.2	3.46
1-90	2	85	45.0	3.96
90-180	3	72	38.0	3.47
Graduate	4	9	4.8	3.06
Totals		189	100.0	3.49

The descriptive data for years of college as illustrated in Table 4.1 indicate the following facts. The EPL score represents the rating of leadership ability for sergeants by patrolmen. Group four (Graduate) and one (None) are the smallest numerically and at the opposite ends of the continuum. As such, one might expect the

greatest difference between these groups. However, this is not the case and elaboration on this relationship may indicate the reasons. Group two (1-90 credits) is the largest numerically and also has the highest EPL mean score. Further analysis is necessary to determine the reason for this and will be discussed later in this section. Group three (90-180) is a large group with 72 subjects but its EPL mean score is similar to group one with no college. This outcome is unexpected and the reason for it will be explored in the hypotheses that have been developed to test these relationships. Also, there is a strong indication of interaction among variables that will be explored. Group four (Graduate) has the lowest EPL mean score which was expected, but further elaboration is necessary to explain why this has occurred.

Military service is analyzed through frequency tables that were run on the patrolmen population consisting of 189 subjects. In Table 4.2 the findings for this category are presented. Listed are the number of patrolmen in relation to military service. In the first group the number is 99 subjects representing 52.4 percent while the second group contains 90 subjects representing 47.6 percent of the total sample.

The descriptive data for military service experience as illustrated in Table 4.2 indicate the following

TABLE 4.2.--EPL score by military service group.

Military Service	Number of Respondents	%	EPL Mean
with	99	52.3	3.45
without	90	47.7	3.90
Totals	189	100.0	3.67

facts. The military service group has 99 subjects with a lower EPL mean score (3.45) than that of the no group (3.90). The difference while nonsignificant is in the predicted direction. These groups appear to be fairly equal on a numerical basis but when confounded by the other categorical variables of years of college and experience they may be widely dispersed. This will be explored in the hypotheses that were developed and in the comparative analysis of the descriptive data.

Years of experience are analyzed as a variable using frequency tables to describe how the groups were created and the distribution determined. Years of experience in Table 4.3 indicate the four groupings that were used. In the first group (1-4 years), there were 69 subjects, 36.5 percent. In the second group (5-9 years), there were 80 subjects or 42.3 percent. Throughout the third group (10-14 years) there were 25 subjects or 13.2

percent. In the fourth group (15 or more years), there were 15 subjects, 8 percent of the population. The medium years of experience was 6.4, while the mean was 7.1 years with a standard deviation of 5.0.

TABLE 4.3.--EPL score by experience group

Years of Experience	Group	Number of Respondents	%	EPL Mean
1-4	1	69	36.5	4.18
5-9	2	80	42.3	3.30
10-14	3	25	13.2	3.38
15 +	4	15	8.0	3.67
Totals		189	100.0	3.63

The descriptive data for years of experience as illustrated in Table 4.3 indicate the following facts. Group one (1-4 years) has a large number of subjects and the highest EPL mean score. This is an expected outcome as the predicted direction of EPL is to decrease as years of experience increase. Group two (5-9 years) has the largest numerical size and the lowest EPL mean score (3.30) for all groups. Reasons for this will be explored in both the hypotheses that were developed and in the comparative analysis of descriptive data. Group three

(10-14 years) has a slightly higher EPL score (3.38) than group two (5-9 years). The difference while not significant is in the opposite direction as predicted. Group four (15+) has the least number of subjects and the second highest EPL mean score (3.67). Although nonsignificant, it is in the opposite direction than predicted. The reasons for this outcome will be explored in further analysis of the data. Summary and analysis of the descriptive data for the category variables are presented in Table 4.4.

TABLE 4.4.--Summary of category variables.

<u>Groups</u>										
Exper.	1-4		5-9		10-14		15+		Row Total	EPL Mean
Mil.	yes	no	yes	no	yes	no	yes	no		
No Coll.			2	4	4	3	9	1	23	3.46
1-90	11	17	25	16	8	4	2	2	85	3.96
1-180	15	23	15	12	5	1	1		72	3.47
Grad.		3	2	4					9	3.06
Column Total	26	43	44	36	17	8	12	3	189	
EPL Mean	4.18		3.30		3.38		3.67			

Descriptive Analysis

Years of College variables

In the college variables, the no-college versus upper-college groups indicated that the experience of one group factored out the education impact of the other resulting in almost identical EPL mean scores. This is a case of two different but separately homogeneous groups, producing similar EPL scores. The no-college group contains patrolmen with a minimum of five years experience. The upper-college group is not well represented above the ten years experience level. Therefore, it is posited that the similarity between EPL mean scores for these groups is due to the relationship between experience and education which exposes the individual to similar learning situations which have shaped the attitudes, perceptions, and cognitive responses of these two groups.

The lower-college group is a heterogeneous group, in which the two variables are equally represented and for this reason this group was selected as the base group for comparison of the variable. The graduate-college group is homogeneous in that it is high in the variable being tested --years of college--while other variables are limited. The result is the best single group for indicating the impact of the variable on the EPL score of patrolmen.

Although the lower-college group lacks representation above the ten years experience level, it is the most

representative of all groups. With the highest EPL mean score, it is composed of slight to moderately educated and slight to moderately experienced patrolmen. With the influence of these two variables factoring each other out, this group is the best sample of a low college-low experience group. Comparing it to the graduate group, which is the lowest EPL mean score, gives the best indication of the impact of college on perceptions represented in the EPL mean score. From this comparison, the researcher suggests that years of college do impact on the perceptions, attitudes, expectations, and cognitive responses of patrolmen in the predicted direction. Years of college seem to produce more critical and evaluative perceptions with higher expectations that result in lower EPL mean scores for this group.

Another finding that can be identified is that the interaction between experience and education is strong enough to completely nullify the impact of education unless a blocking factor is used or as in this study the graduate-college group by chance had a maximum of one through nine years of experience. This circumstance controlled the experience variable and allowed the researcher to analyze a high-college group in a low-experience situation. Thereby it yielded the best indicator of the effect of years of college on the perceptions of patrolmen for their sergeant.

Military service variable

The group with military service has a lower EPL mean score (3.45) than the group without military service (3.9). The difference, while not significant, is in the predicted direction. The composition of the group with military service is primarily made up of no-college/10 years + experience; low-college/1 through 10 years experience; upper-college/1 through 10 years experience; graduate-college/5 through 9 years experience. The group without military service is similarly dispersed in the middle groups (lower/upper-college). But in the no-college group/5 through 14 years experience one can find that there is five years lower in range than the with-military-service group. In the graduate-college group/1 through 9 years is a four year front end extension. This indicates that candidates are being drawn from graduate schools who have less than five years of experience and no military service.

It appears as though fewer young, less experienced patrolmen have had military experience than older and more experienced patrolmen. Comparing the 1 through 9 years of experience group in the no-college and graduate-college groups, 73 percent had no military service and 27 percent had military service. Compared to the 10 through 15+ years of experience group in the no-college and graduate-college groups, 23 percent had no military service and 77 percent experienced military service.

Years of experience variable

The experience variable for the 1 through 4 years group has the highest EPL mean score. It contains no-college patrolmen and a fairly representative sample of lower/upper-graduate-college patrolmen. This sets up a moderate college/low experience comparison in which the result is high EPL scores.

The second group with 5 through 9 years of experience contains a representative sample of all years of college groups and both military service groups and shows the lowest EPL mean score (3.30) for the experience variable. This is the most representative base group to compare the experience variable with.

The 10 through 15+ groups show movement toward slight increases in EPL mean scores, with an increase in the no-college group and the military service group.

Comparing the 1 through 4 years of experience group with the 15+ years of experience group we find a significantly lower rating for sergeants among the more experienced patrolmen. The finding indicates that after five years of experience the patrolmen are more critical in their evaluation of their sergeants.

In general, the least experienced, less educated, and with no military experience patrolmen rate their sergeants higher in leadership when compared to the more experienced, most educated, and with military experience patrolmen.

Hypotheses Concerning the Category Data Set

The category analyzed in this section are (1) years of college; (2) military service experience; and (3) years of experience. Each category is stated as a hypothesis or set of hypotheses and tested for statistical significance.

One-way analysis of variance (ANOVA) with contrasts was performed for most of the hypotheses concerning the categorical data set. In these hypotheses the researcher tests the relationship between the subject's EPL score and the specific category being analyzed. One-way analysis of variance was selected because the output from it provides the following three types of information: (1) decomposition of sum of squares and η^2 which can be used as a descriptive indicator of the overall relationship between the criteria and experimental variables; (2) F ratio and other statistics that test statistical significance; and (3) estimates of effects of differences among the category means which can be used in interpreting the pattern of the experimental variable.

Assumptions for all of the hypotheses using this (ANOVA) statistical treatment are that the level of measurement--EPL score--is an interval scale and years of college, experience, and military service are used as nominal scales.

The model used is independent random sampling, with normal populations for each category of the variable

level. The population variances are assumed to be equal. Hypotheses are stated in the alternate form and will assume that the population means are unequal. The F value is used as a measure in ANOVA and is the ratio of the between and within estimates; it can be viewed as an extension of the difference of means test.

Hypotheses concerning
years of college

- H6 There is a greater EPL score for subjects with no years of college education than for subjects with two years of college education.
- H7 There is a greater EPL score for subjects with no years of college education than for subjects with four years of college education.
- H8 There is a greater EPL score for subjects with no years of college education than for subjects with graduate college education.
- H9 There is a greater EPL score for subjects with two years of college education than for subjects with four years of college education.
- H10 There is a greater EPL score for subjects with two years of college education than for subjects with graduate college education.
- H11 There is a greater EPL score for subjects with four years of college education than for subjects with graduate college education.

Analyses of variance with contrasts were performed. Because all hypotheses are stated in the alternate form, the researcher will attempt to accept them directly as stated.

H6 contrasts group one (no-college) with group two (lower-college). There was a difference of $-.508$ which is not significant and it is in the opposite direction than predicted. That is, subjects with no-college had a lower

EPL score than subjects with two years of college. On the basis of this H6 is not retained.

H7 contrasts group one (no-college) with group three (upper-college); this produced a difference of $-.178$ which was not significant and was not in the predicted direction. That is, subjects with no college had a lower EPL score than subjects with junior and senior college education experience. However, the difference is smaller than for subjects in lower college. H7 is not retained because it is not significant at the required acceptance level.

H8 contrasts group one (no-college) and group four (graduate-college). A difference of $.45$ is not significant although it is in the predicted direction. Therefore, H8 is not retained.

H9 contrasts group two (lower-college) and group three (upper-college). A difference of $-.4903$ indicates no significant difference in EPL scores but the difference is in the predicted direction. That is, subjects with lower college have higher EPL scores than subjects in upper college. Upper college subjects are closer to no college subjects. H9 is not retained because there is no significant difference.

H10 contrasts group two (lower-college) and group four (graduate-college). A difference of $.90$ with a pooled variance of 1.86 and a T probability of $.063$.

The difference is in the predicted direction and is close to being significant. However, H10 as stated in the alternate form is not retained.

H11 contrasts group three (upper-college) and group four (graduate-college). A difference of .41 is not significant at the appropriate level and therefore H11 is not retained. The difference is in the predicted direction.

In summary, each of these hypotheses turns out to be less than unity, because values of greater than one are needed to not-retain the null hypothesis and to retain an alternative hypothesis. This did not happen; therefore the null hypotheses are retained and the alternative hypotheses are not retained. Because the F values are less than unity, they indicate a greater degree of homogeneity within categories than would be expected by chance.

Hypotheses concerning military service experience

- H12 There is a greater EPL score for subjects with no military service experience than for those with this experience.

Hypothesis 12 tests the relationship between the subject's EPL score and the exposure to military service. One-way analysis of variance is the test used. The F ratio for H12 is $F = 1.0539$ with a F probability of .3059. While there appears to be a relationship in the predicted direction, it is not significant. Therefore, H12 as stated in the alternative form is not retained.

In summary, the EPL score for subjects with no military service (3.9) is greater than for subjects with military service (3.45). The difference of .45, while not significant, is in the predicted direction.

Hypotheses concerning
years of police experience

- H13 The EPL score is higher for subjects with one through four years of police experience than for subjects with five through nine years of police experience.
- H14 The EPL score is higher for subjects with one through four years of police experience than for subjects with ten through fourteen years of police experience.
- H15 The EPL score is higher for subjects with one through four years of police experience than for subjects with fifteen plus years of police experience.
- H16 The EPL score is higher for subjects with five through nine years of police experience than for subjects with ten through fourteen years of police experience.
- H17 The EPL score is higher for subjects with five through nine years of police experience than for subjects with fifteen plus years of police experience.
- H18 The EPL score is higher for subjects with ten through fourteen years of police experience than for subjects with fifteen plus years of police experience.

One-way analysis of variance with contrasts was performed. In these hypotheses the researcher tests the relationship between the subject's EPL score among groups with varying years of police work experience.

The test of H13 through H18 was to use the one-way analysis of variance with a priori contrasts to

establish the differences between groups. A posteriori contrast gave the means for each subgroup and the value necessary to be significant, given the .05 level the researcher established.

H13 compares group one (1-4 years of police experience) with group two (5-9 years of police experience). The difference in means between these groups is .875. The pooled variance estimate had a T value of -1.83 and a T probability of -.069. The mean for group one was 4.18 and 3.3 for group two. While this contrast approached our predetermined significance level of .05 it did not reach it completely, and thus H13 is not retained.

H14 compares group one (1-4 years of police experience) with group three (10-14 years of police experience). The difference in means between the two groups is .795. The pooled variance estimate had a T value of -.1.2 and a T probability of -.229. The mean for group three was 3.38. H14 is not retained and the difference between groups one and three is less than the difference between groups one and two.

H15 compares group one (1-4 years of experience) with group four (15+ years). The difference in means between the groups is .41. The pooled variance T value is .366. The difference is in the predicted direction but is not significant at the appropriate level. Therefore, H15 is not retained.

H16 compares group two (5-9 years of police experience) with group three (10-14 years of police experience). The difference in means between groups is $-.08$. The pooled variance estimate had a T value of $-.903$. H16 is not retained and the difference between these groups is even less than the two previous contrasts.

H17 compares group two (5-9 years of police experience) with group four (15+ years of police experience). The difference in means is $-.37$ which is not significant. This outcome is in the opposite direction as predicted; therefore H17 is not retained.

H18 compares group three (10-14 years of police experience) with group four (15+ years of police experience). The difference $-.31$ is not significant and also is in the opposite direction as predicted. Therefore, H18 is not retained as stated in the alternate form.

In summary, H13 and H14 are both near significance and in the predicted direction. That is, EPL score increases as the years of police experience decrease. The remaining hypotheses are not even near significance level and H17 and H18 also are not in the predicted direction. This seems to be due to the slight increase in EPL mean scores above group two (5-9 years) for the third (10-14) and fourth (15+) groups.

Hypotheses Testing EPL by a Categorical
Variable while Controlling for Others

Hypotheses 19, 20, and 21 are analyzed using analysis of covariance because EPL is tested by a category variable while controlling for the other variables. This is an attempt to isolate the differences, if any exist, for closer scrutiny. This statistical treatment is used because the researcher is interested in the effects of all independent variables (nonmetric and metric). Interaction of these variables is expected and so the adjustment process available through covariance seems appropriate. Adjustments are made to hold constant the confounding effects of variables. These adjustments are based upon assumptions which may or may not offer the clarification of interaction that is sought.

- H19 The EPL score of subjects will decrease as the years of college education increase, when controlling for years of police experience and previous military experience.

In H19, the researcher looks at the EPL score by years of college when controlling for years of experience and military service. Analysis of covariance was performed and, when using the F test, it produced no significant relationships. In further analysis, a partial correlation was run looking at EPL score by years of college while controlling for years of experience and military service. No relationship was indicated and therefore H19 is not retained.

- H20 There is a greater EPL score for subjects with no military service when controlling for years of college and years of police experience.

Analysis of covariance for H20 was performed which examined EPL by military service while controlling for years of college and years of experience. The main effects focused upon military service and there were no significant relationships. In this test the covariant years of college was not significant; however, the covariant years of experience showed a F value of 3.164 ($S = .077$) which is nearly significant and indicates a moderate relationship between EPL and years of experience. However, H20 is not retained.

- H21 The EPL score of subjects will decrease as the years of police experience increase when controlling for years of college education and previous military service experience.

Analysis of covariance was performed for H21 and was not significant. In further analysis, a partial correlation was done looking at EPL scores by years of experience while controlling for college. This yielded a significant relationship ($r = -.130$) ($S = .038$); H21 is therefore retained. Further control was attempted by running EPL by years of experience while controlling for college and military service ($r = -.1151$) ($S = .058$). This seems to indicate that years of experience is a significant factor in EPL perceptions. These two partials indicate that years of college have an interaction effect that, if held constant, allows years of experience

to be a significant variable. Military service, however, has a reverse effect; when controlled for, years of experience move further away from significance.

In summary, an inspection of partial correlations led to identifying a potential relationship between EPL and years of experience and also between years of college and military service ($r = .1309$) ($S = .036$), see Table 4.4. Further exploration through a partial correlation between EPL and years of experience controlling for years of college yielded a $r = -.1295$ ($S = .038$) which is a significant relationship. A similar partial correlation between EPL and years of experience controlling for military service yielded a partial correlation of $r = -.0866$ ($S = .119$) which is not significant. Another test run between EPL and years of experience controlling for both years of college and military service yielded $r = -.1151$ ($S = .058$) which is slightly higher than the significance ($S = .038$), which was obtained when controlling for only college. This indicates that EPL and years of experience have a relationship when college is controlled. However, when controlling for military service alone and the college variable is left to affect the relationship, there is no significance.

Summary of Category Data

One of the main findings of the category data was that the relationship between EPL score and years of experience is near significance at .080 level. However, when college is controlled it becomes significant at the .038 level, thus indicating a strong relationship between years of experience and EPL score that grows stronger as the variable college is controlled.

The EPL mean for patrolmen with no college and patrolmen with upper level college--that is, patrolmen in their junior and senior year of college--are very close to being similar. The EPL mean for patrolmen with graduate college credits drops as much as .40 from the no-college group. This is the lowest EPL mean of all the groups. The EPL mean for patrolmen with lower college--that is, patrolmen in their freshman and sophomore years of college--is the highest of all groups with an increase of .50 above the no-college group and a .90 difference when compared to the graduate-college group.

It appears as though patrolmen with no college perceive their sergeants as moderately competent in most areas of leadership; while patrolmen with one or two years of college view them as highly competent in most areas. Patrolmen with three to four years of college also view their sergeants as moderately competent; while patrolmen with graduate credits view them as least competent in most

areas of leadership.

This can be compared to patrolman with one to four years of experience who see their sergeant as highly competent in most areas of leadership; while patrolmen with five to nine years of experience view them as least competent. Further, patrolmen with ten to fourteen years of experience perceive their sergeant as low to moderately competent and patrolmen with fifteen or more years of experience see them as moderate to highly competent.

CHAPTER V

SUMMARY AND CONCLUSIONS

Introduction

This chapter contains a summary of previous chapters, principal conclusions are listed, discussion of the research is presented, and implications for future research and practice are stated.

Summary

This research has investigated the role perception of 189 patrolmen for their immediate supervisor, the sergeant. This was accomplished by evaluating the leadership ability and role performance of the sergeants by surveying the perceptions of subordinate officers. Differences between the patrolmen's perceptions were then analyzed using years of experience, education, and military service as variables for comparison.

The purpose was to explore the availability of leadership in the sergeant position. This was done in such a manner that insight could be gained about how this position might be utilized to fully meet the agency's goals and to estimate the effectiveness of the leadership given to the patrolmen. The specific objectives in this study were

(1) to gain information about the patrolmen's attitudes and perceptions of leadership, and the selected factors of (a) interaction facilitation, (b) support, (c) work facilitation, and (d) leader goal emphasis; (2) to identify demographic characteristics of the patrolmen that might be of importance in explaining the differences in the perceptions; (3) to examine differences in the patrolmen's responses from different groups, according to (a) years in college, (b) age, (c) years of experience, (d) military service, and (e) years in position; and (4) to test the relationships proposed in the hypotheses.

The literature suggests that the patrolmen holds a unique occupational position which cannot be directly supervised. Also, while working alone the patrolman encounters many situations in which he cannot immediately confer with a supervisor before acting. Another factor of importance is the use of discretion by the patrolman. The application of the authority and power vested in the role of a police officer offers a strong argument for higher education. Over time, it has been acknowledged that the police officer as an authority figure possesses within his discretion the power to influence behavior by invoking a wide variety of actions. Background variables have for this reason been viewed as indicators of present ability and preparedness.

In this study leadership is viewed as a motivating,

enhancing, and purposeful activity. The importance of effective, middle-range leadership is emphasized because, if available, it can clarify the expectations of the agency and relate them to the personal values of the patrolman, thereby integrating with and for him a supportive stance upon which the agency's priorities are based. This orientation provides a frame of reference for the decision-making involved in the diverse role activities.

In examining the concept of stress, all of the reviewed authors seem to agree that the police officer has specific types of occupational stress that can be recognized and diminished if the proper training is provided and the agency has a supportive social-emotional system.

Implications of the literature for the study are based on the assumption that the more educated, more experienced an officer is, the more likely he is to be aware of the circumstances of his position. As such, he will be more willing to acknowledge his limitations, recognize strengths and weaknesses, attempt to identify problem areas and develop solutions based upon understanding that is derived from a variety of different perspectives. In short, he will more actively seek and acquire information in a problematic situation. He will also be more verbal and more critical in scrutinizing the circumstances of his position and he will seek the involvement of others in attempts to bring about change.

The main findings of the study were:

1. There is a positive and significant relationship between EPL and the interaction facilitation skills of the sergeant;
2. there is a positive but nonsignificant relationship between EPL and the support, work facilitation, and the leader goal emphasis of the sergeant;
3. there is a lower EPL score for subjects with no years of college education than for subjects with two years of college education. However, the difference is not significant and the direction was not predicted;
4. there is an equal EPL score for subjects with no years of college and subjects with four years of college education;
5. there is a greater EPL score for subjects with no military service experience than for those with this experience. However, the difference is not significant;
6. there is a significant relationship between the subject's perceptions (EPL score) and his years of police experience;
7. the EPL score is consistently higher for subjects with more years of police experience than for subjects with less years of police experience, up to ten years and then it levels off; and
8. the EPL score of subjects will increase as the years of police experience increase when controlling for years of college education and previous military service experience.

Discussion

The researcher has found that the factor variables (interaction facilitation, support, work facilitation, and leader goal emphasis) are all highly correlated. This is probably due to the interaction facilitation factor being present in each of the other factors. The interaction facilitation skills of the sergeant is a positive indicator of his

leadership ability. This factor serves as a channel for the exchange of information, and the transfer of ideas and understanding between the sergeant and the patrolman. The process by which the sergeant takes action--which is a basic police management concern--involves the giving, asking, clarifying, and maintaining of an open flow of information. In relation to the other factor variables, interaction facilitation skills are essential for each of them to be effective. It is therefore viewed by the researcher as the single most important factor: its significant relationship to leadership was an expected outcome in this study.

Interaction facilitation skills also can be related to the category variables of education and experience. Congruent with other studies, the researcher of this study suggests that the effectiveness of interaction facilitation skills increases with years of college education and years of experience. One could posit that this is due to the exposure and acquisition of knowledge and the heightened awareness and sensitivity to the communication process. An increase in the credibility of the communicator because of status also occurs and this again aids in the effectiveness of interaction facilitation.

The finding that the support factor is positively related to effective leadership suggests that the more frequently a sergeant engages in behavior that gives esteem and builds the self-concept of the patrolman, the value of

the sergeant and patrolman relationship is increased. Also, the patrolmen's willingness to act in response to the sergeant's wishes--not demands--is increased through activation of the norm of reciprocity.

In this study it was felt that the work facilitation factor, if performed effectively, would increase the accomplishment of agency objectives with a minimum of confusion and wasted time. It was assumed that a sergeant who is orientated in this manner would encourage "openness" in patrolmen so that problems were brought to his attention at an early time, before much energy had been wasted by the unit. This factor, which is found in the analysis, contains items reflecting the sergeant's use of personnel and resources. These actions probably had the effect of discouraging or encouraging upward communication from the field. To the extent that delay is incurred in the initiation of action toward relieving a problem unit energy is wasted. The norm of distributive justice can be applied to the effort the unit expends. If inappropriate use of talent and time is demonstrated it could lead to decreased satisfaction with both the sergeant and the job.

The researcher suggests that the fourth factor--leader goal emphasis--presents a problem for the sergeant because it involves making choices by selecting areas of priority. For effective leadership, the unit's norm of equitable importance has to be taken into consideration.

A study of Evans (1970;277-298) indicates that supervisor style influences the worker's beliefs about the purposefulness of their work behavior in accomplishing desired goals.

In this study the appropriateness of the sergeant's goal emphasis was evaluated. Task oriented behaviors for attaining desired goals occurred more frequently among sergeants who were rated high in leadership ability.

All of the category variables (years of college, years of experience, and military experience) were highly correlated. This is probably due to the strong influence of experience upon the other categories. Years of experience affects the attitudes and perceptions of patrolmen about their sergeants to a significant degree. Experience can be viewed as practical learning. As such, it involves day-to-day interaction within the agency. This may also be called "learning the ropes." In addition, it establishes status with credibility, confidence, and proficiency.

Experience appears to facilitate a subjective assessment that has an actual reality basis. This can be attributed to the availability of information, personal self-assurance, and a specific understanding of the factors that encourage or inhibit agency goal accomplishment.

Education seems to encourage the critical scrutiny of the agency and a more open expression of its short comings. It is limited to comparisons with other similar agencies. In this manner differences are identified from which objective

statements can be made about comparable goals, standards, expectations, etc. It is based on a broader understanding of the agency and its function. Although the literature on education for the policemen is somewhat divided in propositions and findings, the logical basis for it is strong. The stated purpose of higher education presents a persuasive argument: to increase critical thinking ability, awareness and sensitivity, objectivity and reasoned thinking. In this study, the education variable was not consistent from group to group. This implies the presence of interaction from other variables that are impacting on it. One such factor has to be the atypical nature of the population under study. The intensive screening procedure, utilized to insure that policemen have at least a minimal competency in communication and human relation skills, skews the results of this investigation by minimizing differences that are much greater in the general population.

Implications and Conclusions

The researcher concludes from the findings of the study that education and experience do play an important part in how patrolmen perceive the effectiveness of their sergeants. The more education that patrol officers have, the more of a tendency to critically evaluate the behavior, actions, and procedures of their supervisor. Likewise, experience is also a factor in whether the supervisor is evaluated negatively or positively. The officers with the least

amount of experience evaluated their supervisors in a more positive vein. These two findings have implications for both the individual officer and the functioning of his organization.

On the one hand, college educated officers are able to intellectually recognize the short-comings of their organization and their first line supervisors. The suggestions he makes for organizational improvement can benefit the agency; the organization can be updated and the supervisory process improved. However, if the first line supervisor is not favorably disposed to listening to the patrol officers' suggestions or if the upper administrative levels are not concerned about change then this can create stress for the patrol officers. In effect the college educated patrol officers may not blame themselves for the problems and become self-depreciating, but they may blame the organization. This can cause stress and frustration for the officer. The officer may resign from the organization and find employment that is more challenging and conducive to his organizational orientation. However, if the officer does not have the option of leaving, the stress created may increase conflict between supervisee and supervisor.

The above situation is not totally unmanageable however because often what appears to be an unconcerned supervisor or restrictive organizational policies exist due to a lack of awareness of the problems. The researcher

suggests that organizations can deal with supervisor/supervisee interpersonal problems with a specific stress-management approach that allows employees to make suggestions and follow the suggestions through to fruition if the suggestions are workable.

In addition, police organizations can employ a mental health worker to aid officers in dealing with interpersonal problems and to adjust to the frustrations that may develop due to agency policies. The mental health worker would not only provide direct counseling and assistance to the officers but could be used as a referral source for specific kinds of problems such as alcoholism. Also a rest and recuperation program could be instituted where patrol officers who are involved in highly stressful activities, like under-cover assignments or working in highly stressful areas like the inner city, could be transferred and rotated periodically to less stressful situations.

It is also concluded that the sergeant's role should be well defined and understood by his supervisees. If the supervisees are aware of the functions, duties, problems, and orientation of their supervisor, role incongruity can decrease and create a basis for cooperation, understanding, and joint problem solving. As the researcher indicated in Chapter II, the greater the homogeneity among position incumbents the more concensus they will have in their perceptions of other positions in the agency. Usually, the

longer the members of an agency have interacted with one another the more consensus there will be and the more similar will be their perceptions. The problem, as alluded to earlier, is however that officers with little experience do not understand the role and functions of their supervisor and this causes role incongruence. In addition, the highly educated police officer has learned from textbooks the theory of management and supervision and once on the job often finds that his immediate supervisor does not practice these principles; this also causes role incongruity. There will be role incongruity between officers of the same rank because patrol officers in most police departments do not have equal education and/or experience. Some patrol officers have as much as graduate degrees while other patrol officers have no college at all.

American policing in the future will continue to experience the problem of disproportionate amounts of education and experiences among its line officers. Each particular police agency will have to deal with this problem by having a specific training and orientation program that deals with the varying perceptions and experience of the line officer. In this regard many of the non-college educated line officers are not as articulate as their college educated counterparts. This lack of articulation affects their communication skills and makes it difficult for them to both communicate with their supervisor and articulate the

frustration and stress that they are experiencing both on the job, in relation to the public, and in their interactions with their supervisors.

Another conclusion is that supervisors can also benefit from training that stimulates an understanding of the communication process as well as being exposed to techniques that can improve their articulation ability. Traditional police supervisors have often depended upon the authority of their position rather than the skills of their imagination in dealing with their supervisees. In many cases when a police supervisor is confronted by a patrol officer with a new idea or a new procedure the common response is, "I am the supervisor, you are the supervisee. We have been doing it this way for years and we will continue to do it this way." This is not only stifling for the communication process but it also creates animosity and hard feelings between supervisor and supervisee. The traditional orientation to supervision is often a reaction to the "macho" phenomena, wherein the supervisor is reluctant to positively motivate and praise an employee because it may be seen as a sign of weakness in the supervisor. A training program and process which helps the supervisor deal with this reluctance to positively motivate through compliments can help the supervision process and create an atmosphere of cooperation, especially between supervisor and college educated supervisee.

The last conclusion is that training which improves the communication process, education of individual officers, and stress management programs which may include rest and recuperation and a mental health worker, will be meaningless unless there is support from the upper administrative levels. The upper administration will have to endorse a well defined and strong role definition for the sergeant and support the middle manager in his daily operation. The upper administration should encourage the positive use of the sergeant by patrol officers. The upper administration should also support the suggestions of line officers if they are workable, feasible, and fiscally responsible.

APPENDIX A

APPENDIX A

QUESTIONNAIRE

Please answer each statement listed below as it applies to first line supervisors in the LPD. In answering the questions, please print on the dark line the one letter that best describes the behavior of first line supervisors (or yourself if a supervisor).

To what extent do first line supervisors in the LPD engage in the following kinds of behavior?

- A. Always
- B. Almost always
- C. Frequently
- D. Occasionally
- E. Almost never
- F. Never

Statements:

1. Gives officers the feeling that their work is an "important" activity. _____
2. Gets officers to upgrade their performance. _____
3. Gets support from command when he makes a decision. _____
4. Gives support and encouragement to formal education. _____
5. Solicits input from officers he supervises when a decision needs to be made. _____
6. Gives officers the feeling that they can make a significant contribution toward improving the performance of the LPD. _____
7. Stresses his personal rather than professional consideration in his decisions. _____
8. Gets backing from the LPD administration.
9. Displays integrity in his behavior. _____
10. Has constructive suggestions to offer officers in dealing with their major problems. _____
11. Procrastinates in decision making. _____
12. Takes a strong interest in the professional development of the officers he supervises. _____
13. Takes an interest in the personal welfare of the officers he supervises. _____

Continue, print one of the following letters: A. Always
B. Almost always
C. Frequently
D. Occasionally
E. Almost never
F. Never

14. Treats officers he supervises as professional workers. _____
15. Attempts to reward and compliment officers who are doing an outstanding job. _____
16. Makes those who work for him feel inferior. _____
17. Discourages officers who want to try new ideas. _____
18. Develops a 'we' feeling when working out problems. _____
19. Requires officers to engage in unnecessary paper work. _____
20. Displays inconsistency in decision making. _____
21. Helps eliminate weaknesses in the LPD. _____
22. Reprimands officers whose ideas disagree with his own. _____
23. Maximizes the different skills found in his supervisees. _____
24. Helps officers to understand the sources of important problems they are facing. _____
25. Displays a strong interest in improving the quality of the LPD. _____
26. Conveys an impression of leadership ability. _____
27. Defines clearly the objectives of his officers' duties. _____
28. Helps each officer understand the quality and amount of work expected of him. _____
29. Makes sure each officer understands how his work relates to the other areas of the department. _____
30. Conveys an impression of always being ready to talk with his officers. _____
31. Acts impartially and without bias or favoritism. _____
32. Disciplines all officers against same standards. _____
33. Takes responsibility for mistakes without "buck passing." _____

Continue, print one of the following letters: A. Always
 B. Almost always
 C. Frequently
 D. Occasionally
 E. Almost never
 F. Never

34. Defends and explains unpopular policies of his superiors to his officers. _____
35. Shows unwillingness to cooperate with other areas of the department.

36. Earns the trust of officers by being honest and fair in dealing with them. _____
37. Evaluates supervisees fairly. _____

The purpose here is to explore how well first line supervisors in the LPD are able to carry out various aspects of their job. Please answer the following statements by circling the one letter which best represents your feeling.

How would you rate the performance of the first line supervisors in the LPD in each of the following areas:

A. Outstanding
B. Excellent
C. Good
D. Fair
E. Poor
F. Very poor

Areas of Administrative Behavior:

- | | |
|--|-------------|
| 38. Handling delicate interpersonal situations | A B C D E F |
| 39. Working with other police and community agencies | A B C D E F |
| 40. Getting his officers to use new methods and procedures | A B C D E F |
| 41. Directing the work of his officers | A B C D E F |
| 42. Cutting "red tape" when fast action is needed | A B C D E F |
| 43. Communicating the objectives of the LPD's program to his officers | A B C D E F |
| 44. Improving the performance of his <u>inexperienced</u> officers | A B C D E F |
| 45. Getting his <u>experienced</u> officers to upgrade their performance | A B C D E F |

Continue, circle according to the following:

A.	Outstanding
B.	Excellent
C.	Good
D.	Fair
E.	Poor
F.	Very poor

- | | |
|--|-------------|
| 46. Giving leadership to his officers | A B C D E F |
| 47. Developing and maintaining morale among his officers | A B C D E F |
| 48. Revising procedures in the light of new departmental orders | A B C D E F |
| 49. Keeping his shift running smoothly | A B C D E F |
| 50. General planning for the unit | A B C D E F |
| 51. Knowing about the strength and weaknesses of his officers | A B C D E F |
| 52. Getting his officers to coordinate their activities | A B C D E F |
| 53. Knowing about the strength and weaknesses of the department | A B C D E F |
| 54. Listening to problems, complaints, and suggestions from his officers | A B C D E F |
| 55. Taking action to improve operating and working conditions for his officers when possible | A B C D E F |
| 56. "Going to bat" for officers with higher authority when necessary | A B C D E F |

BIBLIOGRAPHY

BIBLIOGRAPHY

Books

- Ahern, J. F. Police in trouble. New York: Hawthorn Books 1972.
- Bandura, A., & Walters, R. H. Social learning and personality development. New York: Holt, Rinehart & Winston, 1963.
- Bass, B. M. Leadership, psychology, and organizational behavior. New York: Harper & Brothers, 1960.
- Berkley, G. E. The democratic policeman. Boston: The Beacon Press, 1969.
- Bordua, D. (Ed.) The police: Six sociological essays. New York: John Wiley & Sons, 1967.
- Chevigny, P. Police power. New York: Pantheon Books, 1969.
- Clark, D. E., & Chapman, S. G. Forward step: Educational backgrounds for police. Springfield: Charles C. Thomas, 1966.
- Cohen, B., & Chaiken, J. M. Police background characteristics and performance: Summary. New York: The Rand Institute, 1973.
- Fiedler, F. E. Interpersonal perception and group effectiveness. In Tagiuri & Petrullo (Eds.), Person, Perception, and Interpersonal Behavior. Stanford: Stanford University Press, 1958.
- Fiedler, F. E. The contingency model: A theory of leadership effectiveness. In Proshansky & Seidenberg (Eds.), Basic Studies in Social Psychology. New York: Holt, Rinehart & Winston, 1965.
- Fosdick, R. American police system. New York: The Century Company, 1920.
- Friedman, M., & Roseman, R. H. Type A behavior and your heart. Conn.: Fawcett Publications, 1974.
- Fuld, L. F. Police administration. New York: C. P. Putnam & Sons, 1909.

- Fuld, L. F. Police administration. Montclair, New Jersey: Peterson Smith Publishing Company, reprinted in 1971 (originally published in 1909).
- Gellerman, S. W. Motivation and productivity. New York: American Management Association, 1963.
- Gross, N. C., & Herriott, R. E. Staff leadership in public schools: A sociological inquiry. New York: John Wiley & Sons, 1965.
- Gross, N. C., Mason, W. S., & McEachren, A. W. Explorations in role analysis: Studies of the school superintendency. New York: John Wiley & Sons, Inc., 1965.
- Halpin, A. W. The leadership behavior of school superintendents. Chicago: Midwest Administration Center, University of Chicago, 1959.
- Hersey, P., & Blanchard, K. H. Management of organizational behavior: Utilizing human resources. New Jersey: Prentice Hall, Inc., 1977.
- Katz, D., & Kahn, R. L. The social psychology of organizations. New York: John Wiley & Sons, Inc., 1966.
- Klotter, J. C. Techniques for police instruction. Springfield, Ill.: Charles & Thomas, 1971.
- LaFave, W. R. Police discretion. In Richard Quinney (Ed.), Crime and Justice in Society. Boston: Little, Brown & Company, 1969.
- Levinson, D. J. Role, personality, and social structure. In Coser & Rosenberg (Eds.), Sociological Theory. New York: McMillan & Company, 1967.
- Levinson, H. Executive stress. New York: Harper & Row, 1975.
- Likert, R. New patterns of management. New York: McGraw-Hill Book Company, 1961.
- Likert, R. The human organization. New York: McGraw-Hill Book Company, 1967.
- Lindgren, H. C. An introduction to social psychology. New York: John Wiley & Sons, Inc., 1973.
- McGregor, D. The human side of enterprise. New York: McGraw-Hill Book Company, 1960.

- McNamara, J. H. Uncertainties in police work: The relevance of police recruits' background and training. In D. Bordura (Ed.), The Police: Six sociological essays. New York: John Wiley & Sons, Inc., 1967.
- Merton, R., & Barber, E. Sociological ambivalence. In E. A. Tiryakian (Ed.), Sociological Theory, Values, and Sociocultural Change. New York: Harper & Row, 1967.
- Niederhoffer, A. Behind the shield. Garden City: Doubleday & Company, Inc., 1967.
- Niederhoffer, A., & Blumberg, A. S. The ambivalent force: Perspective on the police. Waltham, Mass.: Xerox Publishing, 1970.
- Parsons, T. The social system. Glencoe: The Free Press, 1951.
- Reiss, A. J. Jr. Police brutality: Answers to key questions. In A. Niederhoffer & A. S. Blumberg (Eds.), The Ambivalent Force: Perspectives on the Police. Waltham, Mass.: Xerox Publishing, 1970.
- Reiss, A. J. Jr. The police and the public. London: Yale University Press, 1971.
- Riecken, H. W., & Homans, G. C. Sociological aspects of social structure. In G. Lindzey (Ed.), Handbook of Social Psychology, Volume 2. Cambridge: Addison-Wesley Publishing Company, 1954.
- Saunders, C. Upgrading American police: Education and training for better law enforcement. Washington: The Brookings Institution, 1970.
- Scheffler, I. Philosophical models of teaching. In Scott & Foresman (Eds.), Problems and Issues in Contemporary Education. Glenview, Ill.: Scott, Foresman, & Company, 1968.
- Selye, H. The stress of life. New York: McGraw-Hill Inc., 1976.
- Shanahan, D. T. Patrol administration: Management by objectives. Boston: Hallbrook Press, 1975.
- Smith, A. B. & Locke, B. Police who go to college. In A. Niederhoffer & A. S. Blumberg (Eds.), The ambivalent force: Perspectives on the police. Mass.: Ginn & Company, 1970.

- Sterling, J. W. Changes in role perceptions of police officers. Gaithersburg, Maryland: International Association of Chiefs, 1972.
- Stodgill, R. M. & Coons, A. E. Leader behavior: Its description and measurement. Ohio State University, Bureau of Business Research Monogr. No. 88, 1957.
- Tannenbaum, R., Weschler, R. I., & Massarik, F. Leadership and organization: A behavioral science approach. New York: McGraw-Hill Book Company, 1959.
- Terry, G. R. Principles of management, third edition. Homewood, Ill.: Richard D. Irwin, Inc., 1960.
- Trojanowicz, R. C. The environment of the first line police supervisor. Englewood Cliffs, N. J.: Prentice-Hall Inc., 1980.
- Tuchman, B. W. The missing element. In the American Association for Higher Education, In Search of Leaders. Washington, D. C., 1967.
- Turner, W. W. The police establishment. New York: G. P. Putman & Son, 1968.
- Vollmer, A. The police and modern society. Berkeley: University of California Press, 1936.
- Vollmer, A. The criminal. Brooklyn: Foundation Press, 1959.
- Vollmer, A., & Parker, A. E. Crime and the state police. Berkeley: University of California Press, 1935.
- Wilson, J. Q. Varieties of police behavior. Cambridge, Mass.: Harvard University Press, 1968.

Government Documents

Ashburn, F. G. Changing the rhetoric of professionalism.
In a report of the National Institute of Law
Enforcement and Criminal Justice, Innovation
in Law Enforcement. Washington, D. C.: United
States Government Printing Office, 1973.

Baehr, M. E., Furcon, J. E., & Froemel, E. C. Psychological
assessment of patrolmen qualifications in relation
to field performance. Washington, D. C.: United
States Government Printing Office, 1968.

Lejins, P. P. Introducing a law enforcement curriculum at
a state university: A report of the National
Institute of Law Enforcement and Criminal Justice.
Washington, D. C.: United States Government
Printing Office, 1970.

McManus, G. P., & Griffin, J. I. Police training and per-
formance study. United States Department of
Justice, Washington, D. C.: United States Government
Printing Office, 1970.

National Advisory Committee on Criminal Justice. Standards
and Goals: Report on the police. Washington, D.
C.: United States Government Printing Office, 1973.

National Commission on Law Observance and Enforcement. Report
on the police: Wickersham Commission, Volume 14.
Washington, D. C.: United States Government Printing
Office, 1931.

Police Foundation; Education and Training Task Force Report.
Unpublished report of the Police Foundation, 1972.

President's Commission on Law Enforcement and Administration
of Justice. The Challenge of Crime in a Free
Society. Washington, D. C.: United States Govern-
ment Printing Office, 1967.

_____. Task Force Report: The Police. Washington, D.
C.: United States Government Printing Office, 1967.

Periodicals

- Anderson, C. A. Locus of control, coping behaviors, and performance in a stress setting: A longitudinal study. Journal of Applied Psychology, 1977, 62 (4), 446-451.
- Axelbred, M., & Valle, J. South Florida's approach to police stress management. Police Stress, Spring, 1979, 13-14.
- Bowers, D. G., & Seashore, S. E. Predicting organizational effectiveness with a four-factor theory of leadership. Administrative Science Quarterly, 1966, 11, 238-263.
- Brandstatter, A. F. Education serves the police, the youth, the community. Police Chief, 1966, 33, 13-14.
- Caretti, R., & Green, A. E. Improving psychological services to police officers: A management problem. Police Stress, Fall, 1979, 15-16.
- Carey, H. H. Consultative supervision and management. Personnel, 1975, 18(5), 283.
- Chapman, S. G. Developing personnel leadership. Police Chief, 1966, 33, 26.
- Cottrell, L. S. The adjustment of the individual to his age and sex roles. American Sociological Review, 1949, 14, 617-620.
- Danto, B. L. Police suicide. Police Stress, Fall, 1978, 32-40.
- Evans, G. The effect of supervising behavior on the path-goal relationship. Organizational Behavior and Human Performance, 1970, 5, 277-298.
- Fiedler, F. E. Leadership experience and leader performance: Another hypothesis shot to hell. Organizational Behavior and Human Performance, 1970, 5, 1-14.
- Germann, A. C. Education and professional law enforcement. Journal of Criminal Law, Criminology, and Police Science, 1967, 58, 603-609.

- Glass, D. C. Stress competition and heart attacks. Psychology Today, December, 1976, 53.
- Hoffman, P., & Maier, N. R. F. Quality and acceptance as goals of leaders and members. Journal of Personality and Social Psychology, 1967, 6, 175-182.
- Hudzik, J. K. College education for police: Problems in measuring component and extraneous variables. Journal of Criminal Justice, 1978, 6, 69-81.
- Jagiello, R. J. College education for the patrolman: Necessity or irrelevance. Journal of Criminal Law, Criminology, and Police Science, 1971, 62, 114.
- Jameson, S. Quest for quality in police work. Journal of Criminal Law, Criminology, and Police Science, 1966, 57, 211.
- Kent, D. A., & Eisenberg, T. E. The selection and promotion of police officers: A selected review of recent literature. Police Chief, February, 1972, 24-29.
- Kiessling, R. J., & Kalish, R. A. Correlates of success in leaderless group discussion. Journal of Social Psychology, 1961, 54, 359-365.
- Kroes, W. H., & Gould, S. Job stress in policeman: An empirical study. Police Stress, Spring, 1979, 9-10, 44-46.
- Law Enforcement Assistant Administration: Nixon Signs Bill Extending LEAA. LEAA News Letter, 1973, 3(7).
- Levy, H. Predicting police failures. Journal of Criminal Law, Criminology, and Police Science, 1967, 58, 265-276.
- Lewis, A. E. Police halt push for college grads. The Washington Post, December, 1970, 17, D-1.
- Livermore, J. M. Policing. Minnesota Law Review, 1971, 55, 649-730.
- Mann, R. D. A review of the relationship between personality and performance in small groups. Psychological Bulletin, 1959, 56, 241-270.

- Preston, M. G., & Heintz, R. K. Effects of participatory versus supervisory leadership on group judgment. Journal of Abnormal Sociology and Psychology, 1949, 44, 345-355.
- Selye, H. The stress of police work. Police Stress, Fall, 1979, 7-8.
- Smith, A. B., Locke, B., & Walker, W. Authoritarianism in college and non-college oriented police. Journal of Criminal Law, Criminology, and Police Science, 1968, 59, 132.
- Smith, A. B., Locke, B., & Fenster, A. Authoritarianism in policemen who are college graduates and non-college police. Journal of Criminal Law, Criminology, and Police Science, 1970, 61, 313-315.
- Spencer, G., & Nichols, R. A study of Chicago police recruits: Validation of selection procedures. Police Chief, 1971, 38(6), 50-55.
- Stouffer, S. A. An analysis of conflicting social norms. American Sociological Review, 1949, 14, 708-717.
- Stratton, J. G. Police stress: An overview, Part 1. Police Chief, 1978, 4, 58.
- Warren, R. L. Social disorganization and the interrelationship of cultural roles. American Sociological Review, 1949, 14, 84.
- Weiner, N. L. The effect of education on police attitudes. Journal of Criminal Justice, 1974, 2, 317-328.
- Wilson, J. Q. What makes a better policeman? Atlantic, 1969, 223, 131.
- Wilson, J. Q. Is college necessary for police? The Washington Post, October, 1974, 31.
- Witte, R. P. The dumb cop. Police Chief, January, 1969, 37-58.
- Wolk, S., & Bloom, A. Locus of control, situational stress, and performance accuracy. Journal of Personality, June, 1978, 279-298.

Other Sources

Beecher, H. K. Stress. Time-Life Series, 1978.

Burger, W. E. The urban police function. New York:
American Bar Association, 1972.

Kerner Report. United States National Advisory Committee
on Civil Disorders.

Long. From a lecture at Hillsdale College, 1978.

Report of the National Advisory Commission on Civil Disorder.
New York: Bantam Books, March, 1968.

Weikert, P. S. The social and psychological determinants
of adolescent sexual behavior. Unpublished
doctoral dissertation, Michigan State University,
1978.

Woolf, H. B. Webster's New Collegiate Dictionary. Spring-
field, Mass.: G. & C. Merriam Company, 1975.