

AN EXPLORATION OF THE EFFECTS
OF MEMBER GOAL PREFERENCES ON
A BASIC TRAINING CURRICULUM
IN A STATE POLICE AGENCY

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
BRUCE TREVOR OLSON
1971



This is to certify that the

thesis entitled

An Exploration of the Effects of Member Goal
Preferences on a Basic Training Curriculum
in a State Police Agency

presented by

Bruce T. Olson

has been accepted towards fulfillment
of the requirements for

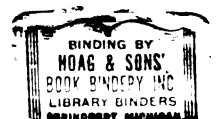
Ph.D. degree in Social Science

A handwritten signature in dark ink, appearing to read "K. L. Gibson", written over a horizontal line.

Major professor

Date June 17, 1971

O-7639



ABSTRACT

AN EXPLORATION OF THE EFFECTS OF MEMBER GOAL PREFERENCES ON A BASIC TRAINING CURRICULUM IN A STATE POLICE AGENCY

By

Bruce T. Olson

Statement of Problem. The study's objective was to determine if, in a complex organization, goal preference is associated with preferences for emphasizing curriculum elements in a basic training program. Since all social systems have at least one goal, and since not all system members will prefer that goal or goals equally, it is of considerable sociological importance to discover whether goal preference and distinctive perspectives on system structures and processes are related.

Procedures. A questionnaire was distributed to all members of a state police agency; seventy-one percent of the potential respondents (1,766) returned usable questionnaires. No crucial non-respondent problems were identified. The questionnaire included 89 curriculum elements (e.g., "securing and protecting a crime scene") used, or which could be used, in the agency's basic training program. Respondents were asked to rate each item on a five-point, Likert-type, emphasis scale ("great emphasis" to "no emphasis, should not be included"). Respondents were also asked to indicate which one of two types of police activities they most preferred:

"activities relating mainly to criminal law enforcement and investigation" or "activities relating mainly to traffic law enforcement and investigation". Goal preference was defined as declared preference for either of the two types of activities. The study's major hypothesis anticipated that certain curriculum elements, closely related to each of the two goals, would distinguish, at statistically significant levels, between those preferring crime or those preferring traffic goals. This hypothesis was tested only on troopers, corporals, sergeants, and staff sergeants because it was felt higher ranking officers' perceptions of the daily trooper work role would be critically different from perceptions held at the supervisory and trooper levels. In this latter group, 773 officers preferred crime and 267 preferred traffic goals.

Several subsidiary hypotheses were developed which anticipated that goal preference would result in distinctive curriculum element preferences, and these hypotheses were tested on two special groups of respondents (high crime and high traffic goal preferring officers) who were identified by discriminant analysis. These two groups were viewed as "ideal types" who could be studied under, so to speak, "high magnification".

Two statistical procedures were used. First, stepwise discriminant analysis identified 12 curriculum elements which, at a significance level of 0.05 or better, distinguished officers who preferred crime goals from those who preferred traffic goals. Discriminant analysis permitted each of the 89 curriculum elements to be used as predictor variables;

criterion variables were reported goal preferences. Besides identifying which respondents were correctly and incorrectly classified (according to their characteristic goal group curriculum element emphasis preferences), discriminant analysis produced a probability score for each respondent which indicated the likelihood of his being correctly or incorrectly classified into his preferred goal group. This permitted 56 and 33 officers to be designated respectively as particularly high crime and high traffic goal preferring respondents.

A second statistical procedure was employed on each of these two groups; mean response scores and Leik (an ordinal measure of consensus) scores were computed for each of these two high goal preferring groups of officers.

Findings. Twelve curriculum elements were identified which distinguished crime from traffic goal preferring troopers, corporals, sergeants, and staff sergeants. Most of these elements, as the major hypothesis anticipated, were obviously related to their respective goals. Three subsidiary hypotheses were accepted as valid from the data produced by the second statistical procedure, suggesting that crime goal preferring officers, as predicted, generally differ from traffic goal preferring officers in curriculum element emphasis preference.

Conclusions and Recommendations. The study's major conclusion was that it is possible to "track" goal preference through a social system and that the method used in this

study may be useful to social scientists who want to study goal-related social system tensions. Recommendations concerning further research and the police work role are offered.

AN EXPLORATION OF THE EFFECTS OF MEMBER GOAL
PREFERENCES ON A BASIC TRAINING CURRICULUM
IN A STATE POLICE AGENCY

By

Bruce Trevor Olson

A THESIS

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

DOCTOR OF PHILOSOPHY

College of Social Science

1971

© Copyright by
BRUCE TREVOR OLSON
1971

AUTHOR'S PREFACE

This is a study of certain relationships between organizational goals and the content of an entry socialization program. The findings reported represent a portion of a project conducted for the Michigan State Police in 1969.

This investigation is perhaps the first study of its kind undertaken in a law enforcement setting. It is, however, addressed to social scientists and all others who may be interested in an empirical analysis of goal preferences and how these preferences may be related to specific social system processes, in this case the content of a basic socialization curriculum.

Many people contributed to this study, including hundreds of dedicated officers who responded to a questionnaire especially designed for this project. Colonel Fredrick E. Davids, former Michigan State Police Director, provided great assistance in this project; his immediate subordinates were similarly helpful. Captain George Halverson, Training Division Commander, was a patient and imaginative advisor. Other Training Division staff members helped the writer minimize design problems by providing insight into their organization.

Captain John R. Plants (now Director of the Michigan State Police) and his computer staff provided valuable assistance and expedited the study greatly. Mrs. Madeline Daniher

and Robert Zajac typed and printed, respectively, a visually attractive questionnaire.

Design assistance was obtained from Dr. Duane Gibson, Director, Institute for Community Development, Michigan State University. His secretary, Mrs. Almeda Ritter, and her co-workers contributed much to the study from its beginning. A faculty research grant from The University of Tulsa and typing assistance from Mrs. Sandra Monical of the University's Department of Sociology and Anthropology also contributed to the study.

Important assistance and encouragement in the data analysis phase of the project were provided by Mr. Javier Rolon, President, Management-Computer INTERLOCK, Inc.; Mr. Jerry Malone of INTERLOCK's Governmental Services Division; and Mr. Robert Jackson, a University of Tulsa sociology major.

Dr. Frederick Simpson, College of Education, University of Tulsa, graciously conferred with the writer regarding the discriminant function, which was the major statistical procedure employed in this report.

Throughout the project's duration, my wife and family provided uncomplaining support in many ways, often at the expense of their own goal preferences. Professors Carl Frost, Donald Olmsted, and Charles Press, who (with Dr. Duane Gibson) comprise the writer's doctoral committee, were major sources of support and encouragement through the writer's academic career at Michigan State University.

Other people assisted the writer in many direct and indirect ways in this study, but none of these, or those above, are responsible for the study's deficiencies--these are solely attributable to the writer.

CONTENTS

	Page
TITLE PAGE	i
COPYRIGHT.	i
AUTHOR'S PREFACE	ii
LIST OF TABLES	vii
LIST OF ILLUSTRATIONS	ix
 Chapter	
I. INTRODUCTION.	1
Need for the Study.	6
Limitations of the Study.	14
The Nature of the Organization and Its Basic Training Program.	16
Orientation of the Study and Definition of Terms.	17
Organization of The Study	18
 II. BACKGROUND FOR THE CONCEPTION OF THE STUDY. . .	19
Introduction.	19
Complex Organizations and Goals	21
Role and Socialization Theory	30
The Police Work Role	36
Assumptions and Hypotheses of the Study . .	43
Some Implications of Theory for Method. . .	45
Summary.	46
 III. METHODS AND PROCEDURES.	48
Introduction.	48
Brief Chronology of the Project	49
Questionnaire Development	53
Questionnaire Distribution and Preparation for Data Processing	66
Selection of Statistical Procedures	70
Discriminant Analysis.	72
Mean and Leik Scores	80

Chapter	Page
IV. THE RESEARCH SITE: THE MICHIGAN STATE POLICE	82
Introduction	82
A Brief History.	83
The Legal Mandate of the Department.	84
Organizational Structure	86
Structural Characteristics.	86
Specialization	87
District Organization	94
The Work of the Michigan State Police.	94
The Department's Basic Training Program.	97
The Thirteen Week Curriculum.	99
The Correspondence Course.	101
The Role Model Program.	102
The Advanced Basic Training School.	106
Summary.	108
V. FINDINGS AND ANALYSIS	110
Introduction.	110
Discriminant Analysis Findings	111
An Analysis of Mean and Leik Curriculum Element Emphasis Preference Scores.	125
Hypotheses Tested With Mean and Leik Scores.	137
Additional Mean and Leik Findings	140
Response Set Indicator.	146
Summary.	147
VI. SUMMARY AND CONCLUSIONS	149
Introduction.	149
Summary.	149
Conclusions.	154
BIBLIOGRAPHY	168
APPENDICES	A-1

LIST OF TABLES

Table	Page
1. Distribution of Michigan State Police Sworn Personnel by Rank, Bureau, and Numbers Assigned to Headquarters and Districts. . . .	87
2. Distribution of Sworn Personnel by Major Divisions and Units	89
3. Distribution of Michigan State Police Sworn Personnel by Rank	91
4. Analysis of Selected Activities by Manhours for 1968	97
5. Analysis of Major Components of the Michigan State Police Recruit School Curriculum by Distribution of Hours	99
6. Curriculum Elements Significant at 0.05 and Better	112
7. Means and Standard Deviations for the Twelve Discriminating Curriculum Elements.	115
8. Number of Respondents Correctly or Incorrectly Classified Into Goal Groups	118
9. Values of D^2 and D at Each of Twelve Steps. . .	120
10. Means and Leik Scores for High Crime and High Traffic Goal Preferring Officers and All Respondents	125
11. Curriculum Elements Differentiating High Crime and High Traffic Goal Officers by 0.75 or Greater	140
12. Eleven Curriculum Elements Receiving Similar Emphasis Preference Values by High Crime and High Traffic Goal Respondents	144
13. Number of Sworn Officers Assigned to Each District and Number and Percent of Usable Responses by Rank and District	D-7

Table	Page
14. Distribution of Respondents by Unit to Which Assigned Compared to Actual Number of Sworn Personnel by Unit	D-10
15. Distribution of Respondents by Eight Length of Service Categories	D-10
16. Distribution of All Sworn Personnel Contrasted to Distribution of Respondents by Eight Age Categories	D-11
17. Crime Versus Traffic Goal Preferences: Numbers and Percentages	D-12
18. Goal Preferences of All Respondents by District: Numbers and Percentages	D-13
19. Goal Preference by Rank of Respondent	D-14
20. Goal Preference by Assignment	D-14
21. Goal Preference by Level of Education	D-15
22. Goal Preference by Length of Service	D-16
23. Goal Preferences of Post Commanders by District	D-16
24. Respondents' Understanding of Purpose of Questionnaire	D-17
25. Degree to Which Respondents Enjoyed Completing the Questionnaire	D-17
26. Respondents' Estimate of Questionnaire Difficulty	D-18
27. Respondents' Evaluation of Individual Phases of Trooper Basic Training and Program as a Whole	D-19

LIST OF ILLUSTRATIONS

Figure	Page
1. Group Mean Distance At Step 1	122
2. Group Mean Distance At Step 12	123

Chapter I

INTRODUCTION

Some years ago, while working as a city policeman, the writer became convinced that his fellow officers could be informally classified into two groups of people, so far as their working personalities were concerned. One group--by far the largest in size--consisted of policemen who found criminal investigation and law enforcement the most challenging segment of their overall work role.

The other group seemed to consist of officers who found the traffic investigation and law enforcement portion of the work role more interesting. This was a much smaller group whose members seemed more homogeneous in their attitude and behaviors than the criminal work role preferring officers.¹

Any classification scheme, of course, can be carried too far. In fact, the writer recognized that all officers found some aspects of both task categories (crime or traffic) motivating. Similarly, not all officers within one work role group

¹Briefly, traffic work role preferring officers seemed more "bureaucratic" in their attitudes and behavior, in contrast to crime work role preferring officers who seemed, in general, somewhat less bureaucratized. More will be said in Chapter II about the apparent differences between these two role categories. At this point, however, the writer emphasizes that this grouping of officers into these two categories is entirely subjective, being based on no "hard" data.

found all of its tasks equally interesting. Also, it seemed likely that a few officers found both task categories equally motivating. And, finally, some officers apparently found neither of the two task categories very interesting, judging by the amount and kind of attention they frequently received from their supervisors.

While this rough sorting system was, no doubt, of limited value, it, nevertheless, appeared to have some merit for analyzing officers' behaviors in a variety of situations; for example, different patterns of officer-citizen interaction, supervisor-subordinate relationships, officer-officer relations, etc.

The idea of sorting people in their work situations according to their orientations toward their work role is, of course, fairly commonplace in social science. Some of these conceptions will be reviewed in the next chapter. Unfortunately, very few social scientists have employed this notion in empirical research. Moreover, there seems to be no reported attempt to relate preferences for specific types of organizational activities to other aspects of one's perspectives of organizational structures and processes.

When, in the spring of 1969, the writer was invited to assist the Michigan State Police² in evaluating their basic training program, his earlier interest in the crime-traffic goal preference phenomenon was renewed. Since MSP officers

²The abbreviation "MSP" will be used, generally, in this study instead of the agency's full, formal designation.

perform (or are responsible for those who do perform) both crime and traffic activities, this agency (unlike police departments where separate crime and traffic divisions exist) seemed to be an ideal setting for studying the crime-traffic goal preference concept. It was particularly fortunate, in terms of the writer's theoretical interest, that the MSP training division staff was interested in determining the extent of agreement and disagreement regarding the various subjects comprising the basic training curriculum since this would provide an opportunity for investigating the hypothesis that goal preferences are related to distinctive perspectives on various organizational structures and processes.

Of all the organization structures and processes which could be studied³, the curriculum of the entry-level socialization process was expected to be particularly sensitive to goal preference. Since the foundation of the agency's formally approved professional identity is established in its basic training program, it would be reasonable to expect that, if preferences for work categories do exist among officers, these preferences (which are conceived in this study as goal preferences) should be related to preferences for the various aspects of the basic training curriculum. In other words, employee goal preference should be related to desired outcomes in the professional identity formation process.

³Examples of other organizational structures and processes which could have been profitably studied are: selection, performance evaluation, assignment decision-making, communication patterns, promotion.

This conviction grew as the writer conducted a series of preliminary interviews with officers who were selected on a semi-random basis throughout the state of Michigan. The crime-traffic goal preference phenomenon appeared to exist among these men as it had among the writer's fellow policemen some years earlier. In particular, the different opinions and attitudes regarding the appropriateness of some, if not all, of the basic training subjects seemed, at least to a degree, related to preferences for either crime or traffic organizational goals.

The reader will have observed that organizational goals are equated, in this study, with large categories of specific work activities. There are certainly many ways of conceiving organizational goals. Rather than detain the reader with an analysis of these various theoretical approaches, the writer will request that, at least for the present, the large categories of similar work activities be accepted as organization goals but, of course, not all the goals an organization pursues. The concern here is with operating goals, viewed as clusters of major and minor activities and tasks.⁴

The assumption that categories of work activities comprise organizational goals avoids the problem of dealing with personal goals pursued by employees in their work for an organization. One person may work because he wants his children to attend college, another because he wants a secure old age,

⁴Later in this study a fuller statement regarding organizational goals will be offered, as well as an analysis of MSP operating activities.

and so on. This study does not examine these individual goals. The goals referred to are derived from the organization's legislative mandate and a key assumption is that individuals (whatever their personal goals) will order these organizational goals into a preference hierarchy.

This conception of goals also avoids the more abstract issues of ultimate social organization goals; e.g., survival. If survival is the ultimate organizational goal then, on this level, the organization which was the site of the present study is indistinguishable from most other social systems. Its basic operating goals, however, can be seen as conducive of survival. If the organization's personnel are ineffectively pursuing the crime and traffic goals, then, presumably, it will be subject to pressure (probably in the form of legislative inquiry) to improve.

Olsen observes that ". . . sociologists often use the phrase 'organizational goals'. . ." as a ". . . shorthand way of saying 'goals shared and jointly sought by the members of a social organization, which in turn become identified with that organization.'"⁵ The problem in this statement, the writer believes, is that it seems to imply that, whatever the organizational goals are, organization members are similar in their perspectives toward them. Actually, an object or idea can be shared among people, while, at the same time, not necessarily be equally valued among them. This is the case in

⁵Marvin E. Olsen, The Process of Social Organization (New York: Holt, Rinehart and Winston, 1968), p. 25.

the type of complex organization studied in this report. Employees may pursue each of two operating goals and, in this sense, share them; but by no means do they necessarily value them equally.

Thus, in the preliminary interviews previously referred to, interviewees seemed to indicate (mostly indirectly or without conscious intention) that they preferred one operating goal; i.e., crime or traffic, over the other. Moreover, this apparent preference seemed related to their assessment of the basic training curriculum; crime goal preferring officers appeared to desire different emphasis on certain curriculum elements than those who preferred traffic goals.⁶

Need for the Study

As an applied research enterprise, this study is a contribution to training needs analysis, both in its theoretical base and its methodology. Traditionally, the identification of training needs in large-scale organizations is a management-initiated activity, often delegated to a staff agency. In this sense, management defines what the appropriate training curriculum should be. The structure and content of a training curriculum may, however, be viewed differently by various

⁶This working hypothesis (that goal preference was linked to curriculum element preference) was developed from a highly subjective process: semi-structured individual and group interviews. It was never, in the interview phase, directly discussed with interviewees, although the writer discussed its possible validity with training division personnel who agreed it was probably founded in reality.

organization members depending, for example, on their rank and position, education, assignment, and many other factors. Among the more important of these moderating factors are the goals of the organization. While it is true that survey research methodology has been used in training needs analysis, so far as the writer could determine, no literature exists which reports attempts using data developed from questionnaires to study goal preference effects on preferences for emphasizing the various subjects in a training curriculum.

At the theoretical level, the study's main justification lies in its attempt to examine empirically the effects of goal preference on one aspect (the curriculum) of an important social organization process, socialization. Again, so far as the writer could determine, the theoretical treatment of organizational goals has been chiefly speculative rather than empirical.

In view of the increasing bureaucratization of society⁷, and particularly in view of continuing conflict over means and ends in the social order, the need for theoretical and methodological contributions to the analysis of social organization goals and their impact on system functions and processes has become increasingly important.

⁷Bowers, for example, observes that "The self-employed status segment of the labor force has declined from 40 per cent to 13 per cent since 1870, while the proportion that is salaried had grown from 7 per cent to 31 per cent." Raymond F. Bowers (ed.), "The Impact of Technological Change on the Careers of Managers and Professionals in Large Scale Organizations", Studies on Behavior in Organizations: A Research Symposium (Athens, Georgia: University of Georgia Press, 1962), pp. 211-12.

All social systems (no matter what their size, formality and complexity) are, so to speak, goal pursuing. Some have relatively simple, concrete goal structures while others have complex, abstract clusters of goals.

While most social organization theories take into account the importance of goals, little is known about the actual consequences of various goal phenomena for social system functioning. How much goal dissensus, for example, can be tolerated before a social system disintegrates? At what point do goal maintenance structures and processes become self-defeating? To what extent can social system goals become internalized by individual members while, at the same time, not stifling personal goal preference and initiative?

Answers cannot be provided for these questions in this study; however, the study is addressed to an issue which is closely related to these larger concerns. In terms of social organization theory, this study is concerned with whether goal preference structures exist among system members and, if so, are goal preferences related to distinctive perspectives on other social system structures and processes.

If a given social system has, one way or another, so completely socialized its members that (in cases where more than one goal exists) they value each goal equally, the system has no problems arising out of differences in goal preference.

This hive-like characteristic does not occur, of course, in human society. No matter what the form of social organization in which men find themselves, they do not value various

goals (to say nothing of means) equally.

Eventually, for example, political rhetoric shaping the politics of consensus reduces to questions regarding differences among people in their preferences for national goals. At the level of local community political affairs, referenda fail wholly or partly because of varying preferences for local government goals. In industrial social systems, goal preference differences may be directly or indirectly involved in tensions, for example, between line and staff, or production and sales divisions.

Finally, institutions of higher learning have recently experienced some of the consequences of goal preference patterns. So far as campus rebellion is based on an informed position, it seems very much related to questions regarding the appropriateness of university and college curricula. Specifically, the clash seems to be based on differences in preferences for social goals as, for example, when students argue that the curricula of educational institutions are not congenial to their particular social goal preferences but favor the goals of the "establishment".

In a social order where socialization processes and structures were operating at maximum effectiveness, this issue of goal preference would not be as important as it is in a society where individualism is highly valued. The existence of goal preference differences is, to some extent, a consequence of a reluctance or inability to create highly effective social control institutions. In this sense, goal prefer-

ence is not a pathological condition but, rather, a product of a variety of characteristics of a relatively individualistic social order.

One could argue, for example, that goal preference occurs because of faulty socialization. It is, however, becoming more possible, at least theoretically, to reduce unexpected or undesired socialization results. Whether this will ever be permitted is itself a question which is closely related to differences in beliefs regarding the appropriateness of social organization goals.

In any case, it is of considerable importance that, even if we reject the pursuit of completely effective socialization techniques, the study of social organization should include the means to analyze the consequences of differences in goal preference and their effects throughout social system structures and processes. If, for example, it became possible to predict system-wide attitudes (and even perhaps behavior) from a device which would identify goal preference variations among individuals comprising a given social system, this ability could be potentially useful for minimizing unnecessary system disfunctioning.

So far as the writer could determine, this particular conceptualization of goals had not been reported in the literature.

Another area of justification for the study is socialization theory. Seen as preparation for effective role performance, a socialization curriculum consists of a variety of

attitudes, behaviors, beliefs, skills and values which are thought to be necessary for effective role performance. Ordinarily, social system custodians certify, out of their own experiences and interpretation of system needs, what forms and intensity socialization structures and processes require. Of these, the curriculum is important as a kind of blueprint for building a working personality and identity. The expectation is that the person to be socialized will acquire his identity from the curriculum with little, if any, deviation from the formally approved role configuration.

It is rather well known, however, that this rarely happens and, in fact, the actual products of any socialization program may be quite different from the intended result.

Among the kinds of modifying influences which have been studied to explain such discrepancies are socio-economic status, personality differences, and differences in career perspectives among "faculty", "students", and system managers. Thus, for example, nurses become "care" or "cure" oriented; welfare workers lean toward "service" or "procedure" work role behavior styles; medical students emerge as "scientists", "humanitarians", or "physicians"; and teachers identify with "life adjustment" or "basic education" pedagogical ideologies.⁸

⁸These examples will be discussed more fully in the next chapter. Still another example of work-role conception in dichotomous form was given the writer by an avid sports fan who observed that professional football coaches could be classified into one of two types: "cheerleaders" (i.e., people who elicit high performance by inculcating intense esprit de corps within their teams) and "tacticians" (i.e., people who plan and execute games according to carefully thought out strategies).

While explanations for these different types of career orientations have sometimes been expressed in psychological terms, the literature of organizational sociology and social psychology has not, as yet, tried to relate these differences to individual goal preferences. For this reason, this study was undertaken as an exploration of a neglected theoretical and methodological area.

Besides these general, somewhat theoretical issue areas, this study may also be of interest to those concerned with the role of the police in America. As will be discussed in the next chapter, some observers feel that an objective analysis of the police work role is needed before significant reforms can be made, not only in law enforcement, but throughout the entire criminal justice system. Consequently, within the past decade, a handful of articles and books have been published regarding the work of the American police. This literature is generally of a speculative nature, except for a few recent works (to be discussed in the next chapter) which are based on empirically developed data.

Although some writers have commented on the need to study the consequences of assigning both criminal and traffic enforcement goals to the police, no empirical examination of this issue has yet been reported in the literature. While the present study is not directly concerned with evaluating the administrative wisdom of this practice, it may be of value to policy makers who are concerned about this tradition. Similarly, those who are interested in evaluating and redesigning

police training programs may find the methodology employed in this study suggestive of further refinements in police training needs analysis techniques.

It is important to point out, however, that the crime-traffic goal issue is not defined as significant by all police observers and experts. For example, one well-known police authority, who is a personal friend of the writer, commented, after hearing a description of this project:

As a former police chief, I am not greatly concerned with the issue of goal preference. The fact is that police departments must perform both crime and traffic duties, and my concern would be that I'd have enough control over the organization to see that both were performed equally well.

It may be because of this kind of feeling about the issue, or because of a feeling of resignation, that few, if any, American police executives have challenged the crime-traffic goal tradition--at least, their professional journals are generally silent on the subject.

The data reported in this study do not provide a basis for arguing that the police should or should not be required to function in the traffic enforcement field. Research addressed to that question would encompass a number of legal, administrative, and social policy issues of which the present study would comprise merely part of the needed analysis. The results of this study do suggest, however, future areas of inquiry for those who want to explore this issue more fully. The final chapter discusses some of these possibilities.

Limitations of the Study

The design of this study can be most realistically described as exploratory. Since it grew out of an applied research undertaking in a large, dynamic public agency, some of its deficiencies were, from a practical point of view, unavoidable.

A number of persons who were familiar with this study observed that, in addition to relying on respondents for their self-reported goal preferences, corroborating external evidence of goal preference should have been provided. This is, of course, a sound observation. The problem is that the writer could think of no external criterion which was readily available and which, itself, was above question. Thus, a main assumption in this study is that reported goal preference is a valid indication of actual goal preference.⁹

Highly trained methodologists may take exception to the use of discriminant analysis in this study; however, they will observe that major deficiencies in its application are discussed in the methodology chapter. Also, the distribution of

⁹The only evidence that this is so which the writer can offer is that, when the goal preference question was being developed (see Chapter III, Methodology, p. 64) he asked a number of knowledgeable MSP informants if the question, as framed, "made sense" in terms of the work role realities of the organization. In no case did the crime-traffic goal dichotomy seem strange to these people. In addition, the writer knows from personal experience that most policemen, after a few months' patrol experience, eventually start sorting out their own feelings about their work in terms of major socially defined organizational goal categories, of which "crime" and "traffic" are probably the two most well known and general groups.

the questionnaire which provided the study's data was not completely satisfactory. No formal controls over the conditions under which it was completed in the field were attempted, largely because of time and logistical reasons. And, while the return rate of completed, usable questionnaires is fairly high as survey research techniques go, several distinctive non-respondent characteristics were observed. Appendix D has been provided to permit readers to judge for themselves whether non-respondent characteristics are crucial.

No explanations for goal preferences are provided in terms of underlying personality configurations which might have been analyzed by the use of sophisticated psychological instruments. While the writer is interested in why some men prefer crime goals while others prefer traffic goals, the study was not designed to explain these differences in psychological terms. Personal goals (i.e., as father, democrat, liberal, etc.) are not explored in this study, although they are probably importantly related to crime-traffic goal preferences.

Finally, no behavioral criteria were employed in this study; thus, the issue of whether officers who prefer crime goals act differently than those who prefer traffic goals is not addressed. While this study's focus is on reported attitudes, the writer offers suggestions in the final chapter by which behavioral criteria may be developed.

The Nature of the Organization and
Its Basic Training Program

The Michigan State Police, at the time this study was undertaken, employed approximately 1,700 police officers of all ranks who were assigned to 59 posts throughout the state. All these men are prepared for their work role by an entry socialization program which, today, requires a full year to complete, and which has been developing for the 50 years of the department's existence.

Despite the care taken to develop the basic training program, many MSP supervisors and executives do not consider it a finished product--perhaps because of the dynamism of contemporary society a socialization program as extensive as that required by MSP is never really completed. Given the size of the agency, its geographical dispersion, the extreme social and political sensitivity of its work, the varying background of its members, etc., it is not surprising that MSP executives are interested in continually re-examining the basic training program, particularly its curriculum, to insure that it is suited to the realities of the trooper work role. While the trooper work role consists of a variety of tasks, many of these (as will be discussed later) consist of either crime or traffic goal categories which are not pursued by officers specially selected and trained for one goal or the other. Michigan State Police troopers are generalists who are responsible for pursuing both goals.

Orientation of the Study and Definition of Terms

In the sense that goals may be seen as structural variables, and that socialization may be defined as a process of social organization, this study may be classified as sociological in its orientation. Nevertheless, because of its relevance to social organization in general it will, perhaps, interest political scientists, industrial psychologists, and social scientists who are interested in possible relationships among goals, social organizations, and the attitudes and behavior of people within those organizations, whether they be factories, families, communes, voluntary organizations, or police departments.

Since this study employs several terms rather distinctively, it may be helpful to define them now:

Curriculum Elements: the basic training program consists of classroom work and some field experience in a variety of subjects comprising the curriculum. Each subject in the curriculum (or each subject which could be included) is an element. Eighty-nine such elements were developed for the questionnaire used in this study.

Goals: in this study, large groups of operating work tasks are seen as comprising operating organizational goals. Thus, all tasks which stem from the criminal law are aimed at attaining a "crime goal" while those tasks stemming from traffic law are aimed at attaining a "traffic goal".

Preferences: all members of the Michigan State Police are assumed to prefer either the crime or traffic goal. Similarly, given a list of curriculum elements, officers will, it is assumed, prefer some more than others and will reflect these preferences in terms of how little or how much they would like to see each element emphasized in basic training.

Organization of the Study

Chapter II reviews certain previous studies and literature which provide a background for the conception of the study. Chapter III describes the methodology of the study, including its statistical procedures, development, and execution. Chapter IV discusses the history of the Michigan State Police, its organization and work role, and its basic training program. The data are analyzed in Chapter V. In Chapter VI, a summary of the findings is offered, together with conclusions and recommendations.

Chapter II

BACKGROUND FOR THE CONCEPTION OF THE STUDY

Introduction

The primary purpose of this chapter is to review theory which guided the formulation of the study's hypotheses and the selection of its methodology.

Since the study is exploratory (both in terms of theory and method), a highly formalized hypothesis system was not developed. In the absence of previous empirical research into the influence of goal preferences on other organizational structures and processes, this study necessarily must test the basic hypothesis that such a relationship exists, at least in terms of attitudinal relationships. Proof that goal preference influences the behavior of social system members will not be offered here. If any systematic goal relationships are found, it should not be construed that these will necessarily influence behavior. Homans' observation that group members are ". . . more often alike in the norms they hold than in their overt behavior"¹ applies particularly well to this study's respondents whose actions are subject to regulation by a military-like organization control structure. On the other hand, there is no evidence that goal preference will

¹George Homans, The Human Group, (New York: Harcourt and Brace, 1950), p. 124.

not, even if only unconsciously, influence some, if not all, member behavior. Since this may be possible, the study's greatest justification is as an effort to foretell how goal preference may be related to a particularly crucial organizational matter--the curriculum used to prepare recruit members for effective work role performance.

The absence of highly developed hypotheses is mainly attributable to the type of organization selected for this study, the kind Hughes referred to when he contrasted the relative ease of conducting a sociological study in an industrial setting with the difficulty of studying institutions ". . . where things are done to and for people."²

The working hypotheses which were developed to focus the study arose from a number of issues implicit in the literature of complex organizations, some of which is reviewed below. These issues include:

1. Do members of a complex organization prefer all goals equally well, or is there a goal preference structure?
2. If a goal preference structure does exist, how will the preferences be quantitatively distributed?
3. Can these preferences affect other parts of the structure? If so, what will the consequences of this relationship be, in terms of attitudinal patterns?

Four areas of social science theory were particularly important in this study's development: (1) complex organiza-

²Everett C. Hughes, Men and Their Work, (Glencoe: The Free Press, 1958), p. 76.

tions, (2) goals, (3) roles, and (4) socialization. In addition, it will be helpful to review briefly recent literature dealing with the police work role, since this is the context in which hypotheses were developed.

Complex Organizations and Goals

If organizational theory had stopped evolving in the early 1900's, the basic issue with which this study is concerned, the variability of goal preference and its possible impact throughout a social system, would probably never be recognized. One characteristic of organizational theory which dominated the late 19th and early 20th centuries was that social system goals were beyond question, or at least rarely questioned. Social system proprietors were, so early theory went, its sole goal architects and custodians and goals were not properly subject to subordinates' preferences.

Supporters of the rational organizational model theory, as Gouldner³ terms it, saw the organization as a deliberately conceived goal attaining instrument in which all member behavior predictably led to carefully articulated formal goals; only ignorance or error accounted for goal deviation and these could be minimized by well planned control structures. The test of the organization's rationality, therefore, was whether

³For a more complete contrast between rational and natural system organizational theories, see Alvin Gouldner, "Organizational Analysis", in Robert K. Merton, (ed.), et. al., Sociology Today, Vol. II, (New York: Harper Torchbooks, 1965), pp. 400-428.

it attained its goals, that is, whether its control structures effectively channeled members' behavior to achieve its chartered objectives.

In time, a competing theory evolved which de-emphasized the rational element and focused on the organization as a natural system in which, while formal goals undeniably exist, several sources of tension threaten goal attainment: (1) the maintenance of the system itself becomes an overriding goal, displacing or subordinating chartered primary goals in the process; (2) the goals of informal groups within the formal structure compete with chartered goals; (3) the personal goals of individual members direct their energies away from chartered goals. Natural system theory, then, did not accept goals as "given". They were conceived as being in a state of constant tension, creating the need for the development of equilibrating structures and processes which deflected the system's resources away from goal attainment.

Another way of distinguishing between the two theoretical orientations is to say that rational system theory emphasized the structures which hold social systems together while natural system theory concentrated on forces which tend to tear it apart.

Neither viewpoint by itself provides a fully developed statement of organizational theory. In terms of many kinds of economically oriented enterprises, and perhaps for military organizations, the rational theory model is useful for hypothesis development, testing, and analysis. However, for

purposes of studying public bureaucracies, where the economic factor is a relatively weak employee motivating force, natural system theory appears more promising. For one reason, economic incentives themselves provide an important (but not all important) source of employee orientation. Few automobile assembly-line workers, for example, are probably motivated directly by the formal goal complex of the organizations employing them. The immediately compelling motivation is remuneration.

In public organizations, however, other motivating elements must be found since, no matter how individual productivity may vary, remuneration tends to be equal within employee job classification categories. In such a setting, the significance of social norms and values as motivational elements is no doubt greater than it might be in private bureaucracies.

Normative involvement tends to characterize natural system theory rather than remunerative involvement. This aspect of natural system theory is, no doubt, a form of protest against the rational theory assumption that men would respond better to economic than ideological stimuli. In the calculus of rational theory this was quite logical; certainly, as Etzioni points out, there are organizational forms in which remunerative involvement is nearly exclusively the motivating force.⁴

⁴Etzioni proposes a scheme for classifying organizations according to three kinds of member involvement: alienative, calculative, moral. Calculative involvement characterizes business organizations; alienative involvement is found among prisoners, slaves, etc.; while moral involvement is found in religious institutions, educational institutions, etc. Amitai Etzioni, A Comparative Analysis of Complex Organizations, (New York: The Free Press, 1961), pp. 8-10.

One of the defects of rational theory was that it could not account for non-remunerative motivation or dismissed it as irrelevant, or, most limiting, ignored it altogether.

In the present study, conceived in the natural system tradition, organizational goals are seen as an important, non-remunerative, organizational force. Every organization has at least one goal and, thus, to create "A good organizational theory. . ." researchers must ". . . account for the relationships of attitudes, values, and goals to the members' decisions and performance in the organization."⁵

Organizational goals, however, are not seen, in natural system theory, as concrete objectives; rather, "A 'bureaucracy' can be said to have ends only in a metaphorical sense." Their "real" meaning comes about as the researcher can ". . . specify the ends of different people, or the typical ends of different strata within the organization."⁶ That the goals of bureaucracy may vary or "are not necessarily identical or salient for all personnel, and may in fact be contradictory. . ." is not, as Gouldner says, ". . . a conclusion which will . . . startle students of industry. . ." but goal variance is, nevertheless, neglected by "some students of administration."⁷

⁵Carroll L. Shartle, et al, "An Approach to Dimensions of Value", Journal of Psychology, LVII (1964), 102.

⁶Alvin W. Gouldner, Patterns of Industrial Bureaucracy, (New York: The Free Press of Glencoe, 1964), p. 21.

⁷Gouldner, op. cit., p. 21.

That so fundamental a force should be often overlooked in organizational research is difficult to explain. Perrow offers two possible causes of this neglect; first, most goals are taken for granted, that is, they are not seen as problem areas; second, there is an inadequate terminology for dealing with goals.⁸

Regarding the first point, taking goals for granted, this is a defect not limited to social scientists. Selznick suggests that one of the crucial failures of leadership occurs when it cannot "infuse the organization at many levels" with institutional purpose, or goals.⁹ Leadership's challenge, in such a case, is more than merely clarifying goals. Goals must be expressed in a way which will least expose them to ". . . the pressure that will arise from within the agency" to redefine them in terms of secondary institutional needs.¹⁰ As Hughes pointed out, as an occupation is professionalized, tension between occupational goals and the self-maintenance needs of the social system "housing" the occupation often develops; means and ends may be rearranged so that medical goals, for example, may be subordinated to patient data collection and processing goals.¹¹

⁸Charles Perrow, "The Analysis of Goals in Complex Organizations", American Sociological Review, XXVI (1961), pp. 854-66.

⁹Philip Selznick, Leadership in Administration, (New York: Harper and Row, Publishers, 1957), p.26.

¹⁰Selznick, op. cit., p. 71.

¹¹Everett E. Hughes, "Studying the Nurse's Work", American Journal of Nursing, LI (1951), p. 294.

The study of goals, like their pursuit, is made difficult by the inability of men to identify what an organization's goals really are. Goals which are expressed in organizational charters may, at first sight, seem most official, but for empirical purposes they are often useless since they are too vague and do not express either unofficial or operating goals. Perrow suggests employing "operative goals" in research: ". . . the ends sought through the actual operating policies of the organization. . . ." These goals ". . . tell us what the organization is actually trying to do, regardless of what the official goals say are the aims."¹² Similarly, Grusky defined goals as ". . . the general objectives or tasks that are pertinent to the functioning of the organization".¹³

By factoring goals in terms of operating activities, rather than abstract social objectives, a police organization can be distinguished from a fire department whereas in their broadest social charter terms both pursue the goal, "protecting life and property".

Most organizations do not have a single goal; even if it were possible to conceive of single-goal organizations, that single goal would eventually become factored into subgoals which would be ". . . allocated to organizational units and become the goals of these units". In this way, individuals

¹²Perrow, op. cit., pp. 854-855.

¹³Oscar Grusky, "Treatment Goals and Organizational Behavior: A Study of an Experimental Prison Camp", unpublished doctoral dissertation, (University of Michigan, 1957), p. 4.

in the various units could appraise the success of their efforts in terms, not of a single, probably vaguely expressed goal, but ". . . in terms of the particular subgoal allocated to their unit. . .".¹⁴

The implication here is that organization members will pursue subgoals in ways which will rationally lead to the fulfillment of the primary goal.

Recent social science research indicates, however, that member-goal relationships are not necessarily objective in terms of the organization. Rather, these relationships are strongly influenced by non-rational (at least in terms of the organization's needs) forces, including psychological and sociological phenomena which may be related to personality configurations, status aspirations, hierarchial location, etc. For these reasons, Kaufman cautioned that neither a researcher studying an organization, nor an administrator, ". . . determined to achieve certain goals, should assume that what is decided at the top is the same as what is done at the bottom of the organization".¹⁵

One of the most well substantiated social science findings is that ". . . groups tend to form strong norms only about the areas of greatest importance and relevance to them. . .".¹⁶

¹⁴Victor Thompson, Modern Organization, (New York: Alfred Knopf, 1961), pp. 15-16.

¹⁵Herbert Kaufman, The Forest Ranger: A Study in Administrative Behavior, (Baltimore: The John Hopkin's Press, 1960), p. vi.

¹⁶Abraham K. Korman, "Selective Perception Among First-Line Supervisors", Personnel Administration, XXVI (September-October, 1963), 32.

This phenomenon, arising from selective perception, suggests that, in an organization with more than one operating goal, some members will (for one or more of many reasons) prefer one goal over another, or all others.

Researchers who propose typologies of employee conduct or perspectives ordinarily do not trace these typologies back to selective goal perception but, nevertheless, goal preference is closely related. Examples of these typologies are: Habenstein and Christ's study of nursing perspectives,¹⁷ Meyer's analysis of nursing work role value types,¹⁸ Francis and Stone's description of the service versus procedure orientations of a group of welfare workers.¹⁹ While these work role typologies are conceived as contrasts in occupational orientation, they may also be seen as contrasts in organizational goal orientation. Where, for example, a welfare worker might prefer a payment eligibility-establishing goal for his organization, he would express his goal preference in procedure oriented work-role behavior. If, however, he prefers a rehabilitation-social adjustment organizational goal, he would tend to behave in a way which would be more correctly defined as service oriented.

¹⁷Robert W. Habenstein and Edwin A. Christ, Professionalizer, Traditionalizer, and Utilizer, (Columbia, Missouri: University of Missouri, 1963).

¹⁸Genevieve Meyer, Tenderness and Technique: Nursing Values in Transition, (Los Angeles, California: University of California Press, 1960).

¹⁹Roy Francis and Robert Stone, Service and Procedure in Bureaucracy: A Case Study, (Minneapolis, Minnesota: The University of Minnesota Press, 1956).

In this way, work-role and organizational goal are closely related, the former being derived from the latter.

While rational model theorists assumed that organizational members were, for the most part, goal compliant, the natural theory model school argued that, to the contrary, industrial man evidenced latitudes of goal preference. Moreover, the organization may not necessarily be jeopardized by its members' differential goal preference. Kornhauser, for example, suggests that complex organizations require a variety of career orientations.²⁰

When organizations must pursue a number of goals, system survival may depend on not over-specifying work role structures.²¹ Highly specified work roles will be found in organizations where goals are few and appear in concrete forms. In such a situation, employees enjoy a narrow range of behavioral options. But few organizations are so constructed and a fundamental dilemma is that, while organizations require ". . . stability, reliability, dependability, predictability. . ." from their members, they also need, ". . . given our current rate of technological and social change. . ." a rather dissimilar ". . . behavior pattern . . . typified by such

²⁰William Kornhauser, Scientists in Industry, (Berkeley, California: University of California Press, 1962), p. 112.

²¹Selznick, op. cit., p. 66, points out that one advantage of vaguely defined organizational goals is that this may permit re-casting the organization into a new form when unanticipated problems arise.

terms as flexibility and adaptability."²²

On the one hand, the organization must insure a reliable level of role performance without, at the same time, circumscribing behavior so narrowly that adaptive response to unusual situations is hindered. One of the processes for insuring reliable role behavior is socialization, to which novices normally are subjected at the beginning of their occupational or organizational careers.

Role and Socialization Theory

Complex organizations, like other institutions, may be seen as collections of roles, a particularly ". . . fruitful [view] because it links a somewhat more easily observable phenomenon, social behavior, to an important, but less easily observable abstraction, social structure."²³ In this study, socialization is defined as learning a role. A role is un-

²²Robert L. Kahn, et. al., Organizational Stress: Studies in Role Conflict and Ambiguity, (New York: John Wiley and Sons, 1964), p. 178. Palumbo reported that, in several public bureaucracies, highly specified work roles were accompanied by greater centralization, more specialization, "less participatory styles of management, lower morale, and less professionalism" than agencies with less specified role behavior. Also: "In general, the performance of these departments is poorer in that their productivity is lower, they have less innovation, high per-unit costs, and narrower scope of programs", Dennis J. Palumbo, "Power and Role Specificity in Organization Theory" Public Administration Review, XIX (1969), 242.

²³William J. Goode, "A Theory of Role Strain", American Sociological Review, XXV (1960), 489.

derstood, not merely as a set of specified behaviors ". . . associated with a defined position in a social system"²⁴ but also as a "Program (as that word is understood in computer technology) for determining the courses of action to be taken over the range of circumstances that arise."²⁵

Role is a derivative, not only of formal organization goals, but also of the personal goals of members. Again, this duality of goal structures which is incorporated into every organizational role is regarded as a basic source of tension in contemporary theory. Likert concludes that the employee's view of the relevance of the organization must be congruent with his view of his own relevance, thus ". . . the mission of the organization [must] be seen by its members as genuinely important."²⁶

To produce at least a minimal level of reliable role behavior (i.e., to insure that employee response to stimuli in the work environment does not subvert goals) the process of socialization is intended to inculcate ". . . approved ideals, attitudes, and behavior, all calculated to enhance the organization's competitive chances."²⁷ For this study's purposes, socialization is taken as a process intended to

²⁴Selznick, op. cit., p. 82.

²⁵Herbert A. Simon, "On the Concept of Organizational Goal", Administrative Science Quarterly, IX (1964), 13.

²⁶Rensis Likert, New Patterns of Management, (New York: McGraw-Hill, 1961), p. 103.

²⁷Robert Presthus, The Organizational Society: An Analysis and a Theory, (New York: The Random House, 1962), p. 2.

indoctrinate ". . . new members with appropriate goal structures. . ." ²⁸

As a field of social science theory, "occupational socialization appears not to have excited scholarly concern." ²⁹ Typically, socialization theory has evolved in reference to children; thus, "although the last decade has been a period of gathering interest in professional socialization, few guidelines [to its study] exist in the literature as yet." ³⁰

Research in occupational socialization may be characterized as process-oriented, the theoretical focus being on change undergone by the novice as he moves through the phases of studenthood. Examples of recent concerns with occupational socialization include the psychosocial phenomena produced by a military basic training program, ³¹ the effectiveness of law school in self-concept formation, ³² how preferences for a

²⁸Anthony Downs, Inside Bureaucracy, (Boston, Massachusetts: Little, Brown and Company, 1967), p. 234.

²⁹Wilbert E. Moore, "Occupational Socialization", in David A. Goslin, (ed.), Handbook of Socialization Theory and Research, (Chicago, Illinois: Rand McNally, 1969), p. 861.

³⁰Rue Bucher, "The Psychiatric Residency and Professional Socialization", Journal of Health and Human Behavior, VI (1965), 197.

³¹Peter G. Bourne, "Some Observations on the Psychosocial Phenomena Seen in Basic Training", Psychiatry, XXX (1967), 187-96. Four phenomena are identified which, Bourne concludes are: ". . . probably not specific" to military training: the periods of (1) environmental shock, (2) engagement, (3) attainment, (4) termination.

³²Dan C. Lortie, "Laymen to Lawmen: Law School, Careers, and Professional Socialization", Harvard Educational Review, XXIX (1959), 363-67.

particular branch of service develop among West Point cadets,³³ structures and processes instrumental in acquiring the nurse work role,³⁴ the three "simultaneous levels of being and becoming" a nurse,³⁵ anxiety regarding professional competence.³⁶

In none of these reports (nor any of the others reviewed for this project) was the content of the socialization curriculum used as a dependent or independent variable. If one views the cluster of attitudes, behaviors, beliefs, skills, and values which comprise a professional curriculum as the template for the emergent occupational identity, the lack of interest in possible stresses on the curriculum is difficult to explain, particularly since identity transformation interests so many students of socialization. If, in other words, one's research objective in studying socialization is greater understanding regarding how the initiate is infused with the

³³John P. Lovell, "The Professional Socialization of the West Point Cadet", in Morris Janowitz, (ed.), The New Military, (New York: John Wiley and Sons, 1967), pp. 119-57.

³⁴Hans O. Mauksch, "Becoming a Nurse: A Selective View", The Annals of the American Academy of Political and Social Science, CCCXLVI (1963), 88-98.

³⁵Virginia L. Olesen and Elvi K. Whittaker, The Silent Dialogue: A Study in the Social Psychology of Professional Socialization, (San Francisco, California: Jossey-Bass, Inc., Publishers, 1968).

³⁶Myron R. Sharaff and Daniel J. Levinson, "The Quest for Omnipotence in Professional Training: The Case of the Psychiatric Resident", Psychiatry, XXVII (1964), 135-49.

core occupational act,³⁷ it would seem reasonable that a productive area of inquiry would be to examine curriculum stresses. Moreover, since socializers (or educators, or trainers) intervene between the novice and the curriculum, it seems likely that they might, one way or another, tint the curriculum with the color of their goal preferences.

Reissman, et. al., did not directly study the effects of goal preference on a curriculum, but they were concerned with the influence of medical educators' goals on student learning motivation: "Some educators stress science, some professional identity, and some the welfare of the patient."³⁸ The attitudes of medical students toward a career-style were thus partly shaped by role models whose own occupational identities were nucleated about preferred professional goals.

Brim and Wheeler approached the issue of goal, role, and socialization relationships in a recent essay, concluding, "evaluation [of socialization effectiveness] must be geared to the organization's goals. . ."³⁹

³⁷"The first task of socialization into a profession is . . . to transform the persons' lay conceptions about the occupation into the technical orientations of the insider." Thus: "When professional values are fully internalized the profession has become a generalized other." Ida Harper Simpson, "Patterns of Socialization into the Professions: The Case of Student Nurses", Sociological Inquiry, XXXVII (1967), 45 and 52, respectively.

³⁸Leonard Reissman, et. al., "The Motivation and Socialization of Medical Students", Journal of Health and Human Behavior, I (1960), 175.

³⁹Orville Brim, Jr., and Stanton Wheeler, Socialization After Childhood, (New York: John Wiley and Sons, Inc., 1966).

Bucher, emphasizing the acquisition of the "core act" of psychiatry through role models, recognized the effects of varying self-conceptions of the role models:

Depending on their segmental identifications, socializers may differ in the kinds of raw materials they look for in recruits, the perspectives on work they wish to impart, and the kinds of experience they deem critical for learning, as well as what they consider worth learning.⁴⁰

Still another source of conflicts regarding socialization outcomes occurs when the social structure in which the occupational act is executed competes, so to speak, with professional self concept. Corwin reported that nursing students were subject to "cross-pressure between school and hospital. . . ." resulting in strain between the "professional ideals stressed in school" and "the bureaucratic principles which operate the hospital."⁴¹

It is rather well known, and sometimes lamented, that socialization processes and structures are imperfect, despite the allegation that ". . . current sociological theory over-stresses the stability and integration of society. . .."⁴² Other theorists conceive of bureaucratic man as functioning, not within narrow behavioral frameworks, but within larger, organizationally sanctioned regions. Downs, for example,

⁴⁰Bucher, op. cit., p. 198.

⁴¹Ronald Corwin, "The Professional Employee: A Study of Conflict in Nursing Roles", American Journal of Sociology, LXVI (1961), 605.

⁴²Dennis Wrong, "The Oversocialized Conception of Man in Western Society", American Sociological Review, XXVI (1961), 193.

suggests that organizational members are relatively free to decide, generally, how deeply they will commit themselves to goals; in fact, they are sufficiently free to decide which of several goals to pursue. Indeed, in this theory of bureaucratic behavior, organizational members will work most assiduously to achieve those goals which are most congruent with their personal goals. Therefore, much of their behavior, their style of self-presentation, their interpretation and verbalization of organizational reality, is conditioned by goal preferences.⁴³

This is not to say that men in organizations will exercise personal operating goal preference to the degree that complete organizational collapse necessarily follows. The writer suggests that, however, goal preferences do exist and are found throughout the organization's structure and processes. To test whether this is so, the writer has selected a state police organization in which two types of operating goals can be identified, and which are distinctive enough to be perceived as two rather different facets of a work role, that of police officer.⁴⁴

The Police Work Role

Davis remarked, in connection with a study of the Officer Naval Corps, that it built ". . . its routine on the abnormal,

⁴³Downs, op. cit., p. 76.

⁴⁴The discussion which follows will be enlarged in Chapter IV, The Research Site: The Michigan State Police.

its expectations on the unexpected."⁴⁵ Similarly, the police work role, as contemporarily structured, is predicated on deviance; none of its elements, or very few of them, arise out of the normal conduct of men and women.

But since non-normality dominates the configuration of the work role, it is, by necessity, varied. A good, brief summary is provided by Bain:

Most police work is not catching criminals or deterring people from crime. It is regulation, direction, information, interpretation, advice, and non-technical work.⁴⁶

A more quantitative description of the police work role (as it exists in a West Coast city) was provided by Webster.⁴⁷ Over 100 separate types of work role elements were identified. These were classified into six distinguishable categories: crimes against persons, crimes against property, traffic, on-view (a term denoting events which became official cases on the initiative of officers themselves), social services, and administration. The first three categories accounted for approximately 24 per cent, on the average, of an officer's time; 40 percent was consumed by the administration category, while on-view accounted for 20 per cent and social service for 17 per cent.

⁴⁵Arthur K. Davis, "Bureaucratic Patterns in the Navy Officer Corps", Social Forces, XXVII (1948), 145.

⁴⁶Read Bain, "Policemen and Children", Sociology and Social Research, XXXIII (1949), 420.

⁴⁷John A. Webster, "Police Task and Time Study", unpublished doctoral dissertation, (University of California, 1969).

Peabody approached an analysis of the importance of police goals differently, asking officers in another west coast police department to specify what the department's most important goals were. The three most highly endorsed goals were: (1) "patrolling, crime prevention, protection of life and property", (2) "enforcement of the law, preservation of the peace, law and order", (3) "traffic control, accident prevention, and accident investigation".⁴⁸

To determine how four police activity categories (criminal apprehension, crime prevention, traffic, and public service) rank in terms of officer preferences, Olson asked municipal police officers in a Michigan city to rate each of 16 specific police tasks on a five-point, Likert-type scale ("like very much" to "dislike very much"). Each category was represented by four specific activity items. The criminal apprehension items were the most liked of the 16 tasks while the four traffic items grouped closely together as the third lowest liked category.⁴⁹

⁴⁸Robert L. Peabody, Organizational Authority: Superior--Subordinate Relationships in Three Public Service Organizations, (New York: Atherton Press, 1964), p. 57.

⁴⁹Bruce Olson, "An Exploratory Study of Police Task Preferences", Personnel Journal, XLIX (1970). Reiss reports that many police officers in a sample he studied would ". . . eliminate most non-police services such as school crossing, hospital or sick calls, and others such as animal calls. A minority of 10 per cent would eliminate traffic control. . . ." Albert J. Reiss, Jr., "Career Orientations, Job Satisfaction, the Assessment of Law Enforcement Problems by Police Officers", (Ann Arbor, Michigan: University of Michigan, May, 1967), processed.

It is not necessary, for this study's purposes, to expand beyond two points with regard to the police work role. First, probably most cities and many state-wide police organizations embrace a number of activities which can be classified under one of two operating goal categories: (1) criminal law enforcement and investigation, and (2) traffic law enforcement and investigation. Second, no doubt some officers prefer one goal or the other.

By distinguishing between these two goals, it will be possible to formulate several working hypotheses regarding their possible effects on the curriculum of the Michigan State Police basic training program.

Perhaps the quickest way to sense differences in the two goals is to read statutes authorizing them. The most striking contrast is that most traffic laws are more specifically phrased than most criminal laws. Motorists and officers can ascertain the exact miles-per-hour which must be exceeded before a traffic ticket can be issued, for example, but what decibel level must be exceeded before participants in a noisy party can be arrested for disturbing the peace? Related to this is the precision with which traffic goal success can be measured, in contrast to measuring crime goal effectiveness. An upwardly mobile Chief of Police can prepare a more concrete, hence attractive vita using traffic goal success data than he can using crime data. Similarly, a lower ranking officer can demonstrate his effectiveness to a supervisor more "factually" with traffic data than he can with crime data.

One must also be able to tolerate greater role ambiguity if he prefers the criminal goal. Uncertainty regarding when to arrest, or whether a certain class of offenses can be enforced, is much more likely in the crime goal field. A "Samaritan" impulse can be gratified somewhat more easily in criminal law enforcement, while, on the other hand, an "avenger" impulse may be more frequently, if not more intensely, gratified in traffic law enforcement.

Successful crime goal achievement probably requires higher interpersonal competence than successful traffic goal achievement. In a related way, an ability to exploit the organization's resources and to cooperate with others in the organization would appear to be more essential in criminal law enforcement, since effective crime goal performance requires more interdependence than traffic goal performance which needs few, if any, resources from others.

Greater judicial oversight attends the criminal goal; none of the contemporary "landmark" court cases appears to have involved traffic law enforcement. One reason, of course, is that there is a greater potential for serious injustice in the criminal goal field. Related to this is the greater likelihood for role behavior failure⁵⁰ in criminal law enforcement, whereas the potential for technical skill failure may be about equal in the two goal fields. The higher role behavior

⁵⁰Mauksch, op. cit., p. 90, observed that role behavior failures in nursing ". . . are more severely censured than technical mistakes. . . [since they reflect on the] . . . nursing community rather than on the individual."

failure potential may be, for some people, unconsciously threatening. By cultivating a traffic goal preference, one may minimize his concern about interpersonal deficiencies since these seem to be less necessary for effective performance.

Finally, the criminal goal is closer to the normative framework of the social order; few citizens believe they have broken a "real" law if they are cited for a traffic violation. The decision to arrest (or cite) for a traffic offense, therefore, does not involve affect as much as a decision to arrest for a criminal offense. Moreover, the traffic arrest act is a brief episode, generally terminated by the act of arrest itself. The crime arrest may repeatedly bring officer and arrestee face-to-face before a prosecutor's or judge's decision ends the episode. Thus, for those who seek short-term closure in role performance, the traffic goal may be more appealing.

None of this is intended to deprecate traffic goal preference. Indeed, the analysis may raise the question "how does the traffic goal persist if, in fact, it is so unmotivating and lusterless?" Ironically, it is the narrowness, concreteness, and predictability of traffic goal work elements (or what might, in Weberian terms, be called their rational character) which invest it for some officers with high value in a bureaucratic context. Thus, its quality of measurability makes it a convenient (and often dramatic) work unit at budget time. Similarly, it is also a useful goal where agency effect-

iveness is concerned.⁵¹ No nationally publicized reward system exists for successful crime goal achievement, whereas several national associations confer various trophies, plaques, medals, etc., on cities each year, commending them, for example, "for the lowest pedestrian-injury rate in the 25,000 population class". In fact, the folk wisdom of the police subculture claims that the most certain route to a position as Chief of Police is an outstanding traffic enforcement record.

It is important to stress that probably most policemen accept (or at least have learned to accommodate) the traffic goal in their role. But for the majority of them, it probably cannot provide the degree of job satisfaction that is offered by the crime goal.

In brief, the writer believes that the main distinction between crime and traffic goals is that the former contains, in contrast to the latter, more of the properties found in professional work roles, e.g., broader behavioral options (or discretion in decision-making), a greater need for interper-

⁵¹The Foreword of the 1967 MSP Annual Report summarizes, in approximately 500 words, seven major achievements of the agency. The first three cited achievements are in the traffic goal category; the last is also related to traffic: "Other significances of the year . . . included an increase in authorized enlisted strength and a decrease in the state traffic death toll". (p. 6) One achievement was related to the crime goal ". . . obtaining . . . a sound spectrograph for voice identification, the first police agency in the nation to do so." Another achievement embraces both the traffic and crime goals: ". . . the start of operations for the Michigan Law Enforcement Information Network . . ." The seventh achievement related neither to crime nor traffic, but to the Department's Civil Defense responsibilities.

sonal competence, (thus a greater need for social science expertise), less routinized problem-identifying and problem-solving strategies. On the other hand, the activities which comprise the traffic goal constitute, so far as skill level for their execution is concerned, something more akin to a craft than a profession.

Assumptions and Hypotheses of The Study

This analysis of crime and traffic goal differences suggests several hypotheses which can be used to explore differences, if any, in the perspectives of persons who prefer one goal over the other. Before specifying these hypotheses, certain assumptions regarding the two operating goals and the basic training curriculum will be discussed.

The first assumption is that the two goals exist and represent two operationally distinct categories, and that little work role overlap occurs between them.⁵² Thus, it should be possible for most respondents to concede that they prefer one over the other and that their preference is not divided between the two goals.

The curriculum elements which will be used to inspect goal preference consequences consist, as will be explained in Chapter III, of 89 subjects. The second assumption is that not all these will be "goal sensitive" but, on the other hand,

⁵²In the Michigan State Police, as in many other state and local police agencies, police officers are responsible for tasks comprising the crime goal as well as those comprising the traffic goal; thus, their work role is not specialized by goal.

some curriculum elements which have not been anticipated in the hypotheses may be unexpectedly sensitive to goal preferences.

The study's first hypothesis is that certain curriculum elements will distinguish between the two goal groups at statistically significant levels. These will be elements which are closely related to each of the two goals.

The second hypothesis is that crime goal preferring officers will place greater value on the training program than will traffic goal preferring officers. This will be reflected in an empirical trend which, in general, will yield greater overall mean emphasis preference scores for the crime goal group, in contrast to the traffic goal group. The exception to this hypothesis is that traffic goal preferring officers will, in general, emphasize traffic-related curriculum elements more highly than will crime goal preferring officers.

The third hypothesis is that crime goal preferring respondents will emphasize social science curriculum elements more highly than traffic goal preferring officers.

Crime goal preferring officers will also emphasize, the fourth hypothesis anticipates, curriculum items relating to criminal law changes, in contrast to traffic goal officers who will accord them less importance, in terms of preferred emphases.

Some Implications of Theory For Method

The next chapter will discuss technical aspects of discriminant analysis, the statistical procedure which was selected to yield data to test hypotheses and otherwise explore goal preference consequences on the Michigan State Police basic training curriculum. It will be helpful, at this point, however, to review certain relationships between theory and method.

The data were collected by questionnaire since this seemed the most reasonable technique for reaching large numbers of respondents. The writer anticipated that very few officers would declare a preference for the traffic goal. This implied that it would be wise not to sample unless it had been possible to know in advance who the traffic goal preferring officers were. It turned out that an unexpectedly large number of respondents reported traffic goal preference. This permitted the writer to restrict the testing of hypotheses to respondents within the same (in terms of proximity) role set: troopers, corporals, sergeants, and staff sergeants. Higher ranking officers were omitted from the present analysis since the writer wanted to include only those respondents whose orientations were influenced by the daily exigencies of line service.

While the writer believes a "hidden curriculum"^{5 3} exists which also is involved in work role socialization, it was not strategically possible to identify its components for the present study. Thus, the curriculum elements chosen represent the formal curriculum and are used in this study as independent variables or as a kind of test which "predicts" goal preference.

Summary

Contemporary social science theory recognizes the instability and tensions attending social system goals. One source of tension is that they are subject to priority ranking by social system members who may, consciously or unconsciously, prefer one goal over another or all others. This need not lead to the dissolution of the system since members may not express their preferences behaviorally and because all social systems erect control structures for the purpose of counteracting individual volition, insofar as it threatens system equilibrium.

Since the literature is virtually silent in terms of empirical analysis of the attitudinal consequences of differen-

^{5 3}Lewis emphasizes that the "hidden curriculum"(". . . the social organization of the schools, the life continuum of the student [including] . . . the atmosphere of the classroom, the halls, the cafeteria. . .") should not be considered as separate from the formal curriculum: "Everything that happens in the school can be viewed as the curriculum." Leslie Lewis, "Evaluation: A Relationship of Knowledge, Skills, and Values", paper read before the American Education Research Association Annual Meeting, (Minneapolis, Minnesota, March, 1970), pp. 5-6.

tial goal preference within a social system, this study was designed to explore how goal preferences, if they exist, may be traced. The analysis was confined to a basic training curriculum, which is seen as the blue-print for the development of an occupational identity. Since the survival of a social system depends on the degree to which the occupational identity incorporates system maintaining attitudes, beliefs, skills, and values, the curriculum was assumed to be unusually responsive to goal preference.

The organization chosen for the analysis embraces several goals, two of which are clearly dominant over the rest and are distinct from each other.

Several hypotheses were specified to guide data analysis and interpretation. The conduct of the data gathering phase of the project and the selection of statistical procedures are discussed in the next chapter.

Chapter III

METHODS AND PROCEDURES

Introduction

The purpose of this chapter is to review briefly the project's chronology, discuss the development of the questionnaire used to collect data, and to describe the statistical procedures used in data analysis.

Appendix A consists of the questionnaire which collected the project's data. It will be seen that, considering the number of usable returned questionnaires (representing 70% of the police officers on the payroll during the distribution period), this study is relatively narrow compared to one which could be based on a complete analysis and report of the data. The complete data from this study are available to interested readers either from the Michigan State Police or from the writer. Two preliminary reports have been prepared, both of which are filed with the Michigan State Police:

Report on An Analysis of The Content of Members' Evaluations of Basic Training in A Complex Organization, November, 1969.

A Preliminary Report of A Study of Basic Training in The Michigan State Police, April, 1970.

The former report is concerned with the development of the 24 items used in Section III (the evaluative items) in the questionnaire while the latter examines in detail res-

pondent and non-respondent characteristics and also explores responses to Sections I and III of the questionnaire, including a preliminary discriminant analysis of the data.

While the present study is confined to exploring what, if any, relationships exist between goal preference (as dichotomized dependent variable) and the attitudes, beliefs, skills, and values implicit in an entry-level organizational socialization program (represented by 89 independent variables) it will be helpful to review briefly how the two projects originated and developed before discussing the questionnaire development, distribution, and statistical procedures sections of this chapter.

Brief Chronology of The Project

Throughout its history, the Michigan State Police has frequently revised its various training programs. Contemporary changes in the agency's socio-legal environment have prompted its executives to review in greater detail than ever before the basic training program which prepares its recruit officers to function as troopers. Naturally, no two members of the agency's command group view the "ideal" curriculum in the same way. Nor do organization members at other levels see the "ideal" curriculum in the same way.

The writer's basic working assumption is that much of the dissensus regarding the curriculum can be explained by goal preference. This assumption was developed out of personal municipal law enforcement experience and was reinforced

during interviews with members of the Michigan State Police. However, the notion that goal orientation is an important determinant of other organizational preferences is not widely shared in police management--indeed, it is often considered irrelevant or impudent, perhaps because to hold this view is interpreted as tantamount to asserting that control structures are imperfect; i.e., management is ineffective.

While the overall project was conceived as a way of assisting the agency to evaluate its basic training program, the writer was particularly interested in exploring the possible impact of goal preference on the socialization program. To study these relationships, if any, the questionnaire included one item which was designed as the study's major dependent variable, goal preference. The design of the curriculum section of the questionnaire, as well as the goal preference item, is the subject of the following section.

In February and March, 1969, exploratory discussions between the writer and certain MSP executives led to mutually agreed project objectives and strategies. First, management wanted to demonstrate its willingness to encourage all organizational members to assist in assessing the basic training program. This precluded developing a scientific sampling procedure. On the other hand, it meant that an effort must be made to reach all respondents with a data-gathering device which would be uniformly constructed so that all who participated responded to the same stimuli. The technique agreed on was a mailed questionnaire which would not exceed an average

response time of 30 minutes. Still another requirement was that the questionnaire be anonymous: not only would no respondent be required to sign his name but no demographic questions would be included by which individuals could be identified. Finally, MSP management agreed that a report of the project's findings would be made available to anyone, regardless of rank or assignment, who wished to read it. This was done to stimulate broad interest and participation.

Between April and May, 1969, all preliminary plans were completed and the writer began acquainting himself with the agency through preliminary interviews in headquarters, reviewing the department's official history, analyzing various administrative reports and visiting with recruits who happened to be in basic training at the time the study began.

During June and July, additional efforts were made to introduce the project to department members by speaking to over 100 individual officers of all ranks throughout the state, visiting staff of the Michigan Troopers' Association, writing a feature story regarding the project for the Troopers' Association newsletter (This was published several weeks prior to distributing the final questionnaire.); in addition, the writer explained the project to a meeting of nearly all 59 post commanders and also, later, to a meeting of officers holding the rank of Captain and higher.

At no time during these introductory interviews and talks was any mention made specifically of the writer's goal preference interest, although from time to time individual officers

expressed, independently, their own feelings about the subject.

Other activities in June and July included: reading the Department's history and archival material relating to training; developing drafts of the demographic section of the questionnaire as well as drafts of the curriculum section. Another activity completed during this period was developing the 24 evaluative items comprising Section III of the questionnaire. While this activity does not directly relate to the present project, it served to publicize the fact that a study of the department's basic training program was underway. A description of this phase of the project is provided in the next section.

By late July and early August, the questionnaire had evolved through six versions, having been tested on a number of recruit officers and training division members throughout its development. During the remainder of August, the final draft was printed in MSP's printing shop; the keypunching instructions were prepared; data processing plans were completed; and the distribution strategy was decided.

Immediately after Labor Day, all questionnaires were distributed. Within a week, half were returned and the writer began reviewing each one individually. Most questionnaires were returned within ten days of the date of distribution. Data processing cards were keypunched and verified by the end of October. During November and December, the first report on the open-end questionnaires was completed. In

December and January, a preliminary analysis of the data was completed. A preliminary report of the data was released to the State Police in April, 1970 .

During the preliminary report phase, the writer conferred with several statisticians regarding how the goal-curriculum element hypothesis could be tested. After rejecting a number of possible procedures, discriminant analysis (described below) was selected. In May and June, several "canned" discriminant analysis procedures were inspected and used to process the data preliminarily. One program, a step-wise discriminant analysis routine, was selected and the analysis of the data on which this report is based was completed early in June, 1970.

These are the major events in the project's evolution. While complete details regarding each event are not necessary for this report, it will be helpful for readers to be acquainted (a) with the development of Sections 1, 2, and part of Section 4 of the questionnaire, (b) how the questionnaires were distributed, (c) some details regarding preparing the questionnaires for data processing, how many were received, how many rejected, and related matters.

Questionnaire Development

No previously developed instrument was found which could be used to study relationships between goal and socialization curriculum element emphasis preference. Therefore, it was

necessary to construct an instrument which could achieve the theoretical objective and accomplish, in addition, the applied objectives which motivated MSP to sponsor the study.

During the early introductory interviews which the writer conducted with officers representing various ranks, assignments, and posts throughout the state, it became apparent that the general evaluative framework held by informants regarding the agency's entry socialization program was supported by two main props. One prop involved a feeling that the present, 13-week curriculum could be improved, not by adding new subjects to it, but by adjusting the amount of time allocated to each curriculum element. The second prop consisted of a group of opinions regarding non-curricular aspects of the program.¹

While these interviews were helpful in reconnoitering the general entry socialization program attitudes, both the writer and Training Division Staff agreed that it might be valuable to create an opportunity for all MSP personnel to provide, voluntarily, additional insights regarding the training program.

After reviewing various strategies to achieve this objective, the most suitable technique--given available time and resources--seemed to be an open-end questionnaire (OEQ) which would be made available to all MSP officers.

¹Seventy-seven distinct, non-curricular options were eventually identified, of which 24 were chosen through a statistical procedure, to comprise Section III.

The OEQ consisted of a single sheet of paper on which four incomplete sentences appeared, each separated by two inches of space for responses:

1. The following subjects should be added to the present recruit trooper training program:
2. The things I like best about the present trooper training program are:
3. The things I like least about the present trooper training program are:
4. In my opinion, recruit training in this department should be:

Each OEQ was attached to an envelope on which the writer's name and university office address were printed. Each envelope bore a first class mail permit. A brief description of the project as an official MSP enterprise appeared on the obverse of each OEQ. The OEQ's and their return envelopes were distributed to post commanders who, in turn, made them available to each officer in their post and each officer in each of the eight District Headquarters.

Just over 16% of the department's officers employed in June (i.e., 241) returned completed open-end questionnaires. An analysis of post-marks on return envelopes indicated that most of the major posts participated; all but one of the seven non-participating posts were rural or semi-rural in character. Since no demographic data were requested, and since no names were required, very little is known about the nature of the 241 respondents, except that they probably represented a portion of MSP's more highly motivated members. Also, the orientation, terminology, and involvement tones of

the responses seemed more characteristic of troopers than supervisors or command officers. Finally, both respondents who appeared generally satisfied with the program and those who were not so satisfied seem to be represented in the total group as were the traffic- and crime-goal preferring groups.

The open-end questionnaire responses confirmed an earlier hunch of the writer's that MSP members did not generally think in terms of adding new subjects to the 13-week entry socialization curriculum. Rather, they had much to say about the proportion of time spent on the various subjects in the current curriculum. In other words, more responses to Questions 2 and 3 were obtained in contrast to very few responses to Question 1, which invited suggestions for new subjects in the training program.

Examples of responses to Question 1 which favored re-emphasizing curriculum elements, rather than adding new subjects, include:

I think the present subjects that are being taught are sufficient; however, I think the time spent on each subject could be revised.

The recruit school covers a large variety of subjects. I don't feel that more subjects are necessary, but I do feel some could be expanded and others deleted.

. . . more time should be spent on the subjects now being taught before new ones are added.

Few new subjects were actually suggested, although some officers who were perhaps unaware of the content of the present curriculum suggested one or more of the following subjects which are currently part of the curriculum:

driving patrol cars²
 photography
 narcotics
 riot training
 psychology
 basic investigation
 juvenile psychology
 court procedures
 use of emergency equipment
 public relations
 community relations
 first aid
 handling disturbed persons
 law of arrest, search, and
 seizure

accident investigation
 combat skills
 public speaking
 sociology
 departmental procedures
 report writing
 post policies, practices
 Michigan history
 crime lab services
 human relations
 spelling
 interrogation
 desk officer duties

Some subjects (including some of the above) were cited as consuming too much time; e.g., "interrogation", "public service commission", "personal and family survival", "uninsured motorists", "water law", "classroom note taking". Other respondents cited one or more of the above as consuming too little time.

Two categories of suggested new subjects were (a) those which would help recruits adjust to their work, and (b) those which might be called "interpersonal relations". Examples of the first category are:

Due to the transfer policies of this department, I feel that these young officers should receive some basic instruction on real estate transactions. . . to avoid serious and costly pitfalls, such as cost of abstract, deeds, closing costs, realtor fees, and related costs.

More training on job attitudes and adjustment.

²A large number of comments regarding how younger officers drive was received, presumably from older officers; e.g., "The younger officers come out of school and drive like they're in the Indy 500 . . ." and "Teach the recruits how much power these patrol cars have before they get behind the wheel of one with me sitting next to him."

It should be indicated to the individual recruit that he will be confronted with undesirable situations about which he can do nothing.

Recruits should be instructed in how to get along with officers who work in other departments . . . some new men feel that other departments are far below them.

Just common courtesy, answering telephone, not clipping nails in public, returning items borrowed from fellow officers, personal neatness--we seem to need more training in these things because this is what it takes to work with others.

Examples of the second category are:

Human relations training, understanding human nature--some practical psychology and sociology.

More human relations training to make officers aware that "minority group" does not mean "inferior group"--make officers more aware of ethnic group's background.

A western city. . . puts their recruits on skid row for an encounter with police so they can learn what the "other side" feels like; this gives them some tact in handling prisoners.

The training concept should be dealing with people, obtaining information, investigating, and still maintaining a good relationship with the public. A course in talking with people would help, for example, poor, militant, rich, middle-class. . . and still do good police work.

Counter-themes, in one sense, to the above are represented by respondents who seem to feel that training should reflect the obligation of law enforcement to preserve civil order and that, if there is any place for interpersonal skill development, it should be subordinate to the more fundamental police goal.

I think the present riot training should be expanded to include basic infantry tactics: procedure for returning sniper fire, squad tactics for removing snipers from buildings.

In the present situation of our society, we still must be the last line of defense. Therefore, the protection of society and ourselves must come first before we can stop and try to understand why a riot, sit-in, etc., are taking place and how we can solve the problem.

I'm a college grad--out of your university--and I've learned the hard way that we need more practically oriented training--more offensive tactics, handcuffs, entering an occupied building, just how to stay alive!

Examples of the hypothesized goal related curriculum tensions appeared in the open-end questionnaire responses:

. . . the traffic summons should not be given priority over criminal arrest and investigation.

We need more Michigan Motor Vehicle Code because it's the basis for our basic job, traffic.

. . . traffic enforcement and accident reporting. . . could be covered in a relatively short time as almost all the traffic offenses are contained in the traffic manual which is quite simple to follow.

More time should be spent to teach the Vehicle Code.

The OEQ phase was, in addition to the preliminary interviews, an important source of suggestions for the curriculum section of the questionnaire. A third source was a study published by International Association of Chiefs of Police which included a list of 103 curriculum elements which had been used in a questionnaire distributed for the purpose of inventorying basic training curricula patterns among the various state police and highway patrols in the United States.³

³Comparative Data Report, Division of State and Provincial Police, International Association of Chiefs of Police, Washington, D.C., 1967, pp. 85-105. See Appendix C, "Elements of State Police Recruit Training Curricula in the United States".

Another important source of ideas for the curriculum section of the questionnaire was the MSP basic training curriculum. By inspecting the list of subjects, comparing it to the International Association of Chiefs of Police study, suggestions obtained from preliminary interviews and the open-end questionnaires, a list of over 80 curriculum items emerged which seemed to the writer to cover the subjects included in the MSP basic curriculum, most of the items in the International Association of Chiefs of Police list, as well as the suggestions received in the preliminary interview and OEQ phases.⁴

The last stage of the development of the curriculum element list occurred when the writer, because of certain theoretical concerns, collapsed certain of the 80 items and rewrote others. These "new" items were:⁵

Item Numbers

6	"How the legislature controls the department. . ."
35	"Up-to-date information on Supreme Court decisions and trends affecting law enforcement."
42	"How a new officer can adjust. . ."
53	"Psychological and sociological aspects of alcoholism."
61	"Principles of psychology. . ."
65	"Criminal justice as a system. . ."
67	"The history of the department. . ."

⁴The MSP basic curriculum is Appendix B.

⁵The items are abbreviated in this listing; see Appendix A for the items in their unabbreviated form.

Item Numbers

69	"Criminology. . ."
70	"Biographies of the nation's outstanding. . ."
73	"Principles of sociology. . ."
75	"Human relations. . ."
79	"Laws and services of federal, state, and local governments. . ."
81	"Self-improvement. . ."
87	"The Department's Future. . ."

Although most of the 89 curriculum items are understandable to persons not familiar with law enforcement, it will be helpful to explain the rationale and meaning of some of them.

Item 6, above, was developed to determine if respondents were interested in providing recruits with some understanding of external and internal organizational control. It is the writer's opinion that this is an essential dimension in social system socialization processes if one assumes it is desirable that system members should understand the relationships of the system to larger social contexts. No doubt a better, more comprehensive item or set of items could be developed to analyze this issue, but, given time and space limitations, this item seemed satisfactory.

Item 42 was designed to determine whether respondents considered it was important to socialize new members in principles which were designed to help them adapt to work related stresses and, if so, were emphasis preferences associated with certain categories of respondents.

Items 6, 53, 61, 69, 73, 75, and 87 are more concrete descriptions of subjects which are included in the present MSP program and which are specified in the IACP study. They were phrased in more concrete terms to provide respondents with a clearer impression of their possible content. For example, "Principles of Sociology" is amplified with an explanation of what it could consist of as a curriculum element. The writer knows from experience that police officers, among others, sometimes equate "sociology" with "social welfare". In order not to risk the consequences of this confusion, we provided examples of what might be included in "Principles of Sociology". Similarly, the rest of the items (which are mostly of a social science nature) were elaborated beyond the simple descriptive statements ordinarily used in the project's questionnaire. All these items were phrased very concretely to make it possible to examine crime-traffic goal preferences on social science aspects of the curriculum.

Items 65, 67, 87 similarly are more explicit statements of subjects found in the current MSP program and in the IACP study. As stated, their general purpose would provide new members with an institutional perspective; that is, if these items accomplished their purpose, recruits would presumably be provided with a broad view of their organization and, perhaps, come to think of it not as a static structure but, rather, as a social system subject to change and interdependence with other social systems in its environment.

Four items (51, 82, 86, 88) in the questionnaire represent comparatively new technological advances in law enforce-

ment which should be briefly explained. LEIN (Law Enforcement Information Network) is a computerized criminal and traffic information data storage and retrieval system. Voice-printing is a technique (currently undergoing scientific assessment) which may be effective for the graphic identification of persons through recorded voice characteristics. The Breathalyzer is an instrument for determining the amount of alcohol concentration in the blood by analyzing a measured amount of breath. VASCAR (Visual Average Speed Computer and Recorder) is a small, vehicle mounted computer which is used to determine the speed of any selected vehicle.

The item, "Modus operandi, theory and use of", refers to a well-established investigative technique which assumes that, for example, a burglar will tend to commit burglary in somewhat the same way time after time. One of the important implications of modus operandi techniques is that investigating personnel must carefully observe crime scenes and report their observations in such a way that certain aspects of the crime can be identified, indexed, and cross-filed to facilitate data retrieval and comparison.

The item, "Motorcycle riding", would be an important curriculum element in an agency which uses motorcycles and, as the IACP study shows, a number of state-supported police agencies train some of their members in proper use of the motorcycle. MSP, however, does not use motorcycles. The item is included as a rough technique for studying how carefully respondents answer the questionnaire. If the item receives

any value, this will presumably be the result of error, falsification, or random response.

The 89 items then, do not comprise the complete content of the present MSP entry socialization program, nor are they intended to. What the 89 items are intended to represent are attitudes, beliefs, skills and values in which recruit officers could be socialized, the amount of emphasis being provided by individual respondents.

After the items had been tested several times on selected recruits and training division members, it was necessary to decide on a response category which would fit all items equally well. The one decided upon was a Likert-type, five-option scale which presented respondents with a range of emphases:

great emphasis	moderate emphasis	no opinion or undecided	very little emphasis	no emphasis, should not be included
-------------------	----------------------	-------------------------------	-------------------------	---

The weights for each category were, respectively, 1, 2, 3, 4, 5.

After experimenting with a number of possibilities for eliciting a goal preference response, a simple item was constructed which tested out well in terms of readability and face validity as indicated by recruits and training division members.

If police work consisted of only the following two types of activities, which one would you most prefer?

1. Activities relating mainly to CRIMINAL law enforcement and investigation.
2. Activities relating mainly to TRAFFIC law enforcement and investigation.

This item, which provides the study's dependent variable, was included in Section 4 of the questionnaire as item number six.

The curriculum element emphasizes preference section was introduced with instructions which asked respondents to suppose they were

. . . in charge of this department's trooper basic training program and had to decide how much emphasis you were going to give subjects that could be included in the 13 week basic training program. But suppose you knew that you couldn't spend as much time as you want on all the subjects, because of time and budget limitations. How would you emphasize these subjects?

To complete this section, place an X in the box next to each subject to show whether you would give it great emphasis, moderate emphasis, very little emphasis, or no emphasis (that is, you would not include it at all). If you are undecided, or have no opinion, place an X in the box where the question mark(?) is to show that you are undecided or have no opinion.

Since no formal pre-distribution reliability or validity tests were undertaken, Section 4 included three questions which were intended to provide insight into the respondents' feelings about the questionnaire. Item 12 asked: "Do you understand the purpose of this questionnaire?" The intent of this item was to determine if the introductory interviews, newsletter publicity, and questionnaire instructions had succeeded in acquainting respondents with the project. Question 13 asked: "How much did you enjoy completing the questionnaire?" The purpose here was to determine if respondents felt discomfort in responding. Question 15 was included to determine if respondents experienced difficulty in completing the questionnaire: "How difficult was this questionnaire to fill out?"

Responses to these questions, and Item 18 in Section 1 (which asked respondents how much emphasis "Motorcycle Riding" should receive), would aid, it was believed, in formulating a rough assessment of response tone and quality.

The final form of the questionnaire appeared as indicated in Appendix A.⁶ The questionnaire was administered, in its final form, to a group of 45 ranking officers employed by large, municipal departments who were attending a special MSP sponsored training program. The average completion time for this group was 28 minutes. (This seemed also to be about the average completion time for MSP respondents during the administration of the final questionnaire, according to members interviewed after the questionnaire was administered.)

Questionnaire Distribution and Preparation for Data Processing

As previously mentioned, MSP executives expressed an interest in creating as much interest in the training program study as possible. Therefore, no attempt was made to construct

⁶Section 2, "Factors Important in a Job", is a scale which was developed to study the organizational involvement of scientists employed by a federal agency. Dwaine Marvick, Career Perspectives in a Bureaucratic Setting, (Ann Arbor, Michigan: University of Michigan Press, 1954). While the scale appeared to have some promise for exploring similar orientations among the study's respondents, an inspection of raw response frequencies indicated that it probably did not achieve its objective among the respondents in this project.

a scientific sample of the MSP universe. As it turned out, the return rate (as will be subsequently explained) was high enough that no serious underrepresentation appeared present in the data.

Various procedures for questionnaire distribution were explored: mailing directly to respondents' homes, holding meetings in district headquarters for the purpose of administering questionnaires simultaneously under uniform conditions, distributing questionnaires during regular post meetings, etc. However, since response was to be voluntary and anonymous, all these--and other--strategies were discarded, either because they appeared unduly coercive or because officers could interpret them as having a potential for identifying them as individuals and, finally, because too much time and expense were required.

The distribution system finally agreed on followed this plan: (1) the required number of questionnaires was assembled for each of the 59 posts; (2) these were distributed to each post where (3) a questionnaire was placed in each man's "pigeon-hole"⁷ along with a return envelope; (4) officers were permitted to complete their questionnaires on duty; (5) the instructions which were mailed to Post Commanders urged them to advise their subordinates not to compare their answers with each other or advise each other how to respond; (6) no pressure

⁷A place in a large cabinet which is assigned to each officer as part of the department's internal mail distribution system.

would be exerted on respondents to complete and return their questionnaire; (7) each officer was permitted to place his completed, unsigned questionnaire in a sealable envelope and return it to his Post Commander who, in turn, returned the questionnaires through the department's courier service to the training division.

Since the questionnaires were not distributed at exactly the same time, and since some officers were off-duty or on vacation when they received their copies, they were not returned at the same time. By the end of 10 days, however, over 80% were returned. Later, in a series of post-distribution interviews, the writer could find no evidence of serious deviations in the distribution procedure nor collaboration by officers in completing the questionnaires. Nor was any evidence found which indicated respondents had difficulty reading and completing the questionnaire.

The writer inspected each completed questionnaire. In general, the quality of response was satisfactory. Of the 1,277 returned questionnaires, only 34 were rejected from analysis because of one or more of the following reasons:

1. No responses to two or more questions in Section 4.
2. Incomplete responses to Sections 1 and/or 3. If more than seven curriculum element preference items or five evaluative section items were skipped, the questionnaire was judged "incomplete".
3. Obviously distorted response patterns; e.g., one respondent chose the "no opinion or undecided" option for every item in Section 1.

In only two cases did respondents express anxiety or hostility about the questionnaire, apparently believing that

they could be identified from their responses to Section 4. In addition to the 34 questionnaires rejected for the above reasons, 12 arrived too late for analysis. Thus, in all, approximately 2.5% of the returned questionnaires were rejected from data processing for one of the above reasons.

Because a preliminary inspection indicated no crucial underrepresentation in responses, no effort was made to encourage non-responding officers to complete and return questionnaires.

Data processing cards were keypunched directly from the 1,243 usable questionnaires, which represented 70% of the total officers actually employed at the time of questionnaire distribution. Key punching accuracy was verified (a) by key punching a second set of cards and comparing it with the first, and (b) processing cards through a code validation program.

Missing data were identified with a "nine punch" but, since there were so few of these, nine punches were converted to "no opinion or undecided" codes in Section 1 of the questionnaire. They were omitted from analysis if they pertained to rank or goal preference, which meant a loss of six respondents.

A complete set of data processing cards was mailed to the writer in Tulsa, Oklahoma, where they were subsequently analyzed on a Control Data Corporation computer, Model 6400.

Selection of Statistical Procedures

This study's general hypothesis is that crime and traffic goal preference will be reflected in distinctive curriculum element emphasis preferences. Specific hypotheses were developed to predict the possible nature of these distinctive differences. The selection of the statistical procedure used in this study was a decision based on the way in which the hypotheses were formulated.

The general hypothesis required a procedure which would determine if certain curriculum elements were distinctively preferred by each of two groups: those who preferred the crime goal and those who preferred the traffic goal. Next, individuals were sought in each of these two groups who could be identified as particularly high in their respective goal preference. These individuals would be, so to speak, enlisted as "consultants" to design a curriculum which would consist of the 89 subjects emphasized in a way which would be appropriate for socializing officers either into the crime or traffic goal. The assumption here is that distinctive goal preferences would manifest themselves in distinctive curriculum element emphasis preferences and that these distinctive preferences would be more intensely expressed by officers with high goal orientations.

These "consultants" would be, of course, extreme cases. Perhaps no such high goal preferring officers would ever be called upon to redesign the curriculum or, if they were, perhaps other organizational forces would moderate their high

goal orientations.

The reason these extreme cases were sought was to examine their curriculum element emphasis preferences under high magnification. Neither the writer nor the reader will expect that, in terms of social reality, these extreme cases have much meaning. On the other hand, they are useful in a Weberian heuristic sense. They exist, not as concrete realities but as highly distilled abstractions or mental constructs, ". . . for the scrutiny and systematic characterization of individual concrete patterns which are significant in their uniqueness. . ." ⁸

Having identified these two groups of extreme cases, the next step would be to examine their distinctive curriculum element emphasis preferences, as revealed in their responses to Section I of the questionnaire.

No statistical data processing program was found which performed all calculations needed to examine the study's hypotheses. One set of calculations was needed to identify respondents with high goal orientations and to identify which curriculum elements distinguish each goal type. Another was needed to compare both high goal groups in terms of their curriculum element emphasis preferences to test the directionally stated hypotheses.

Among the procedures examined were computations of mean scores for the items and statistical tests of their signifi-

⁸Max Weber, "Ideal Types and Theory Construction", in May Brodbeck, (ed.), Readings in the Philosophy of the Social Sciences, (New York: The Macmillan Company, 1968), p. 504.

cance; factor analyses of both goal group responses, and multiple regression. One common disadvantage characterized each computer routine which calculated the above statistics: none provided a basis for judging which individual respondents were exceptionally "high" in goal preference.

A discriminant analysis routine was found which could be used to test the study's major hypothesis and, in addition, identify individuals who were exceptionally high in goal orientation. For testing the specific hypotheses, it was necessary, however, to develop a special computer program which produced mean and Leik scores (i.e., a consensus measure) for each of the 89 curriculum elements for the two high goal groups. Both procedures are discussed below.

Discriminant Analysis

The discriminant function is typically used in educational psychology when, for example, it may be important to know whether certain student characteristics ". . . are more nearly parallel those of engineering students or of veterinary-medicine students." If, in such a case, one were to choose

. . . a single characteristic such as scholastic aptitude, as indicated by the ACE Psychological Examination. . . a score half way between the mean for engineering students and the mean for veterinary-medicine students can be considered as a cutting point. On one side of this cutting point a student is classified as more like engineering students, and on the other side as more like veterinary-medicine students.⁹

⁹James E. Wert, Charles O. Neidt, J. Stanley Ahmann, Statistical Methods in Educational and Psychological Research, (New York: Appleton-Century-Crofts, Inc., 1954), p. 365.

Examples of two other similar discriminant analyses are: where one wishes to determine which one or more of a series of tests do the best job of predicting whether a child will become a member of one or another group--good readers or poor readers;¹⁰ or where one wants to determine if an aptitude test will predict whether students entering high school should follow a business or a college preparatory curriculum.¹¹

In discussing various ways to analyze grouped data, Rulon specifies two questions which can be asked:¹²

1. "How can I analyze these data so I may determine the group in which an individual will perform best?"
2. "How can I analyze these data so I may determine the group which an individual is most like?"

Tiedeman sees multiple regression analysis as the most suitable procedure for answering the first question and discriminant analysis as appropriate for the second. Among his arguments, Tiedeman includes a justification for discriminant analysis which parallels a major characteristic of this study: the classifying of respondents, on the basis of curriculum element emphasis preference, into one of two goal groups, with

¹⁰Mable G. Miles, "The Use of Classification Equations in Reading Diagnosis in Fourth Grade" (unpublished doctoral dissertation, University of Tulsa, 1963).

¹¹David V. Tiedeman and Jack J. Sternberg, "Information Appropriate for Curriculum Guidance", Harvard Educational Review, XXII (1952), 257-74.

¹²David V. Tiedeman, "The Utility of the Discriminant Function in Psychological and Guidance Investigations", Harvard Educational Review, XXI (Spring, 1951), 72-73 quoting P. J. Rulon. "The Stanine and the Separile: A Fable", Educational Research Corporation Bulletin, (February, 1950), 2-10.

20

202

203

204

205

206

207

208

no consideration of quality of performance within a group, nor desirability of group membership, nor any other evaluative consideration. The criterion is merely preferred goal orientation. If, on the other hand, the study were concerned with predicting quality of performance as a goal group member, and there existed a performance criterion (e.g., high or low productivity or effectiveness), multiple regression would be the more appropriate procedure.¹³

The logic employed by Tiedeman appears to justify the use of discriminant analysis for the present problem. Recalling the previously stated study objectives (one of which is to reveal significant differences between crime and traffic goal preferring groups on the basis of the 89 curriculum elements) it can be seen that the discriminant technique, which simultaneously tests both groups with the same instrument and uses all curriculum element emphasis preference data from both groups, provides a methodological basis for observing differences if, in fact, they do exist.¹⁴

¹³Tiedeman, op. cit., pp. 75-77.

¹⁴There are four mathematical assumptions, underlying the use of discriminant analysis, which Rao specifies the data should meet: 1) normality of distribution measurements; 2) linearity of regression between the measurements; 3) homogeneity of within group variance; 4) equal probabilities corresponding to the various groups. P.C. Radhakrishna Rao, Advanced Statistical Methods in Biometric Research (New York: Wiley and Sons, 1952), p. 246. While this study's data were not tested regarding these assumptions, there is evidence that, even when data are not in conformance with the assumptions, classification equations may be effectively used: Wert, Neidt, and Ahmann, op. cit., p. 135 and Miles, op. cit., p. 90, referring to Peter P. Rempell, "The Use of Multivariant Statistical Analysis of Minnesota Multiphasic Personality Inventory Scores in the Classification of Delinquent and Non-delinquent High School Boys", (unpublished doctoral dissertation, University of Minnesota, 1955).

2

51

22

1

3

7

3

0

5

0

2

0

However, this is not the only step in the discriminant analysis. Once the procedure has determined statistically significant curriculum item differences on the basis of goal preference, these differences are used to identify each individual as a traffic or crime officer on the basis of the differences of the most significant curriculum elements. This latter calculation, as will be explained below, is independent at this point of reported goal preference.

Predicted goal preferences are in the form of individual officers' probabilities of being crime or traffic goal oriented, based on curriculum element emphasis preferences alone. This results in a linearly projected continuum of individual goal preference probabilities, all individuals predicted as being crime or traffic goal preferring depending upon which side of the goal classification boundary their curriculum preference characteristics place them, regardless of reported goal preference.

This procedure provided the writer with two sets of classifications on goal preference, a reported set and a predicted set. The accuracy of prediction can be checked by means of incorporating the two sets into a 2 x 2 contingency table, whereby the discriminating power of the variables can be examined in terms of correct and incorrect classifications.

Having reviewed the general rationale of the discriminant function with particular reference to this study's hypotheses, the reader may be interested in a more specific, mathematical expression of the discriminant function.

The use of the discriminant function in the analysis may be expressed in the following equations:

$$1. C_i = c_0 + [c_1X_{1i} + c_2X_{2i} + \dots + (c_jX_{ji}) + \dots + c_nX_{ni}]$$

$$2. T_i = t_0 + [t_1X_{1i} + t_2X_{2i} + \dots + (t_jX_{ji}) + \dots + t_nX_{ni}]$$

These are generalized forms of the two discriminant functions which were calculated in the analysis. Equation 1 is the generalized form of the discriminant function for the crime group and Equation 2 is a similar formulation for the traffic group. The distinctive feature of these equations is that each one contains a set of coefficients (in Equation 1, c_0 through c_n ; and in Equation 2, t_0 through t_n). These sets are unique for each group and the coefficients are calculated for each group on the basis of the individual curriculum element responses of the men who claimed preference for one goal or the other. For example, there were 773 crime goal preferring officers used in the analysis. The responses of these 773 officers were used to calculate the coefficients in Equation 1. A similar procedure is used to calculate the coefficients for the 267 traffic goal preferring officers.

A better understanding of the purpose of the coefficients may be obtained by looking at the portions of the equations which are set in brackets. Each one of the terms has a coefficient multiplied together with an X term or variable. The standard form for these variables is represented by the X_{ji} symbol which means the curriculum item score for the i th individual on the j th item entered in the discriminant function. The standard forms for the coefficients associated

11-11-11

11-11-11

11-11-11

11-11-11

11-11-11

11-11-11

11-11-11

11-11-11

11-11-11

11-11-11

11-11-11

11-11-11

with this variable are c_j and t_j . These coefficients are weighting factors on each one of the individual variables that make certain that they contribute their proper numerical proportions to the discriminant scores. What these proportions are for a variable is determined in part by the power of that variable to discriminate. Consider the parenthesized terms of the equations (i.e., $c_j X_{ji}$ and $t_j X_{ji}$). This is the score on the j th variable for the i th individual multiplied by its coefficients. It can be said, generally, that the coefficients will be larger for this j th variable if the differences on the group means are greater, this indicating more discriminating power for that variable.

There are two additional coefficients, c_0 and t_0 , which stand outside the brackets and are unassociated with any of the variables. These constants, which are negative in each of the calculations, are added to the sums within the brackets to produce the final classification scores for each individual in the crime and traffic groups.

The scores for an individual on all the variables used are entered into both classification equations and two classification scores (i.e., C_i and T_i) are then obtained for each individual. On the basis of these scores, it becomes possible to predict into which of the two goal preferring groups the individual is most likely to fall.

The generalized forms of the discriminant function may be viewed as two equations which mathematically describe the centroids of the two goal preferring groups in terms of the in-

dependent variables. Each individual is tested to see with which of the centroids he is most closely associated.

The traffic centroid is situated to minimize the distance of the traffic group means from it and at the same time maximize its distance from the crime centroid and the crime group means. The crime group centroid is located likewise to minimize within group distances and maximize between group distances. The distance between the two centroids is D . The statistical routine requires that the researcher specifies in advance the level of significance he desires his independent variables to achieve. Therefore, D is a function of only those curriculum elements which were significant at least at .05.

Implicit in the use of the discriminant function is a consideration of whether the crime and traffic group centroids have been sufficiently separated by the independent variables. Rao provides a formula to determine this based on the following relationship: the difference between the score of a group on its own equation and its score on the equation of the other group (obtained by inserting group means into the equation) is equal to one half the squared group distance ($\frac{1}{2}D^2$). Having thus obtained D^2 , Rao¹⁵ incorporates D^2 into a formula to determine whether group differences are significant:

$$F = \frac{N_1 N_2 (N_1 + N_2 - P - 1)}{P (N_1 + N_2) (N_1 + N_2 - 2)} D^2$$

¹⁵C. R. Rao, "On Some Problems Arising Out of Discrimination with Multiple Characters", SANKHYA, IX (September, 1949), 361-77.

N_1 and N_2 represent the number of crime and traffic officers, respectively, whose scores were used; P represents the 12 curriculum elements which were significant at the .05 level.

A statistical program, BMD07M,¹⁶ was found which performs discriminant analysis in step-wise order resulting in a list of curriculum elements which discriminated crime from traffic goal preferring officers. To execute the program, the writer was required to specify the minimum significance level which variables should meet before entering the classification equation. The level chosen was .05. At each step, the variable entered is always the variable with the largest F value. A variable is deleted if its F value becomes too low.

Besides F values for significant variables, output includes

1. Group (i.e., crime and traffic) means and standard deviations
2. Within groups covariance matrix
3. Within groups correlation matrix
4. Discriminant function coefficients
5. The posterior probability of coming from each group
6. A 2 x 2 contingency table showing the number of correct (i.e., officers claiming a particular goal preference and who, on the basis of classification equations, were actually assigned to their preferred goal category) and incorrect classifications.

¹⁶A complete description of this program is available in: Paul Sampson, "BMD07M: Stepwise Discriminant Analysis", in W.J. Dixon (ed.), BMD, Biomedical Computer Programs (Berkeley and Los Angeles: University of California Press, 1968), pp. 214a-14t.

In addition to producing F values for each retained variable, an overall test of the statistical significance of all the retained variables working together is provided. The formula for deriving this F value is reported on page 78, above. It is this F value which will be used to test the study's major hypothesis.

Before using the program to analyze the present study's data, it was pretested in accordance with instructions and sample data provided in the BMD text.

Mean and Leik Scores

The second phase of statistical analysis was undertaken to study how each of the two high goal preferring groups would emphasize each of the curriculum elements. Two measures were used for this purpose: (1) a mean response score (indicated in later tables by \bar{X}), and (2) a Leik score (indicated in later tables by L). The mean response score indicates the average response from great emphasis to no emphasis, should not be included. The mean response score is calculated by assigning the values 1 to 5 to each of the response categories, as previously indicated, and then determining the mean value of an item for the respondents.

The Leik score is a measure of cumulative relative frequency distribution. The theoretical range for this score is from -1.0, where 50 per cent of the responses would be in each of the two extreme response categories (i.e., maximum dissensus), through 0.0 where 20 per cent of the responses would be

in each response category (i.e., maximum dispersion), to 1.0 where all responses are in one category (i.e., maximum agreement).

The reader will have no difficulty interpreting these scores if he remembers these two guides:

1. In reading mean scores, the higher the value, the less respondents felt a curriculum element should be emphasized.
2. In reading Leik scores, the higher the positive value, the greater the agreement.

In the example,

<u>Curriculum Element</u>	<u>Goal Preference</u>			
	<u>Crime</u>		<u>Traffic</u>	
	\bar{X}	L	\bar{X}	L
Principles of Psychology	1.89	.464	3.12	.040

the high crime goal respondents would emphasize "Principles of Psychology" much higher than would traffic goal preferring respondents. Moreover, crime goal respondents have a higher Leik value than traffic goal respondents, indicating greater agreement among the former than the latter on that item.

The reason the Leik score was used, rather than standard deviation (which also is a measure of agreement) is that the Leik score, with its upper limit of 1.00, provides a more readily comprehensible basis of comparison than standard deviation. The Leik score, moreover, does not assume equal intervals between each of the response categories and therefore serves as a measure of ordinal consensus.¹⁷

¹⁷For a description of the rationale and computational aspects of this statistic, see: Robert K. Leik, "A Measure of Ordinal Consensus", Pacific Sociological Review, IX (Fall, 1966), 85-90.

Chapter IV

THE RESEARCH SITE: THE MICHIGAN STATE POLICE

Introduction

The data used in this study were obtained from Michigan State Police officers. Since the study's questionnaire, concepts, and terminology are closely related to this agency, it is necessary for the reader to have some knowledge of it as an institution.

Typically, in the United States,

. . . the two major objectives of state police agencies are traffic supervision and crime repression. Traffic supervision is carried out in every state police agency and criminal law enforcement in most state police agencies.¹

While these agencies, like the Michigan state Police, often perform a variety of non-crime and non-traffic duties, these duties are usually considered somewhat less important than crime and traffic goals.

The Michigan State Police may properly be called a complex organization. It is geographically decentralized, has a relatively large payroll, an elaborate authority structure, detailed rules, procedures and regulations, places great emphasis on rationalism in decision-making, and, in short,

¹Edward A. Gladstone, Thomas W. Cooper, State Highway Patrols: Their Functions and Financing, (Washington, D.C.: United States Department of Commerce, Bureau of Public Roads, Office of Planning, January, 1956), p. 17.

evinces the classical characteristics by which bureaucracies are known.²

A Brief History

In a recently published official history, the Michigan State Police described its "beat" as

All of Michigan, although [MSP] normally provide[s] services and protection to the rural area and respect[s] municipal police jurisdictions. . . . The estimated 8.5 million residents of the [two] peninsula state travel on more than 113,000 miles of streets and highways. In area, including water surfaces of inland lakes and streams, Michigan comprises more than 90,000 square miles and her Great Lakes shore line measures about 3,000 miles. . . .³

Eleven days after Congress declared war on April 16, 1917, the Michigan Legislature created the "Michigan State Troops" to fill the ". . . void in internal security of the state" which was created by the commissioning of the Michigan National Guard for active duty.⁴ Thus, MSP was conceived as a war time constabulary whose

. . . Troops guarded railroad and shipping facilities, grain elevators, warehouses and stockyards, controlled strikes and riots, enforced draft laws, and otherwise protected the general interest of the military effort against sabotage and provided other police services. This protection extended from the great shipping docks at Detroit to the northern ore ranges in the Upper Peninsula and from the Port Huron railroad tunnel to Michigan's western boundary.⁵

²See, for a description of bureaucracy, Anthony Downs, Inside Bureaucracy, (Boston: Little, Brown and Company, 1967), pp. 24-31.

³Michigan Department of State Police, Official History, (Lansing, Michigan: 1968), p. 85.

⁴Ibid, p. 21.

⁵Ibid, p. 26.

On March 27, 1919, the Troops were reorganized, by legislation, as the Michigan State Police ". . . to police rural communities of the state and to assist local officers in the enforcement of laws." Although several subsequent major laws changed, for a time, the name of the organization and modified its goals, MSP has had, since its inception, general police powers.⁶ The varied duties of the organization were summarized as follows in its official history:

Though a good share of their responsibility involves highway patrol, traffic control and accident investigation, they also investigate criminal cases of all types. Other varied activity includes mercy missions for sick and disabled persons, assisting highway travelers, providing qualified first aid for injured persons, delivering emergency messages, searching for lost persons or escaped prisoners, making property security inspections, and doing public relations assignments of subjects relating to police work and public service such as traffic, water, and fire safety, civil defense, juvenile counseling, etc.⁷

The Legal Mandate of the Department

The basic statute governing MSP⁸ charges its Director to

⁶Ibid., p. 34.

⁷Ibid., p. 34.

⁸State of Michigan, Act 59, P.A., 1935. The quotations from this law have been taken from a seven-page document printed by the MSP, n.d. The legally prescribed title for MSP's chief executive officer was, for many years, "Commissioner" (Act 59, P.A. 1935, 28.1 Sec. a). However, when Michigan's Constitution was revised in 1963, the title was changed to Director. His departmental rank is, however, "Colonel".

. . . formulate and put into effect plans and means of cooperating with the local police and peace officers throughout the state for the purpose of the prevention and discovery of crimes and the apprehension of criminals.⁹

In addition, the Director is required to ". . . establish a highway patrol in the uniform division consisting of not less than 100 members. . ." ¹⁰

The Director is empowered to appoint officers and civilian members of the department,¹¹ although the initial recruitment, testing, and certification of eligible applicants, as well as providing and administering promotional examinations, is the responsibility of the Michigan Civil Service Commission.

As is customary in laws establishing public agencies, the details of organizational development are not spelled out; these matters are left to the discretion of the Director who, in turn, elaborates structures and processes throughout his tenure as time, circumstances, and personal leadership style dictate.¹²

⁹Ibid., 28.6, Sec. 6, p. 3.

¹⁰Ibid., 28.4, Sec. 4, p. 2. The term, "officer", refers to employees who are empowered to execute the "constitutional oath of office" as police officers in contrast to civilians, who do not have police officer powers.

¹¹Ibid., 28.4, Sec. 4, p. 2.

¹²During the first nine years of its history, the average incumbency of Directors was two years; however, since 1926, the average length of time served by Directors has increased to 10 years. In all cases, Directors have been career officers.

Organizational Structure

The MSP organizational structure consists of a central executive bureau whose Director commands two major divisions: the Bureau of Staff Services and the Bureau of Field Services. Each of these two divisions is directed by an executive who reports to the Director.

The Bureau of Staff Services is smaller (in terms of numbers of assigned officers) than the Bureau of Field Services, but it is more functionally differentiated, consisting of 10 divisions in contrast to the three divisions comprising the latter. The basic rationale behind the two major bureaus is that Staff Services performs supportive and facilitative duties which are required to keep the whole organization functioning while Field Services is directly responsible for attaining the organization's primary goals.

Structural Characteristics

The major divisions comprising MSP are:

Bureau of Staff Services

1. Administrative Division
2. Business Administration Division
3. Civil Defense Division
4. Fire Marshal Division
5. Operations and Communications Division
6. Personnel Division
7. Records and Identification Division
8. State Safety Commission Division
9. Training Division
10. Safety and Traffic Division

Bureau of Field Services

1. Administrative Division
2. Detective Division
3. Uniform Division

Subordinate to each of these divisions is a variety of sections or units, each of which has specific functions. The distribution of sworn personnel by rank for each of the three major bureaus, and the numbers of personnel with headquarters assignments (that is, general headquarters in East Lansing and each of the eight district headquarters) is shown in Table 1, "Distribution of Michigan State Police Sworn Personnel by Rank, Bureau, and Numbers Assigned to Headquarters and Districts".

Several aspects of Table 1 are important for the purpose of this study: (1) 85% of all sworn personnel are assigned to the 59 posts in the eight districts; (2) 61% of the personnel hold the rank of trooper; (3) corporals are the next largest rank category (13%), followed by detectives (7%), sergeants (4%), detective sergeants (3%), staff sergeants (2%)--all higher ranks comprise slightly more than one per cent of all personnel; (4) there are 12 ranks higher than trooper.

Specialization

Both major bureaus are, as previously mentioned, differentiated into a total of 13 divisions; 62 sections comprise the 13 divisions and, finally, 93 units comprise the sections. This differentiation is the result of several apparent organizational needs, including (1) fixing responsibility for certain functions; (2) increasing task expertise; (3) setting a certain function apart for security reasons.

Beneath each of the 13 divisions is an administrative section and various other sections (e.g., Headquarters garage

Table 1

Distribution of Michigan State Police Sworn Personnel
By Rank, Bureau, and Numbers Assigned to Headquarters & Districts

BUREAU OR DIVISION	NUMBER OF SWORN PERSONNEL BY RANK														
	Trooper	Corporal	Detective	Sergeant	S/Sergeant	Det. Sgt.	Det. S/Sgt.	Lieutenant	Dt. Lt.	Captain	Major	Lt. Colonel	Colonel	Other	Total
Executive Bureau		2		1				1		1			1	4 ³	10
Bureau of Staff Ser.	5	11	4	7	8	4	3	5	2	6	1			130 ¹	186
Bureau of Field Ser. Staff Div. Detective Div.	7	1	27	3		12	4	2	2	2		1		1 ⁴ 2 ²	8 56
Uniform Division (Total Assd. to Hq.) Total in Dist.	(12) 1066	(14) 219	(31) 89	(11) 55	(8) 20	(16) 32	(7) 1	(8) 11	(4) 2	(9) 7	1 (2)	(1) (1)	(1) (1)	(137) 2 ⁴	1 (261) 1505
Total Actual	1078	233	120	66	28	48	8	19	6	16	2	1	1	139	1766

¹Recruits²Policewomen³Executive Aides⁴Pilot

Source: Michigan Department of State Police, Enlisted Personnel Strength Report
(April 1, 1969).

section, plans and operation sections; Operation; Records Section; Traffic Analysis Section; Special Services Section). Examples of unit titles are: Accounting unit, Inventory unit, Grounds unit, State Property and Sprinkler unit, School Inspection unit, Typing Pool unit, Gun Records unit, Training unit, Ordinance and Pistol unit, Water Safety and Underwater Recovery unit, Narcotics unit, Organized Crime unit, Smuggling unit, Polygraph unit.

In some cases, these organizational subdivisions are staffed by civilian¹³ employees only, in some cases by sworn personnel only, and in some cases they are staffed by civilians and sworn officers. Table 2, "Distribution of Sworn Personnel by Major Divisions and Units", shows the number of officers for any MSP unit or division which consists of five sworn personnel or more. This table also indicates that a total of 111 sworn officers is assigned to these specialized organizational subdivisions and that 28% of these are assigned to units or sections with four personnel or less.

Table 3, "Distribution of Michigan State Police Sworn Personnel by Rank", shows the number of officers who were employed March 3, 1969, by the rank categories comprising the state police hierarchy.¹⁴

¹³MSP employed approximately 400 civilians in 1968.

¹⁴Persons holding job titles of Pilot, Executive Aide, Policewoman have one of these other ranks, but are designated as shown for reporting purposes.

Table 2

Distribution of Sworn Personnel
by Major* Divisions and Units

BUREAU, DIVISION, UNIT	No. of Sworn Personnel	% of Grand Total
BUREAU OF STAFF SERVICES Number assigned to divisions with 5 or more sworn personnel		
Fire Marshal Division	8	7
Operations and Communications	13	12
Modus operandi and License Unit	5	5
Safety and Traffic Division	10	9
Training Division	9	8
Subtotal	45	--
Number of personnel in units or division with 4 or less sworn personnel	10	9
Total Assigned Personnel	55	50
BUREAU OF FIELD SERVICES Number assigned to division with 5 or more sworn personnel		
Special Investigation Unit	14	13
Crime Laboratory Unit	14	13

Table 2 (Cont'd.)

BUREAU, DIVISION, UNIT	No. of Sworn Personnel	% of Grand Total
Number assigned to divisions with 5 or more sworn personnel (continued)		
Latent Print Unit	7	6
Subtotal	35	--
Number of personnel in units or divisions with 4 or less sworn personnel	21	19
Total Assigned Personnel	56	50
GRAND TOTAL	111	100

*Source: Michigan Department of State Police, Michigan State Police Strength Report (March 3, 1969). This table lists only divisions and units with 5 or more sworn personnel. Recruits not included in staff services totals.

Table 3

Distribution of Michigan State Police
Sworn Personnel by Rank

RANK	NUMBER OF PERSONNEL	PERCENT OF TOTAL
Colonel	1	*
Lieutenant Colonel	1	*
Major	2	*
Captain	17	1
Detective Lieutenant	6	*
Lieutenant	19	1
Pilot	3	*
Executive Aide	4	*
Detective Staff Sergeant	8	*
Detective Sergeant	48	3
Staff Sergeant	28	2
Sergeant	66	4
Detective	120	7
Corporal	233	13

Table 3 (Cont'd.)

RANK	NUMBER OF PERSONNEL	PERCENT OF TOTAL
Policewoman	2	*
Trooper	1078	61
Recruits	130	8
TOTAL	1766	100

Source: Michigan Department of State Police, Enlisted Personnel Strength Report (April 1, 1969). This summary excludes 68 vacancies and civilian employees.

*Less than 1%.

District Organization

A major MSP structural characteristic is geographical dispersion. The numbers and locations of the 59 posts are somewhat proportionate to the concentration of Michigan's population in the southeast section of the state; about half the Department's manpower is concentrated in Districts 1, 2, 3, 4, (the Southeast portion of Michigan) which comprise approximately one-third the state's land mass. The average number of officers for each post ranges from 14 to 35, the two upstate districts (numbers 7 and 8) having the smallest post size.

The Work of The Michigan State Police

In the absence of a more systematic analysis, some insight into the work of troopers can be derived by reviewing Departmental Order Number 5 (the "Uniform Complaint Classification System") which outlines, in 13 pages, the way in which MSP activities are classified and tallied. While it is possible that most troopers will, after 5-10 years experience, have acquired experience in working on some aspect of many of these tasks, troopers may or may not always work on each type of task completely from beginning to end. And, owing to the existence of the various specialized assignments, some tasks may never be performed by uniformed troopers, but, instead, are assigned to specialized investigators. Nevertheless, for purposes of an overview of the breadth of the trooper work

role, the way in which the department classifies its work in its official reporting system suggests the sensitive and varied nature of the trooper work role.

Listing Class 1 and 2 complaints requires six pages and comprises the largest single complaint category. These complaints include crime of assault (e.g., murder, rape, battery), theft (e.g., burglary, shoplifting, forgery, embezzlement), vice (e.g., gambling, prostitution, liquor, narcotics), sex, vagrancy, wayward and delinquent minors. A list of 35 "miscellaneous crimes" is included in Classes 1 and 2 (e.g., abandoned refrigerators; animals, cruelty to; glue, inhaling of fumes; libel and slander; malicious destruction; possession or sale of adulterated drugs; refuse, littering; scalping law, violation of; unlawful disinterment of the dead; and violation of sepulture.) This complaint category comprises the agency's crime-goal.

Class 3 complaints, subtitled "Safety and Traffic", require slightly less than one page to list and are subsumed under major categories: Drunk Driving, Traffic Violation, Traffic Investigation, Traffic Policing, Traffic Accidents, Hit and Run Accidents, Non-Traffic Motor Vehicle Accidents; Traffic Safety Public Appearances, Breathalyzer Inspection. This complaint category comprises the agency's traffic goal.

Class 4 complaints, subtitled "Fire Bureau", comprise six major categories: Arson, Fatal Fires, Explosions, Fire Laws, Inspections, and Accidental Fires.

Class 5 complaints, subtitled "General", require the second most lengthy enumeration of activities including: assisting State, County, and City officials; accompanying agents or Inspectors of other state departments where no criminal action is taken; assisting firemen; making character checks for other agencies; relays of serum, paper, persons, cars; windstorms and floods; service of Subpoenas, Injunctions; speeches; exhibits; mass fingerprinting; participation in programs of instruction to enforcement officers; assistance to. . . municipal, village, township (police) departments. . . sheriff(s) departments.

Class 6 complaints, subtitled "Accidents(General)" is the briefest complaint category and includes: Aircraft Accidents, Hunting Accidents, Accidental Shootings, Drownings, Boat Accidents, Industrial, Farm and Home Accidents.

In terms of the numbers of activities¹⁵ which troopers performed in 1968, the four broad workload categories are distributed in percentages as follows:

ACTIVITY	NUMBER	% OF TOTAL
Criminal	63,288	44
Traffic	48,646	34
Non-Criminal Non-Traffic	31,489	22
Miscellaneous regulatory	1,445	1
TOTAL	144,868	100

¹⁵Fredrick E. Davids, Annual Summary: Status and Performance, 1968 (Michigan Department of State Police, 1968), n.p. This listing represents a slight reorganization of MSP categories in order to realign like activities.

Table 4, "Analysis of Selected Activities by Man Hours for 1968", summarizes the 3,089,000 man hours spent in 1968 by major categories. In terms of man hours, several findings from the table are of interest: (1) the largest single man hour category relates to traffic enforcement, (2) the second largest man hour category is "administration and supervision", (3) the third largest category is "criminal", (4) if "report writing", "desk assignment", and "administration and supervision" (all three being control or coordinative activities) are combined, the resulting sum is 31%.

The Department's Basic Training Program

In the first years of its existence, MSP did not have a specialized ". . . training staff. . . so the more experienced man was chosen to instruct recruits." In this sense, the role model concept was the first socialization mechanism, but, by 1919 a formal recruit training program was established consisting of

. . . instructions in horsemanship and care of animals, law and court procedures in criminal cases, drill mounted and unmounted, target practice, care of the health and administering first aid, Michigan geography and history and other subjects pertaining to the work of the organization.¹⁶

In the following 50 years, the basic trooper training process has evolved into the present day, four-phase, year-long program which must be satisfactorily completed before recruits become troopers.

¹⁶Michigan Department of State Police, Annual Report, (1919-20), n.p.

Table 4

Analysis of Selected Activities by Manhours for 1968*

ACTIVITIES	EXPENDED HOURS	% OF TOTAL
Traffic Patrol	749,309	
Other Traffic	109,972	
Safety and Traffic	185,521	
Subtotal, Traffic	1,044,802	34
Criminal	645,600	21
General NonCriminal (Abandoned cars, dog bites, loose animals, civil disputes, lost-found property, civil processes, public relations, assisting other depart- ments, general accidents except traffic.)	104,520	3
Fire Bureau	51,663	1
Civil Defense Work	10,158	**
Community Relations, Juvenile Work	7,973	**
Report Writing	147,548	5
Desk Assignment	71,239	2
Administration and Supervision	739,475	24
Training	142,460	5
Fatigue Work	25,117	**
Other Duty	98,481	3

TOTAL 3,089,036 100

*Source: Ibid., n.p. This table is a modification of several reports in the summary.

**Less than 1%.

The complete, year-long entry socialization program has consisted of four phases since 1963:

1. The thirteen week in-residence basic training curriculum.
2. A correspondence course which is conducted concurrently with phase 3 below.
3. Assignment of recruits to a senior trooper for a 3-6 month period.
4. A final, four week in-residence advanced basic training course.

Each of these phases will be described in the following pages. These four phases are, of course, the formally prescribed entry socialization program. The informal (i.e., unofficial) socialization process may well be as, or more, important than the formal process, but it is not this study's concern. Moreover, it is helpful to understand that phases 2 and 3 are concurrent and, unlike phases 1 and 3, these occur in the field and are less controlled by the training division than phases 1 and 3.

The Thirteen-Week Curriculum

Most of the 103 subjects listed in Appendix C are covered in the 13-week curriculum which is shown in Appendix B; however, rather than listing all these subjects, we have, for convenience, abbreviated the curriculum as shown in Table 5, "Analysis of Major Components of the Michigan State Police Recruit School Curriculum by Distribution of Hours". The reason we have summarized the 13-week curriculum in the manner shown in Table 5 is to analyze it as indicated in the following paragraphs.

Table 5

Analysis of Major Components of the Michigan State
Police Recruit School Curriculum by
Distribution of Hours

SUBJECT	HOURS	% OF TOTAL
Miscellaneous	13	2
Administrative Procedures	89	14
Civil Defense	34	6
Defensive Procedures and Physical Training	110	18
Criminal Identification and Investigation	63	10
History and Government	11	2
Human Behavior	25	4
Laws and Criminal Procedure	95	15
Military and Related Subjects	19	3
Patrol Techniques	47	8
Public Relations	10	2
Specialized Training	33	5
Driver Training	38	6
/Classroom Preparation and Study	227	
Non-Curricular Activities	35	5
 Total, less hours allocated to classroom preparation and study	 622	 100
 Total, with hours allocated to classroom preparation and study	 849	

Source: Adapted from training schedule prepared by MSP Training Division for 74th Recruit School, January 6, 1969 to April 2, 1969.

Table 5 shows what percentage each component of the curriculum is of the 849 hours required in the 13-week basic training program. The largest percentage (27%) in the table represents 227 hours which are devoted to class preparation and study after normal business hours. The next largest block of time (124 hours, or 15% of the total) is consumed by a variety of non-academic matters which relate to improving study habits, administering examinations, etc. The next two largest blocks of time are devoted to (1) self-defense techniques, physical training, use of firearms and (2) laws and criminal procedure (110 and 95 hours, or 13% and 12%, respectively).

One of the interesting characteristics of the basic 13 week curriculum as well as the four-week advanced program is that considerably less time is spent on traffic and criminal law enforcement and investigation than one might suppose, in view of the apparent dominance of these two organizational goals in the trooper's work load. Thus, the agency makes a definite attempt to train officers to perform a variety of tasks as well as those required by the crime and traffic goals.

Some time is also allocated to introducing recruits to the department's correspondence course (see below), post procedures, and problems of probationary officers.

The Correspondence Course

If the recruit is graduated from recruit school, he then serves a period of time in a post, usually one in the southern part of the state. This period lasts for about six months and

he is always under the observation of one or more senior troopers and the post commander. But during this period, in addition to performing the tasks previously mentioned, troopers also must satisfactorily complete a correspondence course which consists of 59 lessons under five headings: (1) criminal law and procedure, (2) criminal investigation, (3) introduction to law enforcement, (4) traffic accident investigation, (5) official orders. The course requires a total of approximately 90 hours to complete; examinations are given on every lesson but, unlike examinations in phases 1 and 4, the trooper may refer to his texts and notes.

The Role Model Program

When a "cub" (i.e., a recruit officer in training) is assigned to a senior trooper, one of the department's requirements is that the senior trooper records his evaluation of the trooper, once a month, on a special form, the "Michigan State Police Probationary Trooper Rating". This form consists of two parts: the obverse side of the form requires the senior trooper to rate (i.e., whether "Excellent", "Satisfactory", "Unsatisfactory") the probationary officer on 10 factors: appearance, public complaints, attitude toward job, personal habits, work quantity, dependability, judgment, working relationship with other officers, knowledge of police work, and work quality.

The reverse side of the form requires the senior officer to "indicate with an 'X' each area in which the probationary officer has had experience". Eleven work categories are

listed: driving ability, traffic violation cases, general patrol, desk assignment, processing of arrested subjects, reports, traffic direction, first aid, complaints and warrants, court experience, and criminal investigation. Subsumed under each category are at least two specific activities which must be checked or not checked, depending on whether the senior officer can certify the trooper's performance of the task, for example:

Criminal Investigations

<input type="checkbox"/> narcotics	<input type="checkbox"/> drunk & disorderly
<input type="checkbox"/> homicide	<input type="checkbox"/> attended autopsies
<input type="checkbox"/> suicide	<input type="checkbox"/> lift and photograph
<input type="checkbox"/> sex offense	latent prints
<input type="checkbox"/> stolen property or [burglary]	<input type="checkbox"/> interviewing sus-
<input type="checkbox"/> assaults	pects
<input type="checkbox"/> crime scene search	<input type="checkbox"/> statements

In effect, senior troopers will have judged cubs on 48 specific activities when this form has been completed. Judgments of unsatisfactory appearance, behavior, attitudes, or performance must be supported by narrative documentation.

Besides formal evaluation, the trooper also will be informally evaluated by (a) members of specialized MSP divisions who review--for their own purposes--troopers' work (e.g., members of the Community Relations and Juvenile Section, the Crime Laboratory Unit, the Intelligence Section, Records and Identification Division, Operations and Communications Division, etc.); (b) members of other agencies with whom they have contacts (e.g., county, city, village, township police officials, social service agency personnel, judicial and prosecuting attorney representatives, news media workers, etc.); (c) victims, suspects, witnesses, and perpetrators of major and minor criminal

acts; (d) witnesses to, and participants in, traffic mishaps, etc. Few of these evaluations (except, perhaps, those in the "a" category) become part of the cub's record, although they may under special circumstances, e.g., disciplinary proceedings.

No further attempt will be made to categorize completely the persons who may have an opinion regarding trooper work performance; but, of all of these, the one person who will, at least in the first year of the cub's career, observe his performance most frequently is the senior trooper.

In theory (and to a considerable extent in practice) the senior trooper-cub relationship is tutorial: the former provides the latter with an understanding of the trooper role and an example of its proper execution. The relationship is one of master to apprentice. The senior trooper is not, however, the sole arbiter of when the cub is advanced to trooper status. The decision to confirm a trooper is mutually agreed upon by (a) training division personnel, (b) post commanders, (c) personnel division members, (d) district commanders, all of whom have had access to various official records regarding the cub's progress in the probationary year.

Pre-questionnaire field interviews indicated that, in practice, post commanders vary considerably in their beliefs and assumptions regarding establishing the senior officer-cub relationship. For example, some post commanders believe that no one senior officer should be responsible for certifying a cub's performance: greater diversity of opinion and objectivity,

so this view holds, will result if several different senior officers work at different times with a cub. Some post commanders will assign a cub to one senior officer, but they will also invite other troopers to comment on the cub. In a few instances, post commanders observed that they always wanted a post detective to work with a cub, as one put it, ". . . because detectives are usually particularly well suited to comment on a cub's potential as a criminal investigator". Some post commanders reported they thought that senior officers should not be too old; as for example, one sergeant who believed that

Troops who are still troopers after 12 years or so often get into a slump. They feel they're not getting anywhere. I like to assign cubs to men who have at least four but not over 10-12 years of experience. They're still enthusiastic and it rubs off on the cubs.

Some post commanders reported they believed that the more years of service a senior officer had, the more likely he was to produce cubs who did things "the MSP way".

Still another point of view was represented by a post commander who emphasized that he assigned

. . . cubs to proven traffic men. Traffic enforcement is this department's bread and butter. Cubs have all kinds of pressures on them to become hot-shot Dick Tracys. When they get home, their wives ask them about interesting cases they might have investigated. They never ask 'did you write any interesting tickets?' Their friends and relatives ask them the same thing-- they ask each other the same thing! The one chance you have to impress on a cub how important traffic is, is to assign him to a trooper who can either convince him of that or pound it into him.

No doubt there are many more assumptions underlying decisions regarding which senior trooper should be assigned to a

cub. Besides conflicting assumptions regarding whether role models should be older or younger officers, whether they should be expert in criminal or traffic work, and whether recruits should be trained by one or many officers, there is an additional source of variance in the role model program. Some post commanders permit senior officers to accept or decline a role model assignment.

Moreover, among senior troopers there is probably a low degree of agreement regarding what constitutes satisfactory preparation for role performance, and, therefore, what are desirable evaluative criteria.

There is, nevertheless, a formal, periodic evaluation of cubs by their senior training officers which figures prominently in the final decision whether to confirm a cub.

The Advanced Basic Training School

The fourth phase of the year-long training program is the advanced basic training school, which is convened by bringing the officers back from the field for a four-week, in-residence program. The main subject matter categories in the trooper school curriculum are:

<u>Subject</u>	<u>No. of Hours</u>	<u>% of Total</u>
Indoctrination	3	2
Administrative Procedures (rules and regulations, note-taking, report writing, review, correspondence course final, uniform division panel discussion)	26	13
Defensive Procedures	1	1

<u>Subject</u>	<u>No. of Hours</u>	<u>% of Total</u>
Criminal Identification and Investigation	111	56
Laws and Criminal Procedure	26	13
Human Behavior	11	5
Non-Instructional Activities	4	2
Specialized Training	18	9
TOTAL	200	100

While some of these subjects appear to duplicate subjects taught in the recruit school phase, this final phase presents material more intensively than is done in the first phase. In addition, this phase is far less regimented than the recruit school which allows for considerable trooper-instructor interaction. In effect, the trooper school serves the purpose of tying up loose ends which have not been taken care of in preceding phases.¹⁷

Several important characteristics of this curriculum are

¹⁷The practice of calling troopers back for a final trooper school began in 1956. The Michigan Legislature had authorized 200 new troopers with the provision that they must be ready for patrol duty by Labor Day of that year (for several prior years the State of Michigan had experienced unusually large numbers of traffic fatalities and injuries). Because the Legislature authorized the new positions very late, the State Police shortened their customary recruit training program to be certain that the Legislature's requirement was observed. However, this was done with the idea that, late that fall, the recruits would be brought back to finish their training. Instructors subsequently observed that Trooper participation in the second half of the course was greater than in previous training programs. It was assumed that the practical field experience increased trooper motivation and, therefore, what had been done as an emergency measure became institutionalized. The reason for referring to this important event in the department's history is to illustrate how the traffic goal can affect the agency's functioning.

(1) the substantial percentage of time allocated to criminal identification and investigation, in contrast to very little time allocated to traffic; (2) the relative absence of trooper status identity elements; (3) the more "open" character of the program, as suggested by the period during which patrol division personnel are available to respond to anonymous, written questions from recruits.

The major element of stress on recruits during this period derives from their knowledge that information regarding the final decision to confirm them is being assembled and analyzed. And, while some recruits drop out of the program during the four-week basic course, the attrition rate is much lower than in the 13-week school. Yet, most troopers are not completely confident of their survival prospects until the actual moment of graduation and confirmation approaches.

Summary

The Michigan State Police is a complex organization. As are all complex organizations, it is no doubt subject to a variety of internal stresses. Among these it is reasonable to assume that tensions regarding goal priorities are significant. It would be, however, a simple-minded view which held that only goal tensions operate to challenge institutional integrity.

It seems more reasonable to concede that other forces also compete for dominance, arising, for example, out of geographical decentralization, line-staff conflicts, environmental in-

fluences, and so on. Moreover, these forces are no doubt interrelated so that, to understand how goal tensions come about, it is necessary to perceive the institution as a complex structure.

The previous pages suggest that, among the possible variables which could be selected (e.g., rank, urban-rural environment influences, age of respondent, education, etc.), the crime-traffic goal dichotomy must be a very powerful source of organizational tension. Moreover, since the recruit training program is such a fundamental organizational process (seen as preparation for role performance), it seems reasonable to assume it could possibly be very responsive to tensions arising from the crime-traffic goal dichotomy. The next chapters will show if, indeed, this is the case.

Chapter V

FINDINGS AND ANALYSIS

Introduction

This study's statistical procedures produced two general categories of findings: (1) curriculum elements which distinguished between two goal preference respondent groups, identifying, in addition, two sets of "high" goal preference respondents; (2) statistics which indicated how each of these high goal preference groups emphasized 89 basic training curriculum elements. These findings are analyzed in this chapter. Chapter VI will end this study with a discussion of certain conclusions, recommendations, and suggestions which the writer derived from findings presented in this chapter. Readers who are interested in details regarding this study's respondents will find them in Appendix D, "A Note Regarding Respondents". Several conclusions regarding respondent characteristics should be inserted at this point, however, since readers may have questions about the generalizability of the data.

An analysis of respondent characteristics reveals, first, that the overall response rate was quite high; i.e., just over 70% of all police officers employed by MSP during the period of the survey. Second, no particular units or divisions of MSP were greatly over- or under-represented. Third, there was

a tendency for older officers to contribute fewer questionnaires for their age category than younger men. Fourth, goal preference appeared to be independent of any respondent demographic characteristic.

Regarding the last point, certain MSP staff observed to the writer that they believed traffic goal preference either develops or increases with age (or appears to) because enthusiasm for criminal law enforcement seems to wane as length of service increases. However, the data do not appear to support that theory. Indeed, neither goal appears to be disproportionately distributed among any of the respondent demographic categories listed in Section 4 of Appendix A. If this were the case, goal preference might be "indexing" some other factor. It appears possible, however, that goal preference may be an orientation which is independent of the control variables, although it may be related to other respondent characteristics.

Discriminant Analysis Findings

The study's major hypothesis is that certain curriculum elements would discriminate between the two goal groups at statistically significant levels. These curriculum elements, it was hypothesized, would be closely related to each of the two goals.

The discriminant analysis computer program required the writer to specify in advance the minimum significance level

at which curriculum elements would be judged to discriminate between groups. A specified significance level of 0.05 yielded 12 variables which are shown in Table 6, "Curriculum Elements Significant at 0.05 and Better".¹

Since 12 variables survived a reasonably severe test of significance, the writer concludes that these curriculum elements distinguish the two goal groups for the four rank categories (troopers, corporals, sergeants, and staff sergeants). Each curriculum element, it will be recalled from the discussion of discriminant analysis in Chapter III, was entered into the classification equations in order of high to low F values. Therefore, curriculum element 39, "securing and protecting a crime scene", is the most discriminating of the 12 variables while, among these 12 curriculum elements, "VASCAR" is the least discriminating.

Table 6 also lists the F values at which each variable was entered in a step-wise manner. F was derived for each of the 89 curriculum elements, each of which was thereafter successively entered into the classification equations until significance levels less favorable than 0.05 were attained. The first curriculum element was, of course, entered by itself, so that its F value to enter and its approximate F value between groups are the same. Therefore, curriculum elements are entered additively and the approximate F between groups is based

¹The computer program used a two tailed significance test of group means (i.e., between crime and traffic) differences. Note that Table 6 also lists six curriculum elements which were significant at 0.01.

Table 6
Curriculum Elements Significant at 0.05 and Better

Step No.	Curriculum Element	F Value to Enter	Approximate F Between Groups	Significance Level	Crime or Traffic
1	Securing and Protecting a Crime Scene (39)	17.7017	17.7017	0.01	Crime
2	Records Systems, Practices, Procedures. . . (34)	10.3326	14.0967	0.01	Crime
3	Driving a Patrol Vehicle Under Emergency Conditions (44)	10.4996	12.9838	0.01	Traffic
4	Firearms Training (52)	12.5520	12.9844	0.01	Crime
5	Inspecting Vehicles. . . (28)	7.7905	12.0138	0.01	Traffic
6	Court Procedures (5)	6.9783	10.0745	0.01	Crime
7	Principles of Psychology (61)	6.3650	11.1243	0.05	Crime
8	Plans and Procedures. . . Natural Disasters (54)	6.1172	10.4562	0.05	Traffic

Table 6 (Cont'd.)

Step No.	Curriculum Element	F Value to Enter	Approximate F Between Groups	Significance Level	Crime or Traffic
9	Rules of Evidence (77)	5.5484	9.6111	0.05	Crime
10	State Traffic Laws (16)	4.6505	9.1457	0.05	Traffic
11	The Department's Future (87)	4.1786	8.7198	0.05	Crime
12	VASCAR. . . (88)	5.2158	8.4606	0.05	Traffic

on the curriculum element at each step and curriculum elements at each step and curriculum elements at preceding steps as well. The column, "crime or traffic", indicates whether the step identified a curriculum element whose high emphasis was conferred on it by crime or traffic goal preferring officers.

Table 7, "Means and Standard Deviations for the Twelve Discriminating Curriculum Elements", shows the mean and standard deviation scores for the two groups of officers:

(a) crime and (b) traffic goal preferring troopers, corporals, sergeants, and staff sergeants. Readers will see that these figures indicate that the mean score values for the curriculum elements are logically related, in general, to the activities which comprise each goal. One curriculum item, however, appeared in this list of 12 discriminating elements which, from the writer's viewpoint, was unexpected and could not be accounted for in terms of his understanding of the crime and traffic goals; the item in question was Number 54, "Plans and Procedures for Dealing with Natural Disasters". Not only was its appearance unexpected, but its identification with the traffic goal is surprising.²

The identification of these 12 discriminating variables and the generally consistent relationship of these variables to either the crime or traffic goal confirms, in the writer's opinion, the study's first hypothesis: certain curriculum elements will distinguish between the two goal groups at

²Perhaps the need for traffic control which occurs during tornadoes, floods, forest fires, etc., explains this item's relevance to traffic goal preferring respondents.

Table 7

Means and Standard Deviations for the Twelve
Discriminating Curriculum Elements

Curriculum Element	Group Means and Standard Deviations			
	Crime \bar{X}		Traffic \bar{X}	
Securing and Protecting a Crime Scene	1.30	.54	1.49	.90
Records Systems, Practices, Procedures. . .	2.79	1.19	3.11	1.19
Driving Patrol Vehicles. . . Emergency Conditions	1.55	.85	1.44	.67
Firearms Training	1.51	.73	1.71	1.09
Inspecting Vehicles. . .	2.67	1.16	2.54	1.22
Principles of Psychology	2.44	1.25	2.72	1.35
Plans and Procedures. . . Natural Disasters	3.23	1.21	3.19	1.14
Court Procedures	3.02	1.10	3.17	1.37
Rules of Evidence	1.26	.63	1.43	.86
State Traffic Laws	1.25	.85	1.16	.59
The Department's Future	3.08	1.25	3.29	1.23
VASCAR	2.95	1.22	2.85	1.27

statistically significant levels and these will be elements which are closely related to either of the two goals.

These 12 curriculum elements constitute the basis of the "screening" device which achieved the study's objective of identifying two sets of high goal preferring respondents. While the writer came to think of these two sub-populations as being particularly high in goal preference, this is actually not a technically correct interpretation of what these officers are, in terms of discriminant analysis. In fact, they are two groups of respondents who exceed or fall below, by a considerable degree, the mean response scores on the 12 curriculum items for their respective goal groups. As with more conventional selection instruments, a major issue regarding the 12 elements is how well did they succeed in correctly classifying respondents.

It will be remembered that the discriminant analysis program yields, as one of its final solutions, a two-by-two table which indicates whether the classification equations correctly or incorrectly placed respondents into the crime or traffic goal group. To understand what this means, it is helpful to view what has happened here as something similar to developing a selection instrument. The assumption on which the test is based is that some number of curriculum elements is peculiar to the criterion variables, in this case each respondent's declared goal preference. After the "predictor" variables are identified, the "test" is now "readministered" to the same group, this time to find out how many officers have been cor-

rectly classified into their preferred goal groups.

Table 8, "Number of Respondents Correctly or Incorrectly Classified Into Goal Groups", shows that 533 of the 733 crime goal preferring respondents were correctly "predicted" as crime goal preferring officers, but 240 were classified into the traffic group. The 12 variables were less accurate in predicting traffic goal preference: only 163 of the 267 traffic goal preferring officers were correctly classified.³ What happened, in brief, is that the incorrectly classified officers demonstrated curriculum element preference characteristics which were not as characteristic of their own goal group as they were of the other (i.e., crime or traffic) goal group.

Still another view of how the 12 discriminating variables performed is provided below in Figures 1 and 2. The crucial concept in these figures is represented by "D", the distance between group mean scores. Figuratively speaking, the project began with no value for D; that is, no data indicating discrimination between the crime and traffic groups. By processing the 89 curriculum elements through the discriminant analysis program, 12 curriculum elements were identified which success-

³It will be recalled that this study is based on data from only officers in trooper, corporal, sergeant, and staff sergeant rank categories. These officers totalled 1,040; in other words, by excluding officers of higher ranks, 203 respondents were dropped from the 1,243 respondents who returned usable questionnaires. Of the 1,040 respondents selected for this study, 773 declared a crime goal preference while 267 declared a traffic goal preference. Therefore, the percentages of respondents preferring each goal is approximately what it was among the original group.

Table 8
Number of Respondents Correctly or Incorrectly
Classified into Goal Groups

Number of Officers Preferring the. . .	Number of Officers "Predicted" as Crime or Traffic Goal Preferring	
	Crime	Traffic
Crime Goal	533	240
Traffic Goal	103	164

ively widened the distance between the two goal groups. This widening process was terminated when all variables having significance at better than the 0.05 level had been processed.

While the D^2 values were calculated in the program for the purpose of calculating F values at each step, they were not reported in the printout, although F values were provided, thereby permitting the solution of a formula to derive D^2 and D for each of the 12 steps. These values are shown in Table 9, "Values of D^2 and D at Each of Twelve Steps".

The rearranged formula for D^2 is

$$D^2 = F \frac{(N_1 + N_2)(N_1 + N_2 - 2)P}{N_1 N_2 (N_1 + N_2 - P - 1)}$$

Where $N_1 = 773$, $N_2 = 267$, $N_1 + N_2 = 1,040$.

The value of D increases, in Table 9, from 0.29866 in step 1 to 0.71908 in step 12. D, at each step, provides in standard units the distance between crime and traffic group means, based on the variables entered at each step. Assuming distribution normality, the increase in D is shown in Figure 1, "Group Mean Distance at Step 1", and Figure 2, "Group Mean Distance at Step 12".

In both figures, G_1 and G_2 represent the crime and traffic groups. The distance between group means (M_1 and M_2) increases as D values increase from Step 1 to 12, thus decreasing the overlap in the two curves.

The two dashed lines, C_1 and C_{12} , represent the classification equation dividing lines in steps 1 and 12, respect-

Table 9
Values of D^2 and D at Each of Twelve Steps

Step 1:	$D^2 = 17.70165 \frac{(1040)(1038)(1)}{(773)(267)(1038)}$	$= 0.08920$	$D = 0.29866$
Step 2:	$D^2 = 14.09671 \frac{(1040)(1038)(2)}{(773)(267)(1037)}$	$= 0.14220$	$D = 0.37709$
Step 3:	$D^2 = 12.98750 \frac{(1040)(1038)(3)}{(773)(267)(1036)}$	$= 0.19665$	$D = 0.44345$
Step 4:	$D^2 = 12.98440 \frac{(1040)(1038)(4)}{(773)(267)(1035)}$	$= 0.26247$	$D = 0.51232$
Step 5:	$D^2 = 12.01378 \frac{(1040)(1038)(5)}{(773)(267)(1034)}$	$= 0.30386$	$D = 0.55123$
Step 6:	$D^2 = 11.12426 \frac{(1040)(1038)(6)}{(773)(267)(1033)}$	$= 0.33796$	$D = 0.58134$
Step 7:	$D^2 = 10.45620 \frac{(1040)(1038)(7)}{(773)(267)(1032)}$	$= 0.37096$	$D = 0.60906$
Step 8:	$D^2 = 10.07447 \frac{(1040)(1038)(8)}{(773)(267)(1031)}$	$= 0.40888$	$D = 0.63944$
Step 9:	$D^2 = 9.61107 \frac{(1040)(1038)(9)}{(773)(267)(1030)}$	$= 0.43926$	$D = 0.66277$
Step 10:	$D^2 = 9.14567 \frac{(1040)(1038)(10)}{(773)(267)(1029)}$	$= 0.46488$	$D = 0.68182$

Table 9 (Cont'd.)

Step 11:	$D^2 = 8.71980 \frac{(1040)(1038)(11)}{(773)(267)(1028)} = 0.48803$	$D = 0.69859$
Step 12:	$D^2 = 8.46059 \frac{(1040)(1038)(12)}{(773)(267)(1027)} = 0.51707$	$D = 0.71908$

ively.⁴ In Figure 1, any respondent who is a member of Group 1 or Group 2 and whose scores on the 12 variables place him left of C_1 is classified as a Group 1 member.

Figure 1
GROUP MEAN DISTANCE AT STEP 1

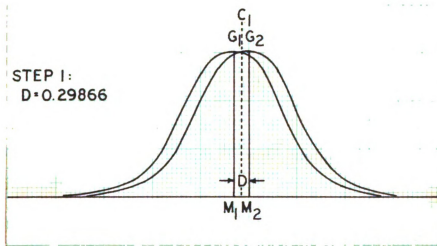


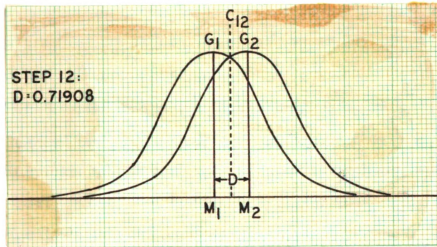
Figure 1 illustrates that a sizeable portion of the Group 2 curve lies to the left of the classification line; this represents the individuals who were misclassified.

In Step 12, D has increased because 11 more discriminating curriculum elements have been added. Thus, M_1 and M_2 are somewhat further apart than in Figure 1 and G_1 and G_2 overlap less. Also, the additional curriculum elements result in a smaller proportion of the Group 2 curve extending to the left of the classification line, C_{12} ; thus, fewer respondents are misclassified.

⁴In Figures 1 and 2, one-half inch along the horizontal axes equals one standard deviation.

Figure 2

GROUP MEAN DISTANCE AT STEP 12



To continue the previous analogy comparing the 89 curriculum elements to a selection device, as in the case of most tests some examinees will score higher or lower than the average. Similarly, some of the respondents were very high in terms of the degree to which their curriculum element emphasis preferences "predicted" goal preference. The discriminant analysis produced, for each respondent, a probability score which indicated the likelihood of his being a member of the goal group to which he was correctly or incorrectly classified.

This score was used to identify the respondents who were defined as high crime or traffic goal preferring, according to this rationale: all respondents assigned a probability score of .80 or higher who were correctly classified were assumed to be extreme cases of their type; i.e., unusually committed to their goals. The decision to use $\geq .80$ as a cutting point was made following a study of the distribution of

all probability scores for all respondents. A higher score, say .90, would have produced too few cases for stability in mean scores. The numbers of high crime goal and high traffic goal preferring officers selected according to this procedure was 56 and 33, respectively.

These respondents represent rather small percentages of their respective goal preference groups; they should not, certainly, be thought of as scientific samples, neither of their goal groups nor their rank categories, nor of the department as a whole. They are defined in this study as extreme cases or "ideal" types of their goal groups.

An Analysis of Mean and Leik Curriculum Element Emphasis Preference Scores

The decision to use all 89 curriculum elements in the questionnaire presented a problem in analysis: because of the large number of curriculum elements, it is difficult to comprehend the meaning of the scores on an item-by-item basis unless graphic renderings of the mean and Leik values are developed, as has been done in Appendices E and F.

Table 10, "Means and Leik Scores for High Crime and Traffic Goal Preferring Officers and All Respondents", reveals curriculum element emphasis preferences for the three groups of respondents.⁵

⁵The 89 curriculum elements were arranged into 13 more general categories (not including item 18, the response set indicator) to facilitate an inspection of empirical trends in the data. These categories were developed on an a priori basis, not through statistical analysis.

Table 10
Mean and Leik Scores for High Crime and High Traffic Goal
Preferring Officers and All Respondents

	HIGH CRIME (N = 56)		HIGH TRAFFIC (N = 33)		ALL RESPONDENTS (N = 1243)	
	MEAN	LEIK	MEAN	LEIK	MEAN	LEIK
<u>CRIME-LEGAL</u>						
5. Court procedures	2.00	.345	2.61	.192	1.85	.476
25. Crimes against the person	1.48	.598	1.76	.545	1.35	.708
17. Crimes against property	1.36	.702	1.48	.596	1.30	.751
37. Law and cases physical evidence	1.41	.658	2.36	.343	1.60	.502
13. Laws of arrest, search, and seizure	1.05	.955	1.21	.823	1.06	.948
77. Rules of evidence	1.14	.881	1.73	.621	1.26	.781
71. State criminal code	1.34	.717	1.64	.470	1.39	.674
<u>CRIME-TECHNIQUES</u>						
33. Collection and preservation of evidence	1.09	.926	1.82	.545	1.25	.795
83. Investigation of arson	2.55	.211	3.00	.116	2.44	.384

Table 10 (Cont'd.)

	HIGH CRIME (N = 56)		HIGH TRAFFIC (N = 33)		ALL RESPONDENTS (N = 1243)	
	MEAN	LEIK	MEAN	LEIK	MEAN	LEIK
<u>CRIME-TECHNIQUES (Cont'd.)</u>						
31. Investigation of death	1.32	.732	2.03	.470	1.50	.586
68. Liquor law inspection and enforcement	2.86	.107	3.30	.318	2.82	.231
41. Principles of criminal investigation	1.27	.777	1.48	.596	1.32	.735
39. Securing and protecting a crime scene	1.05	.955	2.27	.167	1.32	.730
57. Scientific crime detection	1.25	.792	2.58	.369	1.71	.436
47. Techniques of arrest and search	1.16	.866	1.82	.444	1.26	.784
74. Testifying in court	2.12	.271	2.00	.495	1.76	.462
55. Vice control and investigation	2.64	.077	3.33	.242	2.81	.150
<u>GENERAL LEGAL</u>						
72. Civil rights law	2.45	.301	3.09	.141	2.42	.338

Table 10 (Cont'd.)

	HIGH CRIME (N = 56)		HIGH TRAFFIC (N = 33)		ALL RESPONDENTS (N = 1243)	
	MEAN	LEIK	MEAN	LEIK	MEAN	LEIK
<u>GENERAL LEGAL (Cont'd.)</u>						
59. Provisions of the U.S. Constitution	2.23	.301	3.12	.091	2.26	.384
35. Up-to-date information on supreme court decisions	1.61	.494	2.39	.369	1.64	.470
<u>GENERAL TECHNIQUES</u>						
78. Basic patrol concepts	1.50	.583	1.94	.242	1.49	.590
86. Breathalyzer	2.86	.048	3.18	.268	2.83	.179
1. Camera, fundamentals and practice	2.30	.420	2.61	.293	2.37	.430
64. Effective use of car radio	3.11	-.018	3.15	.192	2.75	.194
44. Driving patrol vehicles	2.04	.286	1.42	.646	1.52	.568
49. Emergency medical techniques	1.52	.568	1.79	.369	1.54	.547
51. Familiarization with LEIN	2.57	.167	3.21	.242	2.59	.290
52. Firearms training	1.43	.643	2.21	.419	1.55	.542

Table 10 (Cont'd.)

	HIGH CRIME (N = 56)		HIGH TRAFFIC (N = 33)		ALL RESPONDENTS (N = 1243)	
	MEAN	LEIK	MEAN	LEIK	MEAN	LEIK
<u>GENERAL TECHNIQUES (Cont'd.)</u>						
28. Inspecting vehicles	3.37	.241	2.61	.242	2.58	.321
3. Interviewing and interrogation	1.27	.777	1.33	.722	1.29	.762
36. Jailing and booking practices and procedures	3.34	.122	3.91	.672	3.35	.226
45. Legal aspects of firearms use	1.87	.420	2.24	.444	1.77	.493
29. Modus operandi, theory and use of	2.16	.390	2.55	.444	2.26	.385
19. Personal identification	2.46	.167	2.67	.343	2.36	.389
54. Plans and procedures for dealing with natural disasters	3.50	.375	3.58	.394	3.18	.161
4. Report writing	1.70	.509	2.06	.394	1.58	.515
43. Strategy and tactics for crowd and riot control	2.29	.375	2.70	.167	1.97	.501
40. Typing	2.59	.271	2.61	.293	2.40	.432
50. Use of handcuffs	2.52	.271	3.27	.343	2.62	.270

Table 10 (Cont'd.)

	HIGH CRIME (N = 56)		HIGH TRAFFIC (N = 33)		ALL RESPONDENTS (N = 1243)	
	MEAN	LEIK	MEAN	LEIK	MEAN	LEIK
<u>GENERAL TECHNIQUES (Cont'd.)</u>						
88. VASCAR practices, policies, use of	3.41	.271	3.21	.141	2.90	.088
82. Voice print practices, policies, use of	3.14	.196	3.73	.621	3.12	.193
46. Water safety	2.95	.182	3.33	.343	2.82	.218
<u>INSTITUTIONAL KNOWLEDGE</u>						
65. Criminal justice as a system	2.27	.152	2.82	.217	2.43	.311
12. A familiarization tour	3.23	.211	3.15	.192	3.25	.263
6. How the legislature controls the department	3.46	.226	4.12	.495	3.64	.370
79. Laws and services of federal, state, local governments	2.80	.033	3.33	.293	3.04	.050
80. Police-community relations	2.27	.271	2.33	.369	2.19	.430
2. Police-press relations	2.80	.063	3.06	.015	2.92	.090

Table 10 (Cont'd.)

	HIGH CRIME (N = 56)		HIGH TRAFFIC (N = 33)		ALL RESPONDENTS (N = 1243)	
	MEAN	LEIK	MEAN	LEIK	MEAN	LEIK
<u>INSTITUTIONAL KNOWLEDGE (Cont'd.)</u>						
8. Various line and staff bureaus, units, divisions	2.87	.092	3.24	.318	2.93	.137
67. The history of the department	3.25	.196	3.70	.495	3.21	.269
87. The Department's future	2.61	.226	3.79	.470	3.11	.091
<u>INSTITUTIONS THREATENING THE SOCIAL ORDER</u>						
76. History, methods, objectives of "extremist" groups	2.55	.211	3.36	.318	2.86	.102
23. Organized crime	2.23	.360	2.97	.040	2.31	.369
21. Subversion, internal security, espionage	3.04	.107	3.58	.293	3.12	.111

Table 10 (Cont'd.)

	HIGH CRIME (N = 56)		HIGH TRAFFIC (N = 33)		ALL RESPONDENTS (N = 1243)	
	MEAN	LEIK	MEAN	LEIK	MEAN	LEIK
<u>NON-CRIMINAL, NON-TRAFFIC</u>						
9. Civil matters	3.27	.241	3.24	.318	3.07	.106
15. Civil commitment procedures	3.05	.152	3.27	.242	2.77	.200
63. Domestic disturbances	2.12	.211	2.48	.444	2.04	.425
11. Juvenile laws and policies	1.93	.435	2.12	.545	1.80	.539
<u>PERSONAL DEVELOPMENT AND PROFESSIONALISM</u>						
56. Basic English for police officers	2.82	.048	3.33	.091	2.88	.041
70. Biographies of the nation's outstanding criminologists	4.14	.315	4.52	.596	4.20	.436
42. How a new officer can adjust to police work	2.30	.062	2.85	.066	2.41	.251
62. Conduct of officers off duty	2.46	.107	2.73	.141	2.46	.285
48. Mathematics for police officers	3.70	.241	4.15	.470	3.91	.357

Table 10 (Cont'd.)

	HIGH CRIME (N = 56)		HIGH TRAFFIC (N = 33)		ALL RESPONDENTS (N = 1243)	
	MEAN	LEIK	MEAN	LEIK	MEAN	LEIK
<u>PERSONAL DEVELOPMENT AND PROFESSIONALISM (Cont'd.)</u>						
81. Self-improvement	2.07	.345	2.88	.167	2.40	.283
7. The ethics of law enforcement	1.84	.360	2.27	.419	1.89	.437
<u>PERSONAL FITNESS AND SURVIVAL</u>						
60. Physical conditioning and training	1.73	.449	1.91	.470	1.57	.521
58. Self-defense techniques	1.59	.509	1.67	.470	1.50	.585
<u>PROCEDURES</u>						
84. Care and use of official equipment	2.71	.256	2.91	.040	2.56	.295
66. Desk procedures	2.84	.033	3.42	.268	2.87	.100
85. Internal communications practices	3.12	.152	2.91	.141	2.89	.112
26. Military courtesies	3.00	.107	3.27	.293	3.02	.125

Table 10 (Cont'd.)

	HIGH CRIME (N = 56)		HIGH TRAFFIC (N = 33)		ALL RESPONDENTS (N = 1243)	
	MEAN	LEIK	MEAN	LEIK	MEAN	LEIK
<u>PROCEDURES (Cont'd.)</u>						
38. Officer's responsibility for patrol vehicles	3.11	.018	3.21	.141	2.89	.066
10. Official rules and regulations	1.98	.539	2.18	.394	1.84	.515
14. Policies and practices relating to discipline	2.70	.063	3.21	.242	2.64	.239
89. Post practices, policies	3.18	-.018	3.30	.217	3.05	.036
34. Records systems, practices, procedures	2.09	.420	3.73	.520	2.82	.159
<u>SOCIAL SCIENCE</u>						
69. Criminology	2.66	.122	3.15	.141	2.75	.121
75. Human relations	2.20	.152	2.45	.369	2.37	.311
61. Principles of psychology	1.89	.464	3.12	.040	2.52	.224

Table 10 (Cont'd.)

	HIGH CRIME (N = 56)		HIGH TRAFFIC (N = 33)		ALL RESPONDENTS (N = 1243)	
	MEAN	LEIK	MEAN	LEIK	MEAN	LEIK
<u>SOCIAL SCIENCE (Cont'd.)</u>						
73. Principles of sociology	2.77	.033	3.45	.192	3.14	.054
53. Psychological and sociological aspects of alcoholism	3.54	.256	4.06	.444	3.76	.402
<u>TRAFFIC</u>						
22. Accident investigation	1.70	.509	1.33	.722	1.30	.752
27. Handling drunk driving suspects, violators	2.14	.405	2.27	.419	1.98	.497
24. Officer-traffic law violator contacts	1.91	.449	2.42	.394	1.80	.435
32. Principles and practices of traffic engineering	3.87	.420	4.06	.444	3.96	.477
16. State traffic laws	1.50	.583	1.18	.848	1.19	.844

Table 10 (Cont'd.)

	HIGH CRIME (N = 56)		HIGH TRAFFIC (N = 33)		ALL RESPONDENTS (N = 1243)	
	MEAN	LEIK	MEAN	LEIK	MEAN	LEIK
<u>TRAFFIC (Cont'd.)</u>						
30. Towing procedures	4.36	.464	4.42	.520	4.36	.464
20. Traffic direction	3.32	.375	3.27	.293	3.07	.163
<u>RESPONSE SET INDICATOR</u>						
18. Motorcycle riding	4.32	.435	4.12	.268	4.38	.481

It may assist readers to be reminded of the nature of means and Leik scores: means are arithmetical averages, the Leik score is a measure of agreement. A mean of 1.05 indicates a comparatively high emphasis score, while a mean of 4.32 indicates comparatively low emphasis. A Leik score of .848 indicates high agreement on an item while a score of .101 indicates considerable disagreement, as the scores were distributed through the several groups.

Hypotheses Tested with Mean and Leik Scores

Because of the nature of the procedure employed for this phase of the analysis, no tests of significance were used. Therefore, the hypotheses are examined in terms of the empirical trends in the data.

The study's second hypothesis predicted that crime goal respondents will place greater value on the training program than traffic goal preferring respondents. The test of this hypothesis was that, in general, an empirical trend is expected to appear which yields greater mean emphasis preference scores for the crime goal group, in contrast to the traffic goal group. This hypothesis assumes that an overall tendency to assign low emphasis scores is a function of traffic goal preference, and not some other factor or factors.

The data in Table 10 suggest that the second hypothesis is confirmed: high traffic goal respondents assigned lower emphasis preference scores to most curriculum elements than either high crime goal respondents or all respondents. On

only two items ("A familiarization tour. . ." and "Driving patrol vehicles under emergency conditions. . ."), numbers 12 and 44 did high traffic goal preferring respondents emphasize subjects more than either of the other two groups. High traffic goal respondents placed greater emphasis, in contrast to high crime goal respondents, on eight items, most of them obviously related to the traffic goal: civil matters, state traffic laws, traffic direction, accident investigation, inspecting vehicles for safety law violations, testifying in court, internal communications practices, VASCAR practices. The mean score differences are, over all, larger for the traffic related items in this group of eight subjects than for the non-traffic related items.

Leik scores reveal that among the six items comprising the traffic category in Table 10, high traffic goal preferring respondents were, over all, similar to the two groups in the extent of their agreement on their emphasis preference scores, except that they somewhat more emphasized "State Traffic Laws" than crime goal preferring respondents. However, they de-emphasized "Officer-Traffic Law Violator Contacts" in comparison to crime goal preferring officers.

The third hypothesis expected crime goal preferring respondents to emphasize social science curriculum elements more highly than traffic goal preferring officers. An examination of mean scores in Table 10 suggests that this hypothesis was confirmed: high traffic goal preferring respondents assigned substantially lower emphasis values to the five social science items than high crime goal officers. Were it not for their

tendency to emphasize traffic related items higher than crime goal officers, one explanation for this social science de-emphasis might be that it is simply a manifestation of the overall devaluation of the curriculum in the basic training program. However, the willingness of the high traffic goal group to emphasize most of their goal related items more highly than the high crime goal group suggests that the social science non-preference may, in fact, be a traffic goal preference artifact, and is not merely an overall anti-training perspective. Note, also, that the mean differences in the social science items are, as overall differences go, large (especially on the criminology, psychology, and sociology items). In view of this tendency and the unexpected devaluing of item 24, "Officer-Traffic Law Violator Contacts", it is reasonable to ask whether traffic goal preferring officers tend, as a general matter, to de-emphasize curricular material dealing with inter-personal relationships.

The fourth hypothesis foresaw that crime goal preferring officers will highly emphasize, in contrast to traffic goal officers, items relating to changes in the criminal law. Two items may be used to test this hypothesis:

Up-to-date information on Supreme Court decisions and trends affecting law enforcement.

Law and cases concerning what constitutes admissible evidence.

In both cases, high crime goal preferring officers were considerably higher than high traffic goal preferring respondents; moreover, the former were in greater agreement than the

latter on score values.

The statistics just reviewed indicate that the study's exploratory hypotheses were confirmed. However, the discriminant analysis procedure yielded findings beyond that used to test the hypotheses. These findings will be discussed in the next section.

Additional Mean and Leik Findings

As previously mentioned, except for most of the traffic related curriculum items, high traffic goal preferring officers generally emphasized curriculum elements lower than did high crime goal preferring officers. This tendency may be explained as representing a somewhat anti-training bias, or as indicating a lack of interest in or knowledge of the training program. Whatever it is, it constitutes an analytical problem because the tendency obscures whatever goal related differences might appear in the data. One way to see what these might be is to make the assumption that any mean score difference $\geq .75$ is a meaningful difference, reflecting more than indifference or anti-training sentiment.

Eleven curriculum elements were identified which differentiated goal group means by $\geq .75$. These are shown in Table 11, "Curriculum Elements Differentiating High Crime and High Traffic Goal Officers by .75 or Greater". Differences greater than 1.00, a full score value, were found for four items:
scientific crime detection. . . , principles of psychology. . . ,
securing and protecting a crime scene. . . , the department's

Table 11

Curriculum Elements Differentiating High Crime and
High Traffic Goal Officers by .75 or Greater

Curriculum Item	Difference in Mean Scores Between High Crime and High Traffic Goal Preferring Respondents
Scientific Crime Detection. . .	1.33
Principles of Psychology. . .	1.23
Securing and Protecting a Crime Scene	1.22
The Department's Future. . .	1.18
Law and Cases Concerning What Constitutes Admissible Physi- cal Evidence	.95
Provisions of the U.S. Constitution. . .	.89
History, Methods, Objectives of "Extremist" Groups	.81
Self-Improvement. . .	.81
Firearms Training	.78
Up-to-date Information in Supreme Court Decisions. . .	.78
Use of Handcuffs	.75

future. . .

The Leik score, a measure of agreement, is useful as an indication of the extent to which the two goal group categories, and all respondents as well, agreed regarding their emphasis preferences. Appendix F, "Curriculum Element Emphasis Preference Leik Scores", shows graphically how the three groups were similar or dissimilar in agreement on their mean scores.

To the right of each curriculum element are three lines: the top line represents the crime goal group; the middle line represents the traffic goal group; and the bottom line (dashed) represents all respondents. This appendix reveals several trends that are not otherwise apparent in the Leik scores.

First, in only two cases (items 64 and 89) did Leik scores enter the minus value category. In both cases, this occurred within the high crime goal group. If large minus Leik scores had appeared, this would have implied bi-modal frequencies within categories, suggesting that, for example, within the crime group there were sub-groups holding divergent opinions. Since this did not happen in any appreciable measure it would appear that rather wide-spread intra-goal group dissensus on curriculum elements is not common.

It is possible to examine the Leik data with more understanding if one is willing to make assumptions regarding at what point agreement is high or low. Assume, for example, that $\geq .85$ = high agreement and $\leq .50$ to 0.00 = low agreement. Several findings, based on these two assumptions are:

1. Only two curriculum element categories accumulate many high agreement scores: crime-legal and crime-techniques;
2. The lowest agreement curriculum element categories are procedures, institutions threatening the social order, social science;
3. The high traffic goal group, in general, tends toward the low agreement zone more frequently than the high crime-goal group.

Another view of the data is provided in Appendix G, "Rank Orders of Mean Scores for Curriculum Elements for High Crime and High Traffic Goal Preferring Respondents, and All Respondents". This table permits readers to compare each of the three groups on their curriculum element preference scores in terms of high to low emphasis preference.

Comparing the two groups on the first 10 most emphasized curriculum elements, two findings are of particular interest. First, the high crime goal preferring group includes no traffic-goal related item in this list, whereas the high traffic goal group includes State Traffic Laws and Accident Investigation in the list of 10 highest emphasis items. Second, while the traffic group includes a number of important crime goal items in this list, it includes two items which are specifically concerned with legal aspects which regulate the investigative process: Laws of Arrest, Search and Seizure and Rules of Evidence. The high crime goal group, on the other hand, includes three additional items which include subject matter amounting to the "rules of the game" in criminal investigation: Securing and Protecting a Crime Scene, Collection and Preservation of Evidence, Scientific Crime Detection.

Since some curriculum elements appeared to be similar in both high crime and high traffic goal emphasis preferences, the writer adopted a rule-of-thumb method for identifying such variables: a mean score difference of $\leq .10$ on any item was assumed to indicate similarity in emphasis preference. Eleven curriculum elements were identified according to this procedure. These are listed in Table 12, "Eleven Curriculum Elements Receiving Similar Emphasis Preference Values by High Crime and High Traffic Goal Respondents".

The curriculum items in Table 12 reveal no particular pattern. Their importance lies, perhaps, in the fact that they represent approximately one-ninth of the curriculum and that both goal groups are in substantial agreement on their mean and Leik values, thus tending to negate an assumption that traffic goal officers are completely at odds with crime goal preferring officers regarding the curriculum. It will be noticed that one of the 12 discriminating variables, "Plans and Procedures for Dealing with Natural Disasters", appears in this list, this time being more preferred by the crime than traffic group.

Two traffic goal related items ("Traffic Direction" and "Towing Procedures") appear in Table 12. However, only one closely related crime goal item appears ("Interviewing and Interrogation") but this item is as appropriate to the traffic goal as it is to the crime goal.

Table 12

Eleven Curriculum Elements Receiving Similar Emphasis
Preference Values by High Crime and High Traffic
Goal Respondents

Curriculum Element	High Crime \bar{X} Leik	High Traffic \bar{X} Leik
Interviewing and Interrogation	1.27 .777	1.33 .722
Civil Matters. . .	3.27 .241	3.24 .318
A familiarization tour. . .	3.23 .211	3.15 .192
Traffic Direction	3.32 .375	3.27 .293
Towing Procedures	4.36 .464	4.42 .520
Officer's Responsibility for. . . Patrol Vehicles	3.11 .018	3.21 .141
Typing	2.59 .271	2.61 .293
Plans and Procedures. . . Natural Disasters	3.50 .375	3.58 .394
Self-Defense Techniques	1.59 .509	1.67 .470
Effective Use of Car Radio	3.11 -.018	3.15 .192
Police Community Relations	2.27 .271	2.33 .369

Response Set Indicator

As previously explained, a "false" curriculum element was included in the 89 items to determine, if only grossly, whether respondents were making a conscientious effort to provide valid responses. Item number 18 ("Motorcycle riding"), accordingly, was designated as a response-set indicator. If it received mean values greatly lower than 5.00, it could be assumed that ignorance, error, or conscious distortion were at work in considerable magnitude.⁶ Table 10 reveals an overall response set indicator mean value of 4.38. It is of interest that the high traffic goal group mean value was 4.12, with a Leik score of .268, the latter indicating more intra-traffic goal group disagreement than in the crime goal group. This would suggest that traffic goal preferring respondents, for some reason, placed greater significance on this item than crime goal respondents but that there exists more intra-group dissensus on the item within the traffic group than the crime group.

⁶After reading a preliminary report in which the overall response set mean value was discussed, a Michigan State Police Command Officer observed to the writer that some officers believe that motorcycles should be re-instituted as authorized equipment, and that perhaps this item was tapping a feeling of this kind among respondents. If so, it would appear logical that traffic goal preferring officers were more so inclined than crime goal preferring officers.

Summary

Two sets of findings were used to test this study's exploratory hypotheses. Statistics obtained from discriminant analysis provided a basis for accepting the hypothesis that some curriculum elements would separate, at a statistically significant level, crime goal preferring officers from traffic goal preferring officers. The same findings indicated that the curriculum items which perform this function are logically related, in general, to either of the two goals.

Discriminant analysis also identified two groups of officers who, because of their curriculum element emphasis preferences, were defined as either high crime or high traffic goal preferring officers. Mean scores were computed for all 89 curriculum elements for each of these two groups. Also, agreement (Leik) scores were computed for the two groups. These scores provided a basis for accepting the study's remaining hypotheses, indicating that crime goal preferring officers, in contrast to traffic goal preferring officers, place greater overall emphasis on curriculum elements and, in particular, more highly emphasize social science curriculum elements and two subjects which are designed to acquaint officers with changes in the criminal law.

Additional analysis indicates that crime goal preferring officers (in contrast to traffic goal preferring officers) place higher value on subjects designed to acquaint recruits with rules and procedures regulating the investigative process. Agreement scores, in contrast to mean scores, are nevertheless

higher for both goal groups on crime-legal and crime-technique curriculum elements, but they are low on the procedures, institutions threatening the social order, and social science categories. The traffic goal group appears to be less consensual in its curriculum element emphasis preferences, overall, than the crime goal group. Both groups, however, tended to give somewhat similar emphasis values to a portion of the curriculum but these elements did not appear particularly related to either goal group.

The findings reported in this chapter suggest a number of conclusions, suggestions, and recommendations. Those are discussed in the next, and final, chapter.

Chapter VI

SUMMARY AND CONCLUSIONS

Introduction

The theoretical basis of this study, the writer's experience with the study's statistical procedures, his field experience with the Michigan State Police, and, finally, the fate of the study's working hypotheses suggest a number of conclusions and recommendations which, together with a brief summary of the study, comprise this final chapter.

Summary

Contemporary organizational theorists, unlike most earlier students of public and private bureaucracy, recognize the precariousness of the goals of the institutions they study. Where, in earlier theories, goals were accepted as stable structures which management authenticated as desirable ends, social scientists today see goals caught in the cross-fire of many competing social and political forces, not the least of which are the preferences of the organization's members.

Goals are seen, in this study, as categories of work activities around which are organized beliefs, values, opinions, and biases, regarding a number of organizational processes and structures. If this, in fact, is a valid way of viewing social system goals it follows that social science

needs to increase its understanding of the ways in which goal preferences influence social system outcomes, alter the forms of social organization, and, perhaps, form and change social and occupational identities.

Unfortunately, there are few published reports of empirical investigations into such matters. To contribute to this somewhat neglected field of inquiry, this project was conceived as an exploratory study of differential goal preference among members of a social system (in this case, police officers employed by a state police agency) and, in addition, it was designed as an exploration of whether these goal preferences could be traced to another dimension of a social system.

Since socialization (defined here as work role performance preparation) is an important issue in all forms of social organization, it was selected as the general field in which to seek traces of goal preference. The specific aspect of socialization which was chosen for study was the curriculum of the first phase of the agency's basic training program.

Besides providing the project with a manageable organizational issue with which to work, the selection of the curriculum was also appropriate since it has received little attention in socialization theory, which is presently more concerned with the "how" of "becoming" than the "what". The curriculum is seen in this study as a collection of officially sanctioned attitudes, behaviors, beliefs, skills and values, constituting the substance out of which the organization's basic work role identity is officially formed. For this

reason, it was anticipated that the curriculum's constituent parts should be "goal-sensitive", i.e., different goal preference groups would recommend that curriculum elements be re-emphasized in ways compatible with their preferred goals.

Several exploratory hypotheses were developed to guide the writer in selecting a statistical procedure and analyzing the data. The hypotheses were not intended as rigorously developed instruments for theory testing. The present state of knowledge regarding goals of socialization is not so well developed that precisely formulated hypotheses are, as yet, methodologically appropriate or feasible. Indeed, there is little empirical research to indicate that goal preferences do exist among social system members and that these can be traced attitudinally, if not behaviorally, to other social system processes and structures. For this reason, the study's foundation is a hypothesis testing the proposition that goal preference does exist in the social system studied and that goal preference is related systematically to the curriculum used to train novice members to perform the basic work role of the organization.

Having formed that hypothesis, subsequent hypotheses were developed to predict how goal preference would be expressed in terms of differential curriculum element preferences. This was operationalized by asking respondents how they would emphasize (if they had the power to do so) each of 89 curriculum elements which could be involved in a basic training program. These subsidiary hypotheses were derived

by analyzing the structure of the organization chosen as this study's site (a midwest state police agency), a review of the agency's work, observations of persons who were known to prefer either crime or traffic goals, and literature relating to police work. Although a wide variety of tasks are performed by the agency's members, only two of its operating goals, crime and traffic, were selected for study. A question was designed which asked questionnaire respondents to identify which of two categories of work, crime or traffic, they most preferred.

The hypotheses indicated that a statistical procedure was required which would: (1) test each of 89 curriculum elements for statistically significant association with the crime or traffic goal; (2) produce data which could be used as a basis for judging whether individual respondents would emphasize curriculum elements in a way which was consistent with other respondents in their goal category, and (3) identify all respondents in terms of their actually "belonging" to their professed goal category and to what degree their responses related to the mean responses of their goal category. In short, the curriculum elements were manipulated as predictor variables while the two goal categories were defined as dependent variables.

Having accomplished these objectives, it was then possible to examine the curriculum preferences of two groups (crime and traffic) of high goal preferring respondents. Only troopers, corporals, sergeants, and staff sergeants comprised

the study's population; higher ranking members were excluded because they were not thought to be as well acquainted with the daily realities of the agency's work role as the four sub-management rank categories. An inspection of respondent characteristics revealed no deficiencies in response which were judged as crucial.

The subsidiary hypotheses were also intended to provide insight into the work role of law enforcement officers, an occupational category which (in contrast to nurses, welfare workers, teachers, doctors, ministers, and the military, etc.) is relatively neglected by social scientists.

In the present era, all social control institutions are undergoing reappraisal (whether from within or without), one purpose of which is to determine if they are appropriately organized to attain certain social goals. The police, in particular, are experiencing a variety of legislative, union, militant-group, and professional-organization pressures, some of which are directly aimed at the relevance of law enforcement's response to pressing social issues. Eventually, these pressures will converge upon a key question: of what is the work role of today's police officer composed and is it appropriate for today's society?

Should this happen, the issue of the crime and traffic goals will certainly be critical but, as matters now stand, those who would join this issue must do so speculatively, without data.

The study's hypotheses were confirmed by the statistical procedures. Twelve curriculum elements were found statistically significant at least at 0.05, and six were significant at 0.01. Not only were these curriculum elements significantly associated with either the crime or traffic goal groups but almost all of them were related to their respective goal groups in a way which was logical in terms of the nature of the activities comprising each group. The subsidiary hypotheses suggest that respondents who are high in traffic goal preference tend to value most curriculum elements lower than high crime goal preferring respondents. This tendency includes items relating to social science and changes in the criminal law. It does not, generally, include items relating to traffic law enforcement. Greater general dissensus on most item categories accompanies this traffic goal related tendency. The data do not provide a basis for an unequivocal conclusion regarding the overall attitude of traffic goal preferring officers to the curriculum. Were it not for their willingness to emphasize most traffic curriculum elements more highly than crime goal officers, one could conclude that they were possibly less training oriented than crime goal preferring officers, but this does not seem to be the case.

Conclusions

The major conclusion which the writer derives from this study is that the data indicate that social system goals provide fruitful areas of theoretical inquiry. Unfortunately,

they are difficult to define, indeed, it is often difficult to know when one has encountered them. While this study did not concern itself with the social philosophy or epistemology of goals, this is certainly a crucial area for future work. The assumption on which the specification of goals was made, and which informed their operationalization, was that work activities cluster logically into categories which can be defined as operating goals.

At a macro-sociological theory level, however, one could forcefully argue that this study's two goals coalesce into a more abstract social objective, say, "protecting life and property". On this plane, one finds the goal field occupied by a variety of institutions, e.g., fire departments, hospitals, county assessors' offices, even the United States Constitution. The point here is, simply, that future research in social system goal phenomena will be expedited by some kind of systematic, universal taxonomy for classifying and operationalizing social system goals. Until that happens, other researchers may want to consider the interim alternative of operationalizing goals as sums, so to speak, of work-role activities. This strategy also has the advantage of defining goals in terms which are familiar and meaningful to social system members and which also permits them to distinguish between goals in terms of preferences for performing or not performing activities constituting goals.

Differentiation between, or among, goals can therefore be made in terms referring to daily role performance, rather

than highly abstract, long-range societal purposes.

Those who are not familiar with law enforcement might conclude that there is nothing particularly surprising that the study's basic hypothesis was confirmed. On the other hand, when one considers the degree to which policemen's work is monitored by supervision and management, that the ideology of police management tends to obscure the issue of goal preference, and that many policemen (particularly, perhaps, older officers) probably have no goal preferences, the finding that such preferences exist is by no means one which could be anticipated with great certainty. This study does not provide a basis for generalizing about the intensity with which goal preference is held, nor whether this preference is ever transformed into behavior. Behavioral consequences of goal preference would be difficult to operationalize, given the interpersonal nature of the police work role. Some possibilities include relationships between goal preference and (1) turnover, (2) disciplinary actions, (3) ticket "production", (4) types of activities which officers "originate" as a result of their own volition, (5) adjudicated outcome of traffic citations. More subjective measures could include: (1) a "scale" which discriminates goal preference categories without being obviously designed for that purpose; (2) ratings by peers regarding perceptions of colleagues' goal preferences; (3) judgments by trained observers regarding goal preference.

It seems likely, and certainly worthy of study that goal preference may be "tracked" within many kinds of private and

public bureaucracies. If so, the old public administration bromide, "There is no Republican or Democrat way to manage a city" may be proven false. Perhaps social goals even manifest themselves in welfare worker-"client" relationships, or therapist-patient interaction. In this sense more knowledge about the social-political consequences of goal preference analysis is extremely important.

The selection of a socialization curriculum as a goal-sensitive area of analysis may prove to be an unusually fruitful area of additional theoretical inquiry. Earlier in the study, references were made to the "service-procedure", "treatment-custody", "tenderness-technique", "physician-scientist-humanitarian" perspectives reported elsewhere in the literature. While these are useful constructs, they have not been studied in terms of the social values from which they are derived. Certainly, for example, a nurse's preferred occupational style and her social goal preferences must be related. The point here is that this study's explanatory power would have been improved if some kind of measure of social goal preference had been incorporated into the questionnaire used to collect the data.¹

Since the study indicates that socialization curricula may be sensitive to goal preference, it might be worthwhile to undertake a series of comparative studies to discover what

¹Examples of such measures can be found in: Charles M. Bonjean, et. al., Sociological Measurement: An Inventory of Scales and Indices (San Francisco, California: Chandler Publishing Company, 1967), n.p.

are the underlying social goal determinants of organizational goal preference and how these may be related to the processes by which occupational identities are formed. Extending this to broader social organization concerns, the procedure employed in this study may prove useful, for example, to persons who believe that, in evaluating education curricula, it is important to find how ". . . specific instructional practices are aligned with specific social goals".²

To increase the theoretical power of the goal preference hypothesis it seems important that some typology of goals be advanced which, while being specific enough to make "organizational sense" to social system members participating in such a study, would also be relevant on a broader plane of social organization. It may well be that the service-procedure, tenderness-technique, treatment-cure, traffic-crime hypotheses all "tap" some similar, underlying member personality configurations. Discovering what these might be would be useful, not only to social scientists interested in theoretical matters, but to persons who manage social systems and who need improved selection, performance evaluation, promotional, etc., procedures.

A major issue here is not that goal preference should be purged from a social system but that system managers should recognize that such preferences may exist and, where they do, leadership strategies should be directed at maximizing the

²Robert L. Baker, "Curriculum Evaluation", Review of Educational Research, XXXIX (1969), 349.

beneficial aspects of goal preference and minimizing their possibly inimical consequences. For example, managers in the police agency which was this study's laboratory may be interested in learning if the unexpectedly (at least to the writer) low traffic goal group mean scores on the item, "officer-traffic law violator contacts", is explainable in terms of the goal preference thesis. The writer suggests that, since this is an item implying training for inter-personal competency, it was perceived by traffic goal preferring officers as actually belonging to the social science, rather than the traffic category. Moreover, it received a relatively high rating by the crime group who, overall, seemed more favorably disposed to such subjects. It would seem worthwhile to discover whether this attitudinal datum has behavioral significance, perhaps by studying whether traffic goal preferring officers suffer from a disproportionately high rate of citizen complaints, in comparison to crime goal preferring officers.

The preceding paragraph also suggests that the goal-preference thesis may be useful to persons concerned with redesigning organizational or occupational training programs. Since we may expect that in any organization which does things to and for people goal conflict may exist, it would be valuable to know where in a training curriculum high goal sensitivity will be found. This would be important, not only in training policemen, nurses, welfare workers, correctional workers, but other occupational categories as well, e.g., ministers, city managers, secondary teachers, psychiatric technicians.

In their study of a state police organization, Preiss and Ehrlich found that many officers ". . . believed large discrepancies existed between school material and field practice". Recruits, the writers suggest, experienced these discrepancies as role behavior "dilemmas". No explanation of the underlying cause of these perceived training dilemmas was suggested, except that "school training was identified as a headquarters product" and that since ". . . no two posts functioned alike . . . any generalization learned in recruit school . . . [should] be modified at any given post".³ Certainly it would seem worthwhile to determine how much goal conflict contributes to these perceived discrepancies, not only where the training of policemen is concerned, but wherever curriculum relevance is challenged.⁴

While this study's data are not generalizable, in their nature, to other social systems (except perhaps to other police agencies with similar goal mixtures and curricula), its conception and procedures may be of interest to other students of complex organization and, in this way, eventually contribute

³Jack J. Preiss, Howard J. Ehrlich, An Examination of Role Theory (Lincoln, Nebraska: University of Nebraska Press, 1966), p. 17.

⁴Institutions of higher education seem, in the present era, particularly subject to goal tensions and therefore in need of goal preference analysis. Anderson, for example, observes that "there is currently within institutions of higher education much ferment regarding goals and purposes and means to attain them". He asks whether the aim of the University is ". . . to liberally educate a man to make him a thinking man? a moral man? a happy man? a wise man? an adjusted man? a conforming man? a learned man? a free man? a creative man? a developing man?" G. Lester Anderson, "The Changing Curriculum", Journal of General Education, XXII (1970), 57.

to theory construction.

Researchers who may, in the future, be interested in discriminant analysis as a statistical strategy in social system analysis will find other applications for it than goal analysis. In any case, several suggestions regarding its use may be of value. First, it need not be limited to two goals. The particular routine used in this study could have accommodated up to 80 goals. Thus, a more complex goal structure (or any other type of criterion variable or variables) can be operationalized. Second, it would be well to use fewer predictor variables than this study employed, unless one wants to explore a wide variety of variables for their possible goal significance. In the case of nursing, for example, it should be possible, given the proliferation of literature in that field, to reduce curricular material to a much smaller set of items specifically selected for hypotheses testing. Related to this is the problem encountered in this study regarding the response options available to traffic goal preferring officers. It appears that this group may not have had enough goal related items with which to reveal the full range of their emphasis preference structure. Thus, it may be incorrect to regard them as anti-training in their orientation, but merely anti-crime goal. This problem can be overcome, of course, by item design and scaling.

Another problem in discriminant analysis results from using self reports of goal preference. This may be the only means of identifying goal preference available to the

researcher. Assignment, say, to a traffic division could not be used since this does not occur by an officer's preference--it is almost always a management decision, therefore some officers working in a traffic unit will not prefer that work over criminal law enforcement. There were no other "external" goal indicators available and so, as is probably the case in most organizations, a self report was used. If possible, however, some external indicator should be employed or, at least, a second, corroborating subjective indicator.

The final set of conclusions is directed at certain applications of this study's procedure which, if subsequently refined, could result in practical benefits for people who manage and work in organizations.

One possibility of its application is as a training needs identification technique. Most, but not all, training needs analyses are based on the premise that "training per force must always be aimed at satisfying specific and clearly defined needs of line management."⁵ If management sees training as something aimed at achieving its conception of appropriate organizational goals and feels no need to examine whether its conception is congruent with that of "lower" organization members then the problem of training needs identification is simplified: it is merely a matter of declaring who should be trained in what, when, and how. If, on the other hand, management desires to undertake a training needs

⁵Edwin Timbers, "Defining Training Needs", Training and Development Journal, XIX (February, 1965), 17.

study in the context of ". . . a study of the entire organization--its objectives, its resources, the allocation of these resources in meeting its objectives . . ." ⁶ then fairly sophisticated techniques are required, particularly if management finds it useful to understand what internal forces exist which could hinder the success of such a program, or assure its success.

Table 10 in the previous chapter, as an example, could be used to decide whether goal preference should be recognized in a curriculum. It may be that, by recognizing goal preference in curriculum design, greater learning motivation can be stimulated. This might be accomplished, for example, by holding specially designed seminars organized around goal preference in addition to training seminars organized around curricular materials of overall organizational relevance. The issue here seems to be whether organizational effectiveness is best served by ignoring or recognizing goal preference.

Another application of the goal preference concept might be in the field of employee selection. If the 12 statistically significant curriculum elements (of Table 6) were further refined, it might be worthwhile to use them as part of a battery of initial selection procedures to determine which goals applicants seem to prefer prior to basic training. Results, if valid, could be used in a variety of ways, e.g., to regulate constantly organizational "goal mix" so that some desired

⁶Paul C. Buchanan, "The Function of Training in an Organization", Journal of the American Society of Training Directors, XIV (April, 1960) 53-54.

balance of goal preference is not disproportionately changed because (by accident or plan) several generations of novices all preferring the same goal were recruited over a period of time; counselling novices who "test out" as unusually high on one goal in an effort to convince them of the need to demonstrate balance in the way they use the organization's time and resources; to determine how pre-training goal preference changes as a result of the basic training experience.

Such applications are based on the assumption that goal preference can, and perhaps should, be accommodated in police work. The writer's personal belief is that the two goals should not be pursued by the same police organization. While this study does not provide data to support the conclusion that the traffic goal is necessarily incompatible with the crime goal, it does suggest that the perspectives of traffic goal preferring officers may differ in critical ways from those of crime goal preferring officers.

Few, if any, police administration authorities have questioned the social logic of charging local police with traffic investigation and enforcement. While Smith deplored the involvement of the American police in traffic work and suggested it as a major source of public resentment toward law enforcement, he advanced no argument for separating it from criminal law enforcement.⁷ Nor did one of the most recent large scale inquiries into the role of the police in

⁷Bruce Smith, Police Systems in the United States (New York, Harper and Row Publishers, 1960), p. 64.

American criminal justice comprehensively address itself to what would seem to be a basic question: is the police work role, as it is now conceived, composed of as few non-contradictory activities as possible, and specifically, is criminal law enforcement compatible with traffic law enforcement?⁸

On the other hand, August Vollmer, forty years ago, argued that

Traffic and vice regulation and control hamper progressive police executives. Traffic should be handled by a separately organized body of men, whose whole time and thought will be given to the solution of that problem. . .⁹

Federal law enforcement agencies do not incorporate traffic law enforcement into their work role. Some of the public approval which many of them seem to enjoy (in contrast to local law enforcement) must be related to the fact that their employees do not have to enforce traffic laws. The local police, on the other hand, suffer from their obligations to

⁸The President's Commission on Law Enforcement and Administration of Justice, Task Force Report: The Police (Washington, D.C., 1967). The word "traffic" does not appear in this report's index. In general, the report appears to represent an exclusive concern with the crime goal; perhaps this could be advanced in defense of an accusation that it ignores the police work role.

⁹August Vollmer, "A Separate Traffic Department", in Samuel G. Chapman (ed.), Police Patrol Readings (Charles Thomas Publisher, Springfield, Illinois, 1964), 376-78. Vollmer's statement, extracted from his report on the Chicago Police Department (written for the Illinois Association for Criminal Justice and the Chicago Crime Commission) argued that traffic and vice enforcement overburden the police workload, expose the police to negative public opinions, and (vice particularly) are sources of political corruption. The argument has little to do with inherent social psychological differences in goal orientation.

try to enlist broad community support while, at the same time, being forced to deal with citizens in a role-relationship which rarely evokes positive citizen response.

It is certainly true, however, that the present study does not provide a firm basis for a policy decision to disengage the crime and traffic goals. It does, however, provide a justification for additional research into the crime-traffic goal preference hypothesis. Examples of further research include: (1) a study of underlying personality configurations of the two goal preference groups; (2) examining how goal preference effects other aspects of police organization (e.g., recruitment criteria and policies, promotional systems, supervisory and management styles); (3) an inquiry into the distribution of goal preferences among top-level police officials and administrative and legislative officials external to the police system but who are important determinants of its policies and practices.

One of the early indications that a field is professionalizing, Hughes remarked,¹⁰ is that some, if not many, of its members become self-conscious about their work--of what its parts are, how they are arranged and related, and, most importantly, how the work role should be restructured in the interest of increased public support. The writer's final conclusion, and suggestion, is that the American police have arrived at a point in their development where the structure

¹⁰Everett C. Hughes, "Studying the Nurse's Work", The American Journal of Nursing, LI (1951), 294.

of their work role is crucial to their professionalization. While it is beyond the scope of the present study to suggest the pattern of an improved work-role, it does provide a basis for an argument that research into restructuring the police work role should be included in future inquiries into the condition of American criminal justice.

BIBLIOGRAPHY

BIBLIOGRAPHY

Public Document

State of Michigan. Act 59, P.A. 1935.

Books

- Bonjean, Charles M., et al. Sociological Measurement: An Inventory of Scales and Indices. San Francisco, California: Chandler Publishing Company, 1967.
- Bowers, Raymond F. (ed.). "The Impact of Technological Change on the Careers of Managers and Professionals in Large Scale Organizations." Studies on Behavior in Organizations: A Research Symposium. Athens, Georgia: University of Georgia Press, 1962.
- Brim, Orville, Jr., and Wheeler, Stanton. Socialization After Childhood. New York: John Wiley and Sons, Inc., 1966.
- Downs, Anthony. Inside Bureaucracy. Boston, Massachusetts: Little, Brown and Company, 1967.
- Etzioni, Amitai. A Comparative Analysis of Complex Organizations. New York: The Free Press, 1961.
- Gouldner, Alvin. Patterns of Industrial Bureaucracy. New York: The Free Press of Glencoe, 1964.
- _____. "Organizational Analysis," in Robert K. Merton (ed.), et al. Sociology Today. Vol. II. New York: Harper Torchbooks, 1965.
- Homans, George. The Human Group. New York: Harcourt Brace, 1950.
- Hughes, Everett C. Men and Their Work. Glencoe, Illinois: The Free Press, 1958.
- Kahn, Robert L., et al. Organizational Stress: Studies in Role Conflict and Ambiguity. New York: John Wiley and Sons, 1964.

- Kaufman, Herbert. The Forest Ranger: A Study in Administrative Behavior. Baltimore, Maryland: The John Hopkins Press, 1960.
- Kornhauser, William. Scientists in Industry. Berkley, California: University of California Press, 1962.
- Likert, Rensis. New Patterns of Management. New York: McGraw-Hill, 1961.
- Lovell, John P. "The Professional Socialization of the West Point Cadet," in Morris Janowitz (ed.). The New Military. New York: John Wiley and Sons, 1967.
- Marvick, Dwaine. Career Perspectives in a Bureaucratic Setting. Ann Arbor, Michigan: University of Michigan Press, 1954.
- Moore, Wilbert E. "Occupational Socialization," in David A. Goslin (ed.). Handbook of Socialization Theory and Research. Chicago, Illinois: Rand McNally, 1969.
- Oleson, Virginia L., and Whittaker, Elvi K. The Silent Dialogue: A Study in the Social Psychology of Professional Socialization. San Francisco, California: Jossey-Bass, Inc., Publishers, 1968.
- Peabody, Robert L. Organizational Authority: Superior--Subordinate Relationships in Three Public Service Organizations. New York: Atherton Press, 1964.
- Preiss, Jack J., and Ehrlich, Howard J. An Examination of Role Theory. Lincoln, Nebraska: University of Nebraska Press, 1966.
- Presthus, Robert. The Organizational Society: An Analysis and a Theory. New York: Random House, 1962.
- Rao, P. C. Radhakrishna. Advanced Statistical Methods in Biometric Research. New York: Wiley and Sons, 1952.
- Sampson, Paul. "BMD07M: Stepwise Discriminant Analysis", in W. J. Dixon (ed.). Biomedical Computer Programs. Berkley and Los Angeles, California: University of California Press, 1968.
- Selznick, Philip. Leadership in Administration. New York: Harper and Row Publishers, 1957.
- Smith, Bruce. Police Systems in the United States. New York: Harper and Row Publishers, 1960.
- Thompson, Victor. Modern Organization. New York: Alfred Knopf, 1961.

- Vollmer, August. "A Separate Traffic Department," in Samuel G. Chapman (ed.). Police Patrol Readings. Springfield, Illinois: Charles C. Thomas, Publisher, 1964.
- Weber, Max. "Ideal Types and Theory Construction," in May Brodbeck (ed.). Readings in the Philosophy of the Social Sciences. New York: The Macmillan Company, 1968.
- Wert, James E., Neidt, Charles O., and Ahmann, Stanley J. Statistical Methods in Education and Psychological Research. New York: Appleton-Century-Crofts, Inc., 1954.

Monographs and Bulletins

- Francis, Roy, and Stone, Robert. Service and Procedure in Bureacracy: A Case Study. Minneapolis, Minnesota: The University of Minnesota Press, 1956.
- Habenstein, Robert W., and Christ, Edwin A. Professionalizer, Traditionalizer, and Utilizer. Columbia, Missouri: University of Missouri, 1963.
- Meyer, Genevieve. Tenderness and Technique: Nursing Values in Transition. Los Angeles, California: University of California Press, 1960.

Journals

- Anderson, Lester G. "The Changing Curriculum," Journal of General Education. XXII (1970), 51-60.
- Bain, Read. "Policemen and Children," Sociology and Social Research. XXXIII (1949), 417-23.
- Baker, Robert L. "Curriculum Evaluation," Review of Educational Research. XXXIX (1969), 339-58.
- Bourne, Peter G. "Some Observations on the Psychosocial Phenomena Seen in Basic Training," Psychiatry. XXX (1967), 187-96.
- Buchanan, Paul C. "The Function of Training in an Organization," Journal of the American Society of Training Directors. XIV (April, 1960), 53-63.
- Bucher, Rue. "The Psychiatric Residency and Professional Socialization," Journal of Health and Human Behavior. VI (1965), 197-206.

- Corwin, Ronald. "The Professional Employee: A Study of Conflict in Nursing Roles," American Journal of Sociology. LXVI (1961), 604-15.
- Davis, Arthur K. "Bureaucratic Patterns in the Navy Officer Corps," Social Forces. XXVII (1948), 143-53.
- Goode, William J. "A Theory of Role Strain," American Sociological Review. XXV (1960), 483-96.
- Hughes, Everett C. "Studying the Nurse's Work," American Journal of Nursing. LI (1951), 294-95.
- Korman, Abraham K. "Selective Perception Among First-Line Supervisors," Personnel Administration. XXVI (September-October, 1963), 31-36.
- Leik, Robert K. "A Measure of Ordinal Consensus," Pacific Sociological Review. IX (Fall, 1966), 85-90.
- Lortie, Dan C. "Laymen to Lawmen: Law School, Careers, and Professional Socialization," Harvard Educational Review. XXIX (1959), 352-69.
- Mauksch, Hans O. "Becoming a Nurse: A Selective View," The Annals of the American Academy of Political and Social Science. CCCXLVI (March, 1963), 88-98.
- Morrison, Donald G. "On the Interpretation of Discriminant Analysis," Journal of Marketing Research. VI (May, 1969), 174-81.
- Olson, Bruce. "An Exploratory Study of Police Task Preferences," Personnel Journal. XLIX (December, 1970), 1015-1020.
- Palumbo, Dennis J. "Power and Role Specificity in Organization Theory," Public Administration Review. XXIX (1969), 237-48.
- Perrow, Charles. "The Analysis of Goals in Complex Organizations," American Sociological Review. XXVI (1961), 854-66.
- Rao, P. C. Radhakrishna. "On Some Problems Arising Out of Discrimination with Multiple Characters," Sankhya. IX (September, 1949), 361-77.
- Reissman, Leonard, et al. "The Motivation and Socialization of Medical Students," Journal of Health and Human Behavior. I (1960), 174-82.

- Rulon, P. J. "Distinctions Between Discriminant and Regression Analyses and a Geometric Interpretation of the Discriminant Function," Harvard Educational Review. XXI (1951), 80-90.
- _____. "The Stanine and the Separile: A Fable," Personnel Psychology. IV (Spring, 1951), 99-114. Also, Educational Research Corporation Bulletin. (February, 1950), 2-10.
- Sharaff, Myron R. and Levinson, Daniel J. "The Quest for Omnipotence in Professional Training: The Case of the Psychiatric Resident," Psychiatry. XXVII (1964), 135-49.
- Shartle, Carroll L., et al. "An Approach to Dimensions of Value," Journal of Psychology. LVII (1964), 101-11.
- Simon, Herbert A. "On the Concept of Organizational Goal," Administrative Science Quarterly. IX (June, 1964) 1-22.
- Simpson, Ida Harper. "Patterns of Socialization into the Profession: The Case of Student Nurses," Sociological Inquiry. XXXVII (Winter, 1967), 47-54.
- Tiedeman, David V. "The Utility of the Discriminant Function in Psychological and Guidance Investigations," Harvard Educational Review. XXI (1951), 71-79.
- _____, and Sternberg, Jack J. "Information Appropriate for Curriculum Guidance," Harvard Educational Review. XXII (1952), 257-74.
- Timbers, Edwin. "Defining Training Needs," Training Directors Journal. XIX (February, 1965), 17-19.
- Wrong, Dennis. "The Oversocialized Conception of Man in Western Society," American Sociological Review. XXVI (1961), 183-93.

Reports

- Davids, Fredrick E. Annual Summary: Status and Performance, 1968. Michigan Department of State Police, 1968.
- International Association of Chiefs of Police. Comparative Data Report. A report prepared by the Division of State and Provincial Police. Washington, D.C.: International Association of Chiefs of Police, 1967.
- Michigan Department of State Police. Annual Report. 1919-20.

- Michigan Department of State Police. Annual Report. 1967.
- Michigan Department of State Police. Enlisted Personnel Strength Report. April 1, 1969.
- Michigan Department of State Police. Michigan State Police Strength Report. March 3, 1967.
- Michigan Department of State Police. Official History. Lansing, Michigan: 1968.
- Reiss, Albert J., Jr. Career Orientation, Job Satisfaction, the Assessment of Law Enforcement Problems by Police Officers. Ann Arbor, Michigan: University of Michigan, May, 1967. (Processed.)
- The President's Commission of Law Enforcement and Administration of Justice. Task Force Report: The Police. Washington, D.C., 1967.

Unpublished Material

- Gladstone, Edward A., and Cooper, Thomas W. "State Highway Patrols: Their Functions and Financing." Paper read before the Highway Research Board, 45th Annual Meeting, January, 1966.
- Grusky, Oscar. "Treatment Goals and Organizational Behavior: A Study of an Experimental Prison Camp." Unpublished Doctoral Dissertation, University of Michigan, 1957.
- Lewis, Leslie. "Evaluation: A Relationship of Knowledge, Skills and Values." Paper read before the American Education Research Association Annual Meeting, Minneapolis, Minnesota, March, 1970.
- Michigan Department of State Police. Training Schedule Prepared by the Michigan Police Training Division for the 74th Recruit School. January 6, 1969 to April 2, 1969.
- Miles, Mable G. "The Use of Classification Equations in Reading Diagnosis in Fourth Grade." Unpublished Doctoral Dissertation, University of Tulsa, 1963.
- Rempell, Peter. "The Use of Multivariant Statistical Analysis in the Classification of Delinquent and Nondelinquent High School Boys." Unpublished Doctoral Dissertation, University of Minnesota, 1955.
- Webster, John A. "Police Task and Time Study." Unpublished Doctoral Dissertation, University of California, 1969.

APPENDIX A

MICHIGAN STATE POLICE BASIC TRAINING QUESTIONNAIRE

APPENDIX A

MICHIGAN STATE POLICE BASIC TRAINING QUESTIONNAIRE

The questionnaire on which this study was based was not conveniently suited for reproduction according to dissertation format rules. Copies of the questionnaire may be obtained by writing the author at The University of Tulsa, 600 South College, Tulsa, Oklahoma 74104.

APPENDIX B

MICHIGAN STATE POLICE BASIC AND ADVANCED TRAINING CURRICULA

APPENDIX B

1968 MICHIGAN STATE POLICE RECRUIT SCHOOL CURRICULUM (Thirteen-Week Program)

<u>MISCELLANEOUS</u>	<u>HOURS</u>
Loyalty Oath and Personnel Forms	5
Opening Remarks by Training Division Commander	$\frac{1}{2}$
Opening Remarks by Director	$\frac{1}{2}$
Physical Examinations	6
Recruit School Rules and Regulations	$\frac{1}{2}$
Psychological Attitude Testing	$\frac{1}{2}$
	<u>13</u>
 <u>ADMINISTRATIVE PROCEDURES</u>	
Classroom Notetaking	1
The Art of Listening	2
Typewriting	10
Field Notetaking and Report Writing	3
Report Preparation	30
Policies and Procedures Panel	3
Records	1
Departmental Rules and Regulations	3
Examinations	<u>36</u>
	89
 <u>CIVIL DEFENSE</u>	
First Aid - Family and Personal Survival	27
Radiological Monitoring	<u>7</u>
	34

<u>DEFENSIVE PROCEDURES AND PHYSICAL TRAINING</u>	<u>HOURS</u>
Calisthenics	35
Defensive Tactics	7
Firearms	33
Heavy Weapons and Use of Gas	13
Holds and Releases	18
Theory of Firearms	<u>4</u>
	110
 <u>CRIMINAL IDENTIFICATION AND INVESTIGATION</u>	
Accident Investigation	40
Aircraft Accident Investigation	2
Criminal Investigation	8
Fingerprints	6
Police Photography	1
Polygraph	2
Water Accident Investigation	2
Familiarization with Breathalyzer	<u>2</u>
	63
 <u>HISTORY AND GOVERNMENT</u>	
History and Government of Michigan	3
Introduction to Law Enforcement	5
Michigan State Police History	<u>3</u>
	11
 <u>HUMAN BEHAVIOR</u>	
Basic Criminology	10
Human Relations	4

<u>HUMAN BEHAVIOR (Continued)</u>	<u>HOURS</u>
Juvenile Delinquency	5
Psychology of Mobs and Crowds	2
Abnormal Human Behavior	<u>4</u>
	25

LAWS AND CRIMINAL PROCEDURE

Aeronautical Law	2
Laws of Arrest	3
Search and Seizure	3
Rules of Evidence	3
Constitutional Law	5
Liquor Control Commission Laws	2
Motor Vehicle Laws	50
Prosecution in Accident Cases	2
Testimony in Court	2
Philosophy of Traffic Law Enforcement	10
Orientation to Civil Law	1
Substantive Criminal Law	8
Admissions and Confessions	2
Water Laws	<u>2</u>
	95

MILITARY AND RELATED SUBJECTS

Military Courtesy	2
Military Drill	7
Riot Control and Tactical Formations	<u>10</u>
	19

<u>PATROL TECHNIQUES</u>	<u>HOURS</u>
Communications	6
Computer and Data Processing	1
Law Enforcement Information Network	1
Michigan Law Enforcement Blockade System	2
Patrols	35
Traffic Control	<u>2</u>
	47
 <u>PUBLIC RELATIONS</u>	
Character	1
Fundamentals of Speech	4
Police Courtesy and Ethics	<u>5</u>
	10
 <u>SPECIALIZED TRAINING</u>	
Correspondence Course Introduction	1
Dog Program	2
Post Procedure	1
Problems with Probationary Troopers	2
Underwater Recovery Squad	1
Uniform Division Policies and Procedures Panel	3
Water Safety	<u>23</u>
	33
 <u>DRIVER TRAINING</u>	
Precision Driving Techniques	38
 <u>CLASS PREPARATION AND STUDY</u>	
Notebook Preparation	75
Study	<u>152</u>
	227

<u>NON-CURRICULUM ACTIVITIES</u>	<u>HOURS</u>
Final Cleaning and Inspection of Quarters	2
Uniform Inspection and Class Pictures	1
Practice Graduation	1
Graduation and Final Assembly	4
Individual Photographs	1
Issuance of Uniforms and Equipment	1
Personal and Quarters Inspections	24
Turning in of Recruit Equipment	<u>1</u>
	35
<u>TOTAL HOURS</u>	<u>849</u>

APPENDIX B

CURRICULUM FOR ADVANCED TROOPER BASIC COURSE

<u>INDOCTRINATION</u>	<u>HOURS</u>
Orientation	2
School Evaluations and Closing Address	1
 <u>ADMINISTRATIVE PROCEDURES</u>	
Case Supervision	3
Concealed Weapons	2
Data Processing and Computer System	2
Examinations	8
Examination, Final on Correspondence Courses	2
Notetaking and Report Writing Review	1
Rules and Regulations	5
Uniform Division Panel Discussion	3
 <u>DEFENSIVE PROCEDURES</u>	
Firearms, Off Duty Concealment and Safety	1
 <u>CRIMINAL IDENTIFICATION AND INVESTIGATION</u>	
Arson Investigation	4
Auto Theft Investigation	4
Bombs and Infernal Devices	1
Burglary Investigations	2
Collection and Preservation of Evidence	8
Crime Scene Search, Photographs and Plaster Casts	10
Fraud Investigations	2

CRIMINAL IDENTIFICATION AND INVESTIGATION (Cont'd.) HOURS

Fraudulent Check Investigations	5
Gambling Investigations	5
Homicide Investigations	5
Informants and Sources of Information	2
Interview and Interrogation	22
Larceny Investigations	2
Latent Fingerprints	8
Liquor Law Violations	2
Missing Person Investigations	1
Narcotic Addiction and Dangerous Drugs	2
Narcotic Investigations	3
Nuisance and Obscene Telephone Calls	2
Organized Crime in Michigan	2
Practical Aspects of Criminal Investigation	2
Robbery Investigations	2
Sex Crime Investigations	5
Surveillance and Undercover Assignments	5
Vehicle Accident Investigation	5

LAWS AND CRIMINAL PROCEDURE

Criminal Law and Procedure	20
Testimony and Demeanor in Court	2
Water Laws and Accident Investigations	4

HUMAN BEHAVIOR

Community Relations	5
Juvenile Investigations	5
Militant Groups	1

<u>NON-INSTRUCTIONAL ACTIVITIES</u>	<u>HOURS</u>
-------------------------------------	--------------

Travel Time to and From School.	4
---	---

<u>SPECIALIZED TRAINING</u>	
-----------------------------	--

Department of Pardons and Paroles	1
---	---

Detroit Edison Co. (Electricity and Hot Wires).	1
---	---

Illicit Stills and Federal Firearms	2
---	---

Immigration and Naturalization(Alien Investiga- tions).	2
--	---

Interstate Transportation of Contraband Products.	2
---	---

Jurisdiction and Services of the F.B.I.	1
---	---

Jurisdiction and Services of the Secret Service	3
---	---

Polygraph Examinations	1
----------------------------------	---

Secretary of State, Driver Licensing.	2
---	---

State Department of Licensing and Regulation.	2
---	---

Underwater Recovery Squad	1
-------------------------------------	---

<u>TOTAL HOURS</u> - - -	200
--------------------------	-----

APPENDIX C

ELEMENTS OF STATE POLICE RECRUIT TRAINING CURRICULA IN THE UNITED STATES

APPENDIX C

ELEMENTS OF STATE POLICE RECRUIT TRAINING CURRICULA IN THE UNITED STATES

	<u>YES</u>	<u>NO</u> <u>INDICATION</u>
1 Greetings	38	11
2 Academy Orientation and Rules	46	3
3 Exams	39	10
4 Exam Review	30	19
5 Counselling	24	25
6 Physical Tests	26	23
7 Psychological	14	35
8 Graduation	43	6
9 Professional Ethics	36	13
10 Rules and Regulations	44	5
11 Organizations	38	11
12 General Orders	22	27
13 Tour of Facilities	18	31
14 Personnel Policies	34	15
15 Department History	41	8
16 Budget	14	35
17 Disciplinary Procedures	21	28
18 Foundations of Criminal Justice	19	30
19 Constitutional Law	26	23
20 Criminal Justice Agencies--Federal	35	14
21 Criminal Justice Agencies--State	27	22
22 Criminal Justice Agencies--County	11	38
23 Criminal Justice Agencies--Local	11	38
24 State Criminal Code	43	6
25 Miscellaneous State Codes	24	25
26 Civil Matters	12	37
27 Juvenile Code	30	19
28 Local Ordinances	1	48
29 State Traffic Code	46	3
30 Local Traffic Ordinances	1	48
31 Civil Rights Laws	26	23
32 Laws of Arrest, Search, and Seizure	47	2
33 Civil Commitment Procedures	8	41
34 Rules of Evidence	40	9
35 Court Procedures	41	8
36 Testifying in Court	40	9
37 Interrogation Procedures	35	14
38 Basic Sociology	6	43
39 Social Disorganization	3	46
40 Police-Community Relations	19	30
41 Human Relations	28	21
42 Basic Psychology	12	37
43 Abnormal Psychology	15	34

	<u>YES</u>	<u>NO INDICATION</u>
44 Public Relations	40	9
45 Police-Press Relations	26	23
46 Criminology	9	40
47 Adolescent Psychology	5	44
48 State and Local Government	25	24
49 Extremist Groups	10	39
50 Community Service Agencies	7	42
51 Accident Investigation	48	1
52 Traffic Direction	44	5
53 Officer-Violator Contacts	38	11
54 Drunk-Driving Contacts	32	17
55 Speed Measurement	25	24
56 Towing Procedures	11	38
57 Summons Issuance Procedures	31	18
58 Vehicle Inspection	29	20
59 Traffic Engineering	25	24
60 Records and Communication	40	9
61 Jail and Booking Procedures	10	39
62 Motor Vehicle Maintenance	37	12
63 Equipment and Property Procedures	32	17
64 Basic Patrol Concepts	29	20
65 Report Writing	46	3
66 Field Inquiry	12	37
67 Patrol Tactics and Duties	37	12
68 Principles of Investigation	28	21
69 Crime Scene Protection	27	22
70 Physical Evidence	25	24
71 Collection and Preservation of Evidence	34	15
72 Interviewing	26	23
73 Interrogation	30	19
74 Personal Identification	28	21
75 Investigation of Death	23	26
76 Crimes Against the Person	15	34
77 Crimes Against Property	19	30
78 Miscellaneous Offenses	18	31
79 Subversion	4	45
80 Organized Crime	12	37
81 Vice Investigation	17	32
82 Scientific Crime Detection	27	22
83 Domestic Disturbances	11	38
84 Emergency Medical Techniques	40	9
85 Mathematics	5	44
86 Disaster Plans and Procedures	31	18
87 Alcoholism and Drunkenness	15	34
88 Tours and Exhibits	15	34
89 Basic English	11	38
90 Typing	13	36
91 Water Safety	18	31
92 Physical Conditioning	41	8

	<u>YES</u>	<u>NO INDICATION</u>
93 Mechanics of Arrest and Search	38	11
94 Defensive Tactics	43	6
95 Crowd and Riot Control Tactics	45	4
96 Use of Handcuffs	24	25
97 Legal Aspects of Firearms Use	28	21
98 Firearms Training	47	2
99 Military Courtesy	28	21
100 Pursuit and Defensive Driving	44	5
101 Orientation	20	29
102 Field Assignments	28	21
103 Debriefing	13	36

APPENDIX D

A NOTE REGARDING RESPONDENTS

APPENDIX D

A NOTE REGARDING RESPONDENTS

Section Four of this study's questionnaire asked respondents to provide information about their assignments, certain personal characteristics, and attitudes regarding the questionnaire and the training program. An analysis of response frequencies and cross tabulations of some of these data reveal certain characteristics of respondents and their attitudes, as well as information regarding officers who, for one or another reason, did not return questionnaires.

Tables 13-16 in this section reveal respondent information regarding district of assignment, rank, unit of assignment, length of service, and age. Tables 17-23 report cross tabulations of goal preference by district, rank, assignment, level of education, length of service, and goal preferences of post commanders by district. Tables 24-27 reveal certain attitudes of respondents toward the questionnaire and the four phases of the trooper basic training program.

The first group of tables permits certain conclusions to be drawn regarding the nature of response and non-response in terms of organization structure, length of service, and age. The second group of tables permits an inspection of the distribution of goal preference throughout the organization according to certain respondent characteristics. The last group of tables may be used to obtain insights into the quality of questionnaire response, to the extent this may be

inferred from respondents' assessment of the degree to which they understood the purpose of the questionnaire, enjoyed completing it, and how difficult they found it. Table 27 is useful as an insight into respondents' feelings about the Michigan State Police Trooper Basic Training Program.

Return Rate Characteristics

The questionnaire enjoyed a fairly high overall return rate, considering that only one attempt was made to distribute it, no follow-up strategies were employed, and its completion was voluntary. The response rate was lightest in District I, a composite rural-urban area which includes the Department's headquarters. A rather low return from troopers in District I accounts for much of this relatively low district return rate. The low headquarters return rate is largely attributable to the practice of assigning recruits (for training purposes) to headquarters. Since 130 recruits were in training in April, 1969, and since many of them did not complete basic training and therefore did not receive a questionnaire in fall, 1969, the headquarters return rate is a spurious one.

Districts V-VIII responded at a rate slightly higher than the department wide rate, which implies a slight non-urban bias in response.

An inspection of response by rank, as indicated in Table 13, indicates that the lowest rate of return was in the trooper category, while the three highest return rates were in the corporal, sergeant and staff sergeant, and lieutenant

or detective categories, suggesting a slight "middle-management" bias in overall response.

One problem in analyzing response rates by rank is that the April, 1969 personnel report indicated that 130 recruits were assigned to the Staff Services Bureau. These officers were at that time undergoing training. By fall, when the questionnaire was distributed, recruits who were confirmed as troopers were assigned to districts. This, of course, was a figure considerably smaller than 130, since the basic training attrition rate in the MSP is quite high.

Table 14 indicates that Executive Bureau officers contributed to the overall response rate at a comparatively high level, but that Staff Service Bureau officers did not appear to participate at a similar rate--this, of course, is another reflection of a relatively low overall headquarters response.

Data were not conveniently available to analyze how length of service contributed to the response rate; Table 15 does indicate, however, that newly trained officers (who may not have well developed curriculum element emphasis preferences) do not constitute a large response category. Table 16 provides more insight into the response rate in terms of respondent age: it appears that younger officers were slightly less prone to complete and return questionnaires than their older colleagues. Again, this is somewhat related to the somewhat lower trooper response proclivity.

Just over three quarters of all respondents expressed a preference for the crime goal while the rest expressed a

preference for the traffic goal (Table 17). In general, goal preference is distributed throughout the eight districts in somewhat equal proportions, although crime goal preference is somewhat higher in District II (the Detroit area) and District III which is somewhat similar to District II in terms of organization. Traffic goal preference is lower in headquarters than in any of the eight districts and considerably lower than the department wide figure (Table 18). Sergeants and staff sergeants were highest in traffic goal preference of the seven rank categories; whereas detectives were the highest crime goal preferring category (Table 19). The distribution of goal preference in terms of the ranks employed in this study (troopers, corporals, sergeants and staff sergeants) is relatively close to the department wide distribution.

Goal preference was distributed somewhat similarly in the Executive Bureau, Staff Services Bureau, and the Uniform Division, whereas crime goal preference exceeded its department wide percentage in the Administrative and Detective Divisions (Table 20).

No important change in goal preference distribution appears when goal preference is cross tabulated by education, except perhaps that traffic goal preference may somewhat diminish with increased education (Table 21); nor does length of service appear to change crime-traffic goal preference proportions greatly (Table 22). Some MSP observers claim that as one ages, he becomes either less crime goal oriented or more traffic goal oriented, but Table 22 does not indicate

that this occurs markedly.

Although relatively few officers are involved (N = 57), Table 23 was prepared to determine if post commanders differed greatly from other ranks in goal preference. It would appear, overall, that these officers--who are usually staff sergeants--share about the same goal preference perspectives as officers reflect on a department wide basis. However, traffic goal preference seems to be more prominent in the northern (i.e., most rural) portions of the state, except for the Detroit district where it also is disproportionate to the state-wide distribution.

Table 24 indicates that most respondents felt they understood the purpose of the questionnaire. Seven percent of the respondents enjoyed the questionnaire "not at all" (Table 25), while ninety percent found it "very easy" or "fairly easy" (Table 26).

Table 27 indicates that the entire basic training program enjoys a considerable amount of approval among respondents and, in particular, the 13-week course (whose curriculum elements constituted a major concern in this study) is rated by most respondents as "very good" or "good".

Conclusions

The questionnaire enjoyed a relatively good return rate. The demographic data do not provide a clear understanding regarding what kinds of persons did not respond but, on the other hand, the data do not indicate that any particular rank

or district was crucially underrepresented in the study. While troopers, in terms of response percentage, constitute the lowest response category by rank, the magnitude of their numbers supports the conclusion that they were reasonably well represented in the study. Since only troopers, corporals, sergeants, and staff sergeants were used in the present study, respondent characteristics of higher ranks are not particularly relevant.

Unfortunately, the data do not provide insight into whether the traffic goal preferring respondents were adequately represented; it is possible that their somewhat pronounced anti-social science bias may have restricted their participation in this study. Perhaps only those with "moderate" traffic goal preference participated, whereas those intensely preferring the traffic goal generally declined to participate. It is this latter possibility which prompted the search leading to discriminant analysis, thus providing a basis for identifying persons who were operationally defined in this study as high crime and high traffic goal preferring respondents. In future applications of discriminant analysis as it was used in this study, researchers may want to consider analyzing (through the use of a personality assessment instrument) how persons comprising high goal preference groups differ in terms of psychological make-up. In this way, for example, additional knowledge about the psychological, as well as sociological, concomitants of goal preference could be accumulated.

Number of Sworn Officers Assigned to Each District and Number and Percent of Usable Responses by Rank and District

District	Rank							Total
	Trooper	Corporal	Detective	Sergeant and Staff Sergeant	Detective Sergeant and Detective Staff Sergeant	Lieutenant or Detective Lieutenant	Captain and Higher	
I								
1. Number Assigned	106	17	7	6	2	1	1	140
2. Number of Usable Responses	49	13	6	7	2	1	1	79
3. 2 is what % of 1	46	77	86	*	100	100	100	56
II								
1. Number Assigned	196	36	51	10	12	4	1	310
2. Number of Usable Responses	130	28	49	13	9	0	1	230
3. 2 is what % of 1	66	78	96	*	75	0	100	74
III								
1. Number Assigned	169	30	8	12	5	2	1	227
2. Number of Usable Responses	107	27	5	11	5	2	1	158
3. 2 is what % of 1	63	90	63	92	100	100	100	70
IV								
1. Number Assigned	112	22	6	7	2	1	1	151
2. Number of Usable Responses	73	15	6	6	1	1	1	103
3. 2 is what % of 1	65	68	100	86	50	100	100	68

Table 13 (Cont'd.)

District	Rank						
	Trooper	Corporal	Detective	Sergeant and Staff Sergeant	Detective Sergeant and Detective Staff Sergeant	Lieutenant or Detective Lieutenant	Captain and Higher
V	123	21	7	7	3	1	1
	103	17	7	7	2	1	1
	84	81	100	100	67	100	100
VI	138	24	6	9	3	1	1
	109	21	7	7	4	1	1
	79	88	*	78	*	100	100
VII	93	27	2	10	3	1	1
	77	22	2	10	5	1	1
	83	82	100	100	*	100	100
VIII	129	42	2	14	3	2	1
	106	38	2	13	2	2	1
	82	90	100	93	67	100	100
Total							
V	163						
	138						
	85						
VI	182						
	150						
	82						
VII	137						
	118						
	86						
VIII	193						
	164						
	85						

Table 13 (Cont'd.)

District	Rank							Total
	Trooper	Corporal	Detective	Sergeant and Staff Sergeant	Detective Sergeant and Detective Staff Sergeant	Lieutenant or Detective Lieutenant	Captain and Higher	
Headquarters								
1. Number Assigned	142	14	31	19	23	12	13	254
2. Number of Usable Responses	17	12	14	20	20	8	9	100
3. 2 is what % of 1	12	86	45	*	87	67	69	39
Total								
1. Number Assigned	1208	233	120	94	56	25	21	1757
2. Number of Usable Responses	771	193	98	94	50	17	17	1240**
3. 2 is what % of 1	64	83	82	100	89	68	81	71

*A few officers are not identified in the April 1, 1969 Enlisted Personnel Strength report by their conventional rank titles; rather, they are shown by certain functional titles. Therefore, nine officers (two policemen, four executive aides, three pilots) may have completed questionnaires which are represented in one of the rank categories shown above. This factor, plus certain temporary duty assignments, accounts for certain discrepancies in some of the rank totals.

**Three respondents did not furnish rank data.

Table 14

Distribution of Respondents by Unit to Which Assigned
Compared to Actual Number of Sworn Personnel by Unit

Assignment	Number	
	Actually Assigned	Responding
Executive Bureau	10	8
Bureau of Staff Services	186	119
Bureau of Field Services	1,570	1,107

Table 15

Distribution of Respondents by Eight
Length of Service Categories

Length of Service Category	Number Responding	Percent of Total
Under 1 year	46	3
1-2 Years	155	12
3-5 Years	313	25
6-10 Years	158	13
11-15 Years	330	27
16-20 Years	106	9
21-25 Years	107	9
Over 25 Years	23	2
TOTAL	1,238	100

*Excludes five respondents who did not answer this question.

Table 16
Distribution of All Sworn Personnel Contrasted to Distribution
of Respondents By Eight Age Categories

Age Category	All Sworn Personnel*	Percent of Total	All Respondents	Percent of Total	Percent of All Personnel
21-25	258	15	175	14	10
26-28	349	21	247	19	15
29-31	210	12	161	13	10
32-35	206	12	155	13	10
36-39	239	14	182	15	11
40-43	236	14	188	15	11
44-48	134	8	97	8	6
49+	58	3	35	3	2
Total	1,690	100	1,240	100	75

Source: Personnel Division, March, 1968. Three respondents did not answer the age question.

Table 17

Crime Versus Traffic Goal Preferences:
Numbers and Percentages

Goal Preferences	Number and Percent Reporting	
	Number	Percent of Total
Activities Relating Mainly to Criminal Law Enforcement and Investigation	946	77
Activities Relating Mainly to Traffic Law Enforcement and Investigation	276	23
TOTAL	1,222	100

*Twenty-one respondents did not indicate an activity preference.

Table 18
Goal Preferences of All Respondents By District: Number and Percent

Goal Preference	District Number							
	1		2		3		4	
	#	%	#	%	#	%	#	%
Crime	60	78	191	83	133	85	76	74
Traffic	17	22	39	17	23	15	27	26
TOTAL	77		230		156		103	
							98	72
							38	28
							136	

Goal Preference	Hqs							
	6		7		8		Total	
	#	%	#	%	#	%	#	%
Crime	107	73	83	72	113	71	85	86
Traffic	39	27	32	28	47	29	14	14
TOTAL	146		115		160		99	
							946	77
							276	23
							1222*	

*Excludes 21 respondents who did not indicate an activity preference.

Table 19
Goal Preference By Rank of Respondent

Goal Preference	Tpr #	Tpr %	Cpl #	Cpl %	Det #	Det %	Sgt S/Sgt #	Sgt S/Sgt %	Det Sgt S/Sgt #	Det Sgt S/Sgt %	Det/Lt #	Det/Lt %	Capt #	Capt %	Total #	Total %
Crime	565	75	144	75	95	98	64	69	50	100	14	82	12	80	944	77
Traffic	190	25	48	25	2	2	29	31	0	0	3	18	3	20	275	23
Total	755		192		97		93		50		17		15		1219	

*Excludes three respondents not answering rank question and twenty-one respondents not indicating activity preference.

Table 20
Goal Preference By Assignment

Goal Preference	Field Services Bureau By Division										Total	
	Executive Bureau #	Executive Bureau %	Staff Services #	Staff Services %	Administrative #	Administrative %	Detective #	Detective %	Uniform #	Uniform %		
Crime	6	75	91	77	3	100	111	98	733	75	944	78
Traffic	2	25	28	24	0	0	2	2	241	25	273	22
Total	8		119		3		113		974		1217	

*Excludes 20 officers not indicating activity preference and four not indicating assignment.

Table 21
Goal Preference By Level of Education

Goal	Years of College Completed									
	High School Only		1		2		3		4 But Not Grad.	
	#	%	#	%	#	%	#	%	#	%
Crime	537	75	171	81	141	78	46	77	13	81
Traffic	173	25	38	18	40	22	14	23	3	19
Total	710		209		181		60		16	
									43	
									3	
										1,222

Grad Degree

%

Bach-elor's Degree

%

4 But Not Grad.

%

3

%

1

%

Total

Excludes twenty-one officers not indicating activity preference.

Table 22

Goal Preference By Length of Service

Goal Preference	Length of Service									
	Under 1 Year	1-2 Years	3-5 Years	6-10 Years	11-15 Years	16-20 Years	21-25 Years	25+ Years	Total	%
Crime	34 74	115 75	231 76	115 74	261 80	81 77	89 84	17 77	943	75
Traffic	12 26	38 24	73 24	40 26	65 20	24 23	17 16	5 23	274	25
Total	46	153	304	155	326	105	106	22	1217	

*Excludes twenty-one officers not indicating activity preference and four not indicating rank.

D-16

Table 23

Goal Preferences of Post Commanders By District

Goal Preference	District Number									
	1	2	3	4	5	6	7	8	Total	%
Crime	3 75	6 67	9 90	4 80	5 83	4 80	4 67	8 67	43	75
Traffic	1 25	3 33	1 10	1 20	1 17	1 20	2 33	4 33	14	25
Total	4	9	10	5	6	5	6	12	57	*

*Excludes one respondent who did not indicate an activity preference.

Table 24

Respondents' Understanding of Purpose of Questionnaire

Understood Purpose of Questionnaire	Number and Percent Reporting	
	Number	Percent
Yes	1,131	91
No	28	2
Not Certain	81	7
Total	1,240*	100

*Excludes three respondents who did not answer this question.

Table 25

Degree to Which Respondents Enjoyed
Completing the Questionnaire

Degree to Which Respondent Enjoyed Completing Questionnaire	Number and Percent Reporting	
	Number	Percent
Very Much	398	32
Somewhat	747	61
Not At All	84	7
Total	1,229*	100

*Excludes 14 respondents who did not answer this question.

Table 26

Respondents' Estimate of Questionnaire Difficulty

Estimate of Questionnaire Difficulty	Number Reporting	Percent of Total
Very Easy	445	36
Fairly Easy	669	54
Fairly Difficult	112	9
Difficult	12	1

Total

1,238*

100

*Excludes five non-respondents.

Table 27

Respondents' Evaluation of Individual Phases of Trooper Basic Training and Program as a Whole

	N u m b e r R e s p o n d i n g					Total #
	Very Good 1 #	Good 2 #	No Opinion 3 #	Bad 4 #	Very Bad 5 #	
1. The 13-week course ¹	711 58	498 41	17 1	4 1	0 0	1,230
2. The Continuing Education Program ²	398 32	510 41	237 19	79 6	10 1	1,234
3. The Senior Trooper-Cub Phase ³	486 40	563 46	85 7	77 7	18 1	1,229
4. The Advanced Basic Course ⁴	573 46	510 41	94 8	48 4	8 1	1,233
5. All Four Phases As A Whole ⁵	425 35	766 63	33 2	1 1	0 0	1,225

¹ Number Not Responding = 13

² Number Not Responding = 9

³ Number Not Responding = 14

⁴ Number Not Responding = 10

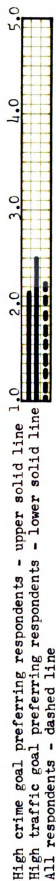
⁵ Number Not Responding = 18

APPENDIX E

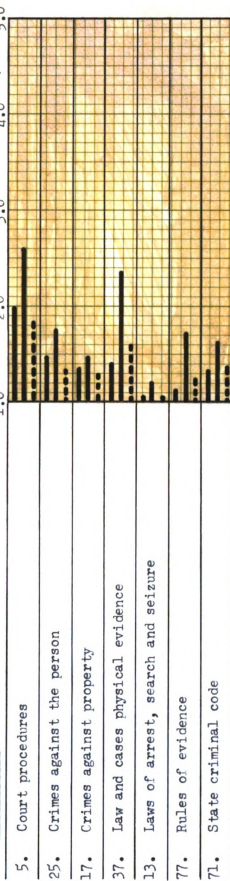
CURRICULUM ELEMENT EMPHASIS PREFERENCE MEAN SCORES
FOR HIGH CRIME AND TRAFFIC GOAL PREFERRING
RESPONDENTS, AND ALL RESPONDENTS

APPENDIX E

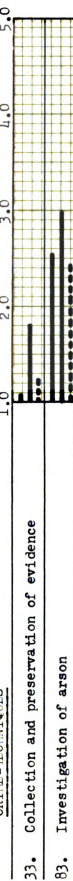
CURRICULUM ELEMENT EMPHASIS PREFERENCE MEAN SCORES FOR HIGH CRIME AND TRAFFIC GOAL PREFERRED RESPONDENTS, AND ALL RESPONDENTS

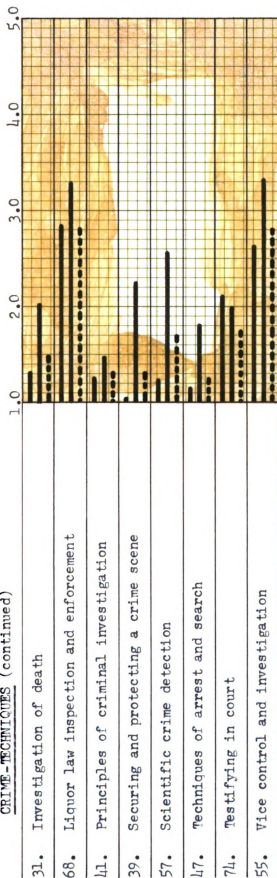
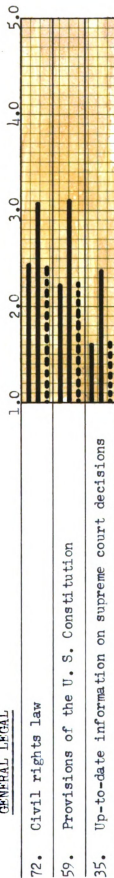
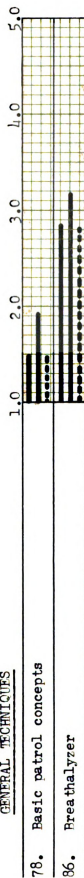


CRIME-LEGAL



CRIME-TECHNIQUES



CRIME-TECHNIQUES (continued)GENERAL LEGALGENERAL TECHNIQUES

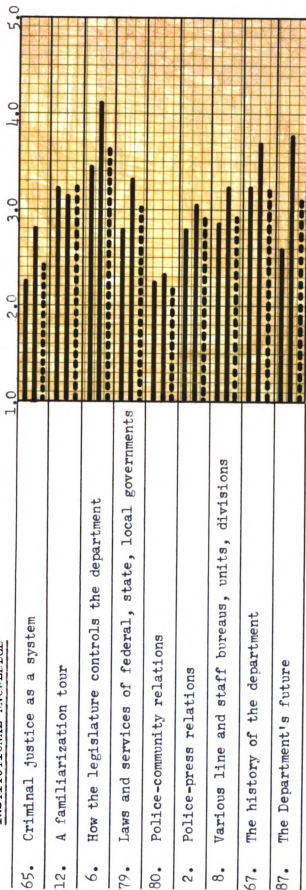
GENERAL TECHNIQUES (continued)

1. Camera, fundamentals and practice	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0												
64. Effective use of car radio	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0										
44. Driving patrol vehicles	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
49. Emergency medical techniques	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
51. Familiarization with LEIN	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
52. Firearms training	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
28. Inspecting vehicles	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
3. Interviewing and interrogation	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
36. Jailing and booking practices and procedures	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
45. Legal aspects of firearms	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
29. Modus operandi, theory and use of	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
19. Personal identification	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
54. Plans and procedures for dealing with natural disasters	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
4. Report writing	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
43. Strategy and tactics for crowd and riot control	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
40. Typing	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
50. Use of handcuffs	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0

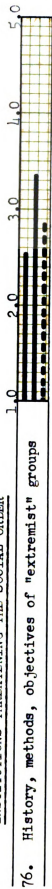
GENERAL TECHNIQUES (continued)



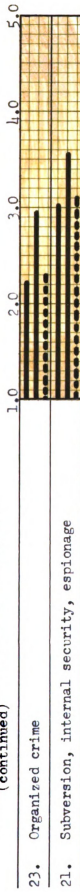
INSTITUTIONAL KNOWLEDGE



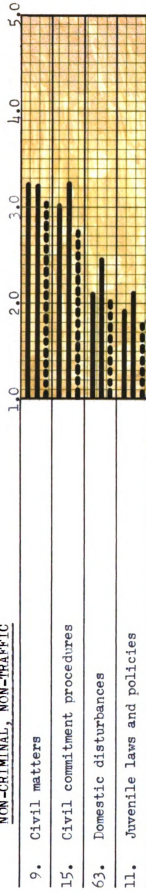
INSTITUTIONS THREATENING THE SOCIAL ORDER



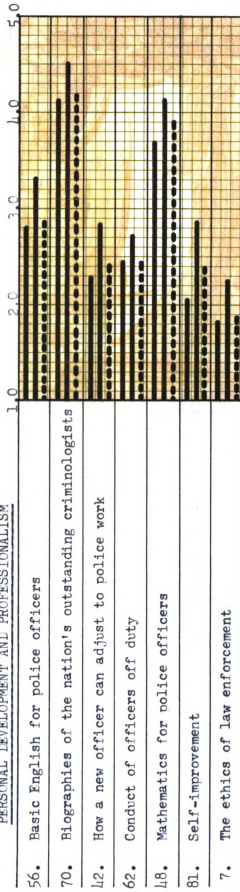
INSTITUTIONS THREATENING THE SOCIAL ORDER
(continued)



NON-CRIMINAL, NON-TRAFFIC



PERSONAL DEVELOPMENT AND PROFESSIONALISM



PERSONAL FITNESS AND SURVIVAL

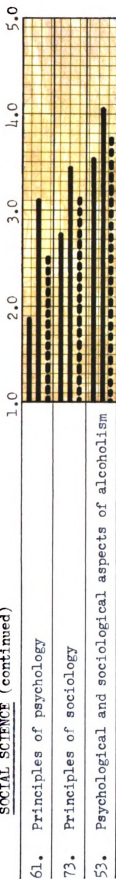
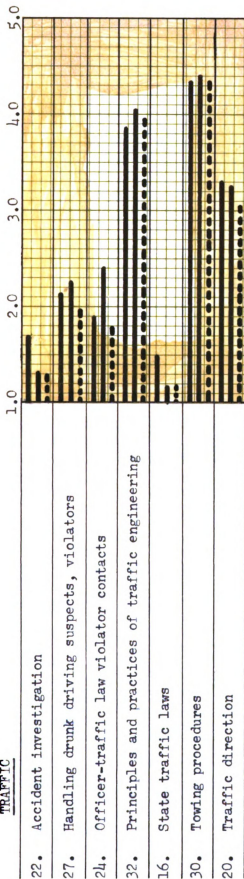
60. Physical conditioning and training	1.0	2.0	3.0	4.0	5.0
58. Self-defense techniques	1.0	2.0	3.0	4.0	5.0

PROCEDURES

84. Care and use of official equipment	1.0	2.0	3.0	4.0	5.0
66. Desk procedures	1.0	2.0	3.0	4.0	5.0
85. Internal communications practices	1.0	2.0	3.0	4.0	5.0
26. Military courtesy	1.0	2.0	3.0	4.0	5.0
38. Officer's responsibility for patrol vehicles	1.0	2.0	3.0	4.0	5.0
10. Official rules and regulations	1.0	2.0	3.0	4.0	5.0
14. Policies and practices relating to discipline	1.0	2.0	3.0	4.0	5.0
89. Post practices, policies	1.0	2.0	3.0	4.0	5.0
34. Records systems, practices, procedures	1.0	2.0	3.0	4.0	5.0

SOCIAL SCIENCE

69. Criminology	1.0	2.0	3.0	4.0	5.0
75. Human relations	1.0	2.0	3.0	4.0	5.0

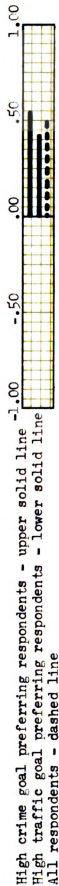
SOCIAL SCIENCE (continued)TRAFFICRESPONSE SET INDICATOR

APPENDIX F

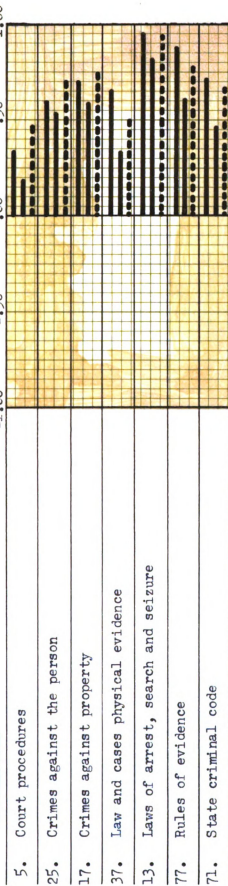
CURRICULUM ELEMENT EMPHASIS LEIK SCORES FOR HIGH
CRIME AND HIGH TRAFFIC GOAL PREFERRING
RESPONDENTS, AND ALL RESPONDENTS

APPENDIX F

CURRICULUM ELEMENT EMPHASIS LEIK SCORES FOR HIGH CRIME AND HIGH TRAFFIC GOAL PREFERRED RESPONDENTS, AND ALL RESPONDENTS



CRIME-LEAL



CRIME-TECHNIQUES



CRIME-TECHNIQUES (continued)

	-1.00	-.50	.00	.50	1.00
31. Investigation of death					
68. Liquor law inspection and enforcement					
41. Principles of criminal investigation					
39. Securing and protecting a crime scene					
57. Scientific crime detection					
47. Techniques of arrest and search					
74. Testifying in court					
55. Vice control and investigation					

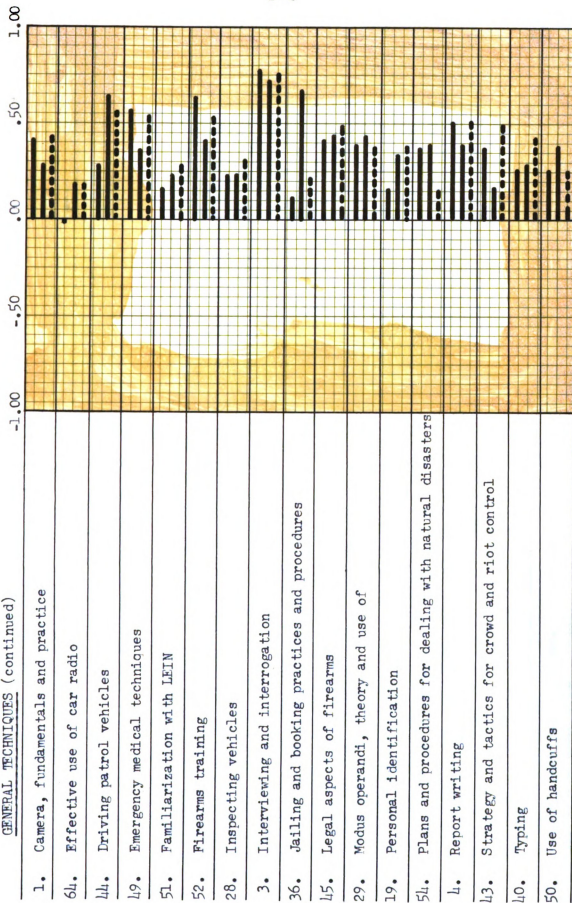
GENERAL LEGAL

	-1.00	-.50	.00	.50	1.00
72. Civil rights law					
59. Provisions of the U. S. Constitution					
35. Up-to-date information on supreme court decisions					

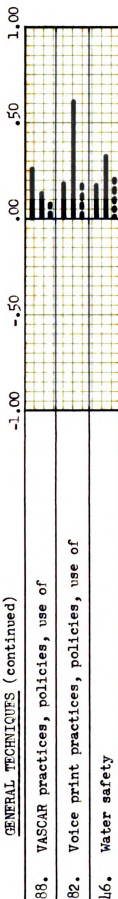
GENERAL TECHNIQUES

	-1.00	-.50	.00	.50	1.00
78. Basic patrol concepts					
86. Breathalyzer					

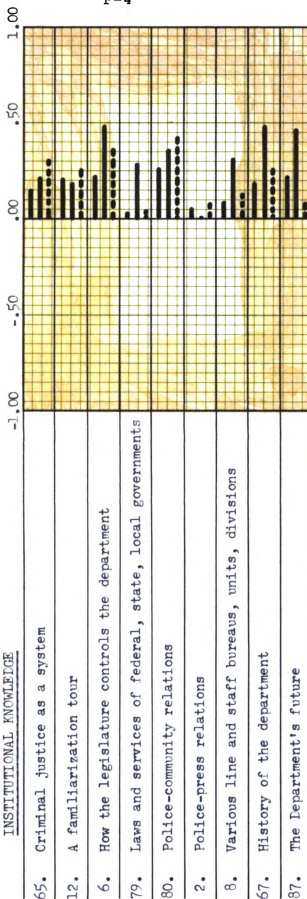
GENERAL TECHNIQUES (continued)



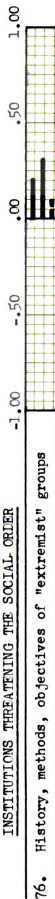
GENERAL TECHNIQUES (continued)



INSTITUTIONAL KNOWLEDGE



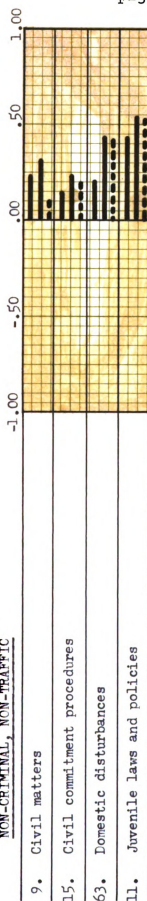
INSTITUTIONS THREATENING THE SOCIAL ORDER



INSTITUTIONS THREATENING THE SOCIAL ORDER
(continued)

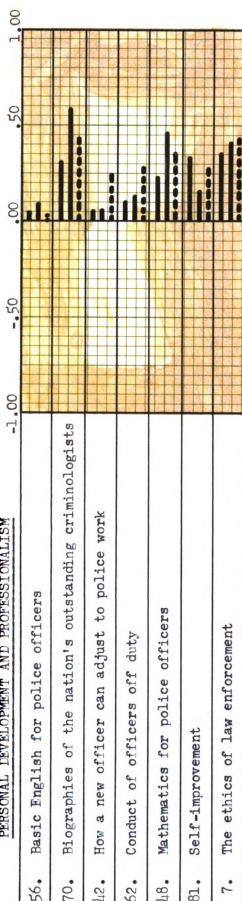


NON-CRIMINAL, NON-TRAFFIC

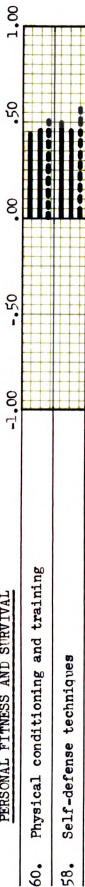


F-5

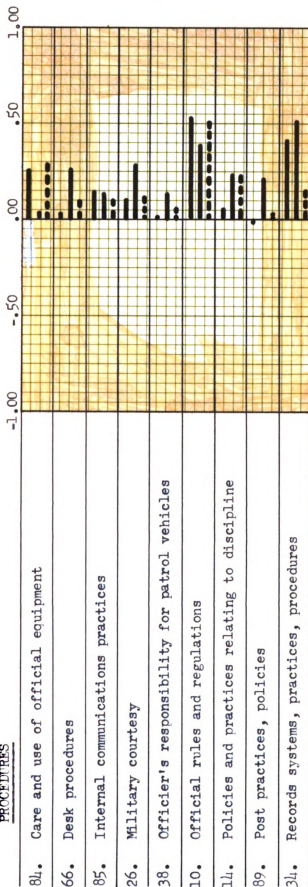
PERSONAL DEVELOPMENT AND PROFESSIONALISM



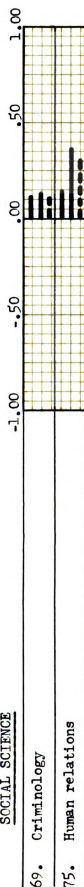
PERSONAL FITNESS AND SURVIVAL



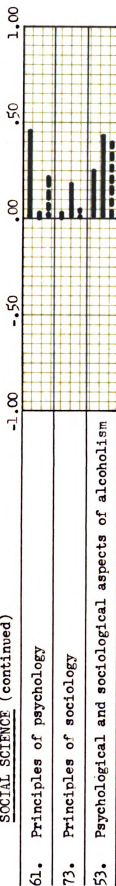
PROCEDURES



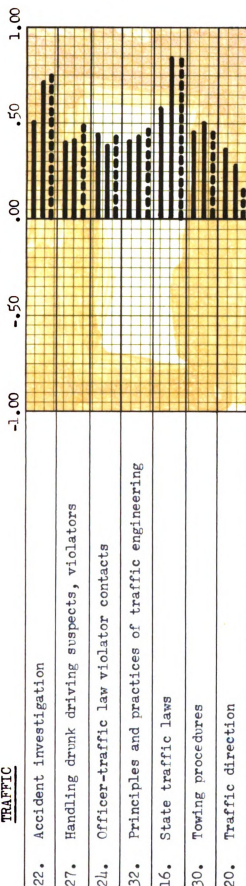
SOCIAL SCIENCE



SOCIAL SCIENCE (continued)



TRAFFIC



RESPONSE SET INDICATOR



APPENDIX G

RANK ORDER OF MEAN SCORES FOR CURRICULUM ELEMENTS FOR HIGH
CRIME AND HIGH TRAFFIC GOAL PREFERRING RESPONDENTS
AND ALL RESPONDENTS

APPENDIX G

RANK ORDER OF MEAN SCORES FOR CURRICULUM ELEMENTS FOR HIGH CRIME AND HIGH TRAFFIC GOAL PREFERRING RESPONDENTS AND ALL RESPONDENTS

Curriculum Item	All Respondents		High Crime		High Traffic	
	Mean	Rank	Mean	Rank	Mean	Rank
Laws of arrest, search and seizure	1.06	1	1.05	2	1.21	2
State traffic laws**	1.19	2	1.50	15	1.18	1
Collection and preservation of evidence	1.25	3	1.09	3	1.82	13
Techniques of arrest and search	1.26	4	1.16	5	1.82	14
Rules of evidence**	1.26	5	1.14	4	1.73	10
Interviewing and interrogation	1.29	6	1.27	7	1.33	3
Accident investigation	1.30	7	1.70	21	1.33	4
Crimes against property	1.30	8	1.36	11	1.48	6
Principles of criminal investigation	1.32	9	1.27	8	1.48	7

Curriculum Item	All Respondents		High Crime		High Traffic	
	Mean	Rank	Mean	Rank	Mean	Rank
Securing and protecting a crime scene*	1.32	10	1.05	1	2.27	26
Crimes against the person	1.35	11	1.48	14	1.76	11
State criminal code	1.39	12	1.34	10	1.64	8
Basic patrol concepts	1.49	13	1.50	16	1.94	16
Investigation of death	1.50	14	1.32	9	2.03	18
Self-defense techniques	1.50	15	1.59	18	1.67	9
Driving patrol vehicles*	1.52	16	2.04	30	1.42	5
Emergency medical techniques	1.54	17	1.52	17	1.79	12
Firearms training*	1.55	18	1.43	13	2.21	22
Physical conditioning and training	1.57	19	1.73	22	1.91	15
Report writing	1.58	20	1.70	20	2.06	19

Curriculum Item	All Respondents		High Crime		High Traffic	
	Mean	Rank	Mean	Rank	Mean	Rank
Law and cases concerning physical evidence	1.60	21	1.41	12	2.36	28
Up-to-date information on Supreme Court decisions	1.64	22	1.61	19	2.39	29
Scientific crime detection	1.71	23	1.25	6	2.58	34
Testifying in court	1.76	24	2.12	33	2.00	17
Legal aspects of firearms use	1.77	25	1.87	24	2.24	23
Juvenile laws and policies	1.80	26	1.93	27	2.12	20
Officer-traffic law violator contacts	1.80	27	1.91	26	2.42	30
Official rules and regulations	1.84	28	1.98	28	2.18	21
Court procedures*	1.85	29	2.00	29	2.61	5
The ethics of law enforcement	1.89	30	1.84	23	2.27	24

Curriculum Item	All Respondents		High Crime		High Traffic	
	Mean	Rank	Mean	Rank	Mean	Rank
Strategy and tactics for crowd and riot control	1.97	31	2.29	42	2.70	40
Handling of drunk driving suspects, violators	1.98	32	2.14	35	2.27	25
Domestic disturbances	2.04	33	2.12	34	2.48	32
Police-community relations	2.19	34	2.27	40	2.33	27
Modus operandi, theory and use of	2.26	35	2.16	36	2.55	33
Provisions of the U.S. Constitution	2.26	36	2.23	39	3.12	51
Organized crime	2.31	37	2.23	38	2.97	47
Personal identification	2.36	38	2.46	46	2.67	39
Camera, fundamentals and practice	2.37	39	2.30	43	2.61	35
Human relations	2.37	40	2.20	37	2.45	31
Typing	2.40	41	2.59	52	2.61	36

Curriculum Item	All Respondents		High Crime		High Traffic	
	Mean	Rank	Mean	Rank	Mean	Rank
Self-improvement	2.40	42	2.07	31	2.88	44
How a new officer can adjust to police work	2.41	43	2.30	44	2.85	43
Civil rights law	2.42	44	2.45	45	3.09	50
Criminal justice as a system	2.43	45	2.27	41	2.82	42
Investigation of arson	2.44	46	2.55	50	3.00	48
Conduct of officers off duty	2.46	47	2.46	47	2.73	62
Principles of psychology**	2.52	48	1.89	25	3.12	52
Care and use of official equipment	2.56	49	2.71	57	2.91	46
Inspecting vehicles*	2.58	50	3.37	80	2.61	37
Familiarization with LEIN	2.59	51	2.57	51	3.21	58
Use of handcuffs	2.62	52	2.52	48	3.27	63

Curriculum Item	All Respondents		High Crime		High Traffic	
	Mean	Rank	Mean	Rank	Mean	Rank
Policies and practices relating to discipline	2.64	53	2.70	56	3.21	57
Effective use of car radio	2.75	54	3.11	71	3.15	54
Criminology	2.75	55	2.66	55	3.15	55
Civil commitment procedures	2.77	56	3.05	69	3.27	66
Vice control and investigation	2.81	57	2.64	54	3.33	71
Water safety	2.82	58	2.95	66	3.33	69
Liquor law inspection and enforcement	2.82	59	2.86	63	3.30	67
Record systems, practices, procedures*	2.82	60	2.09	32	3.73	80
Breathalyzer	2.83	61	2.86	64	3.18	56
History, method, objectives of "extremist groups"	2.86	62	2.55	49	3.36	73

Curriculum Item	All Respondents		High Crime		High Traffic	
	Mean	Rank	Mean	Rank	Mean	Rank
Desk procedures	2.87	63	2.84	62	3.42	74
Basic English for police officers	2.88	64	2.82	61	3.33	72
Internal communications practices	2.89	65	3.12	72	2.91	45
Officer's responsibility for patrol vehicles	2.89	66	3.11	70	3.21	59
VASCAR practices, policies, use of**	2.90	67	3.41	81	3.21	60
Police-press relations	2.92	68	2.80	59	3.06	49
Various line and staff bureaus, units, divisions	2.93	69	2.87	65	3.24	61
Military courtesies	3.02	70	3.00	67	3.27	65
Laws and services of federal, state, local governments	3.04	71	2.80	60	3.33	70
Post practices, policies	3.05	72	3.18	74	3.30	67

Curriculum Item	All Respondents		High Crime		High Traffic	
	Mean	Rank	Mean	Rank	Mean	Rank
Traffic direction	3.07	73	3.32	78	3.27	64
Civil matters	3.07	74	3.27	77	3.24	62
The department's future	3.11	75	2.61	53	3.79	81
Voice print practices, policies, use of	3.12	76	3.14	73	3.73	79
Subversion, internal security, espionage	3.12	77	3.04	68	3.58	77
Principles of sociology	3.14	78	2.77	58	3.45	75
Plans and procedures for dealing with natural disasters**	3.18	79	3.50	83	3.58	76
History of the department	3.21	80	3.25	76	3.70	78
A familiarization tour	3.25	81	3.23	75	3.15	53
Jailing and booking practices and procedures	3.35	82	3.34	79	3.91	82

Curriculum Item	All Respondents		High Crime		High Traffic	
	Mean	Rank	Mean	Rank	Mean	Rank
How the legislature controls the department	3.64	83	3.46	82	4.12	85
Psychological and sociological aspects of alcoholism	3.76	84	3.54	84	4.06	83
Mathematics for police officers	3.91	85	3.70	85	4.15	87
Principles and practices of traffic engineering	3.96	86	3.87	86	4.06	84
Biographies of the nation's outstanding criminologists	4.20	87	4.14	87	4.52	89
Towing procedures	4.36	88	4.36	89	4.42	88
Motorcycle riding	4.38	89	4.32	88	4.12	86

*Significant at the 0.01 level

**Significant at the 0.05 level