POLICE INTERACTION AND REFERRAL ACTIVITY WITH PERSONNEL OF OTHER SOCIAL REGULATORY AGENCIES: A MULTIVARIATE ANALYSIS

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This is to certify that the

thesis entitled

POLICE INTERACTION AND REFERRAL ACTIVITY WITH PERSONNEL OF OTHER SOCIAL REGULATORY AGENCIES: A MULTIVARIATE ANALYSIS

presented by

Knowlton William Johnson

has been accepted towards fulfillment of the requirements for

Ph.D. degree in Social Science

John H. McNamara
Major professor

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ABSTRACT

POLICE INTERACTION AND REFERRAL ACTIVITY WITH PERSONNEL OF OTHER SOCIAL REGULATORY AGENCIES: A MULTIVARIATE ANALYSIS

By

Knowlton William Johnson

The primary objective of this exploratory study has been, first to generate detailed descriptions of police officers' interaction and referral activity patterns with personnel of Juvenile Probation, Department of Social Service (DSS) and Community Action Against Poverty (CAAP). Further, this study involved locating important predictor variables for future consideration when constructing a change model designed to manipulate these police behaviors.

A secondary objective has been to explore the use of statistically powerful data-analysis techniques which can efficiently describe and explain the phenomena under study. Emphasis was on determining the applicability of a multivariate data analysis to research in the area of interorganizational relations.

The frame of reference for studying relations between one police agency and three supportive-type agencies was the designation of policemen as occupying a focal position and personnel of each support agency as being located in a counter position. Each dyadic relationship was referred to a positional sector. Of specific interest

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were individual differences in policemen's interaction and referral patterns, across and within positional sectors.

The present study was part of a larger evaluation-research project designed to determine the effectiveness of an in-service interagency training program conducted in Muskegon, Michigan. The primary source of data was a self-administered questionnaire to which 69 Muskegon Police Officers responded (total strength of this department was 76 men). Questionnaire information was also obtained from personnel of Juvenile Probation (10), DSS (57), and CAAP (12) for the purpose of making specific comparisons between police and members of these agencies. Items included in the questionnaire specifically for the purposes of the present study were intended to measure police behavior with other agency personnel, social-psychological variables, and several structural variables.

Using a cluster analysis technique, first composite scores (scales) were developed for two specific types of police activity, interaction and referral, with personnel of the three support agencies of interest, and for six social-psychological predictor variables. These predictor variables were: police esteem for support agency personnel, philosophical discrepancies between police and support agency personnel along a punitive-treatment continuum, police job satisfaction, police work style regarding the importance of helping citizens with personal problems, police perceptions

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of Blacks. Second, individual differences in police interaction and referral activity (called boundary-activity) across and within positional sectors, were described by using a multivariate analysis of variance for repeated measure technique, and an "O" analysis technique. Third, multiple correlation procedures were used to determine the extent to which the social-psychological predictors and two extraneous structural variables (police rank and friendship linkage) could explain variations in police boundary activity with personnel of each support agency.

The results of this study showed that police officers had the highest level of interaction and referral with Juvenile Probation, then DSS, and CAAP personnel, respectively. Officers' level of interaction was also found to be higher than their level of referral activity with members of each support agency. Further, it was determined that only with CAAP workers was there a majority of the police officers whose level of interaction equalled their level of referral activity, i.e., officers who engaged in little or no interaction with CAAP members also had little or no referral activity with these personnel.

As a result of the multiple correlation analysis it was found that although individual differences were found among police officers regarding the social-psychological variables considered in this study, only esteem for DSS and CAAP personnel emerged as significantly related (positive

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direction) to police interaction with members of DSS and CAAP and to referral to CAAP. It was also found that both structural variables, police rank and friendship linkage with specific support agency personnel, were significantly related (both in the positive direction) to specific types of police boundary-activities. Police rank helped explain interaction and referral activity with Juvenile Probation and DSS personnel and interaction with members of CAAP. Friendship linkage with members of DSS and CAAP produced a significant contribution to explaining police referral activity with DSS personnel and both types of boundary-activities with members of CAAP. When the magnitude of these significant relationships was assessed, it was discovered that in all cases the relationships were relatively weak (highest partial correlation = .39). A final finding was that the predictor variables considered in this study were much more successful in explaining variations in police boundary-activity with CAAP personnel than either with members of Juvenile Probation or DSS. Even in this case, however, much of the variance was left unexplained.

The implications of this study are first: that social-psychological variables of this study are poor predictors of police behavior with personnel of supportive-type agencies; second, the emergence of significant relationships of the two structural variables suggests that future studies should consider other structural variables as possible predictors of police boundary-activity; third, since

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police esteem and friendship linkages with support agency personnel emerged as significantly related to police boundary-activity with specific support agency personnel, it may be necessary to consider these variables when constructing a change model to manipulate police boundary-activity. The relatively weak relationships, however, suggest the risk would be high if only these variables were considered when attempting to change police behavior. Fourth, this study has shown that multivariate data analysis techniques are extremely useful when either describing or explaining relations among personnel of different organizations.

POLICE INTERACTION AND REFERRAL ACTIVITY WITH PERSONNEL OF OTHER SOCIAL REGULATORY AGENCIES: A MULTIVARIATE ANALYSIS

By

Knowlton William Johnson

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

To

Harriet and Jeff

their patience as a wife and son can only be matched by their love and understanding

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The completion of a dissertation is achieved not by one individual, but by the cooperative effort of many persons. A list of those persons to whom I wish to express my most grateful appreciation for their involvement is as follows:

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Personnel of Muskegon Police Department, Community Action Against Poverty, Department of Social Services, Juvenile Probation, and members of the Michigan Civil Rights Commission with whom I worked, for their cooperation in making this study possible.

Chapter

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TABLE OF CONTENTS

Table

LIST OF TABLES

Figure

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LIST OF FIGURES

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CHAPTER I

HISTORY OF THE PROBLEM

Historically social scientists who are interested in organizational phenomena have studied the relationships of structural, interpersonal, and personality variables in individual formal organizations, rather than the relationship between organizations. Evan (1966) states that:

> Social science research on organizations has been concerned principally with intraorganizational phenomena. Psychologists have studied the individual in an organization; social psychologists, the relations among the members of a group in an organization and the impact of a group on the attitudes and behavior of group members; and sociologists, informal groups, formal subunits, and structural attributes of an organization.

With relatively few exceptions, research focusing upon an organization in its environment of other organizations was totally neglected until the late 1960's. Two notable exceptions are Ridgeway's (1957) study of manufacturer-dealer relationships, and Dill's (1958) investigation of two Norwegian firms. Blau and Scott (1962) devoted only a dozen pages to this phenomenon. March's handbook (1965) has no direct-index entries referring to interorganizational relations. Evan (1966) indicates that the overemphasis on intraorganizational relations and an underemphasis on interorganizational relations is surprising to him in view of the

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fact that all formal organizations are embedded in an environment of other organizations.

A personal survey of the literature with respect to interorganizational relations reinforced a 1969 statement made by Turk addressing the problem:

> Most of what little systematic theory and research there is on the area of relations among formal organizations--among business firms, hospitals, voluntary association, political parties, interest groups, churches, colleges, and the like--has been generated over the past ten years.

Review of the few available theoretical and empirical works reveals that several common characteristics exist throughout most of the literature. First, research regarding relations between organizations has been limited to public organizations that provide various services to the community. Pruden's (1968) study of interorganizational relations between industrial sellers and buyers is an exception; Blau (1962), Evan (1966), Warren (1967), and Reid (1964) present several exceptional theoretical discussions of interorganizations relations in general. Those public-service organizations that have been studied have been in the area of public welfare and health,[1] education,[2] social

[1]Levine and White (1961), Litwak and Hylton (1962), Aiken and Hage (1968), Morris (1963), and Wharf (1969).

[2]Lancaster (1969), Livingston (1968), and Clark (1965).

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A second characteristic of interorganizational literature is that the unit of analysis is predominantly organizations. Scientists who use organization as their level of analysis are interested in explaining relations between organizations that are formed by administrative policy. Conceptual models have been constructed in an effort to explain the phenomena in contention by linking independent variables together as attributes of an organization (power, status, resources, professionalism, size, etc.). The several notable frameworks which have been constructed are: Levine and White's exchange model; Litwak and Hylton's coordination and conflict model; and Evan's organizational set model. Their models, however, have not generated sufficient empirical support for these theoretical suggestions, moreover, most of the research findings disseminated have been qualitative in nature.

Those few social scientists who have been interested in relations between personnel of different organizations have viewed organizations as aggregates of people occupying specific occupational roles. These empirical investigations have, however, been descriptive and restricted to zero order

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[3]Dienstein (1960), Haurek and Clark (1967), Cumming (1968), Clark (1970), and Clark and Darroch (1968).

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analysis. Explaining the nature of specific relationships between personnel of different organizations has not been discussed theoretically or investigated empirically. At best, Clark (1970) discussed briefly a research study now in progress which is concerned with explaining specific personnel relations between organizations of social control.

Thus, one major problem with respect to interorganizational relations is the paucity of theoretical model building and empirical inquiry. This problem is most acute in the area of relations between personnel of different organizations.

A more pragmatic interorganization-relations problem exists in the field of social control. In 1967 and 1968, two major national commissions established to study specific social control problems (National Advisory Commission on Civil Disorders and The President's Commission on Law Enforcement and Administration of Justice) pointed to interorganizational relations as problematic with respect to accomplishing social-control functions. The reports of both commissions discussed how the lack of cooperation among control organizations contributed to the ineffectiveness of community prevention and control programs.

As early as the 1950's, Miller (1958) discussed an unsuccessful attempt to create working relationships among several Boston community agencies interested in delinquency prevention. Later, in a series of articles which were published in the early 1960's, and in 1968 expanded into a book,

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Cumming and her associates[5] described problems of integration among social control agencies. These authors reported limited "boundary activity" (interaction), between the personnel of agencies designed to offer counseling services to clients with psychological problems. Pfiffner (1964) identifies a dysfunctional phenomenon of organizational disparity which he calls the police-rehabilitation conflict. He contends that police and social workers, educators, and probation officers are constantly in a state of latent conflict. Clark (1965) found problems of mutual isolatism among various social regulatory agencies. He reported that "a significant portion of the police and other agency personnel manage to curtail interaction in official matters." Recently, Bard (1970) reported that relations between police and social service agencies were poor in the area of New York City in which he implemented his family-crisis police-intervention model. He found that toward the end of the two-year experiment, the policemen assigned to the special unit were attempting to handle behavioral problems of clients which should have been referred to an appropriate social service agency.

In summary, this introductory chapter contains a discussion of the literature reflecting two major problems in the area of interorganizational relations. First,

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research dealing with interorganizational phenomena both at an organizational and individual level, has been descriptive and has offered little explanation of why specific relations exist across organizations. Research thus far has also been restricted to zero order contingency table or correlation analysis and spurious relationships have, for the most part, not been considered. Second, interorganizational relations on an individual level have been found to be especially problematic between police personnel and members of other social regulatory organizations. This problem is paramount in light of the ineffectiveness of social control organizations discussed earlier in this chapter.

Given these problems, the primary objective of the present exploratory study is to generate information about two types of police boundary-activity, interaction and referral activity, with personnel of three supportive-type agencies (Juvenile Probation, Department of Social Service (DSS), and Community Action Against Poverty (CAAP). The relevance of selecting these organizations for study is that the police, an organization formally designed to control[6] the behavior of people, are the "gatekeepers" to a network of organizations that are responsible for the administration of justice. Their interaction with or utilization of

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[6]Cumming (1968) defined the concept "control" as "to suppress or isolate disruptive behavior or to prescribe behavior in the interest of the common good."

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services of agencies formally designed to support[7] persons with problems may well determine to a large extent how justice is administered.

More specifically, the investigation involves identifying important variables which can explain individual differences among policemen regarding boundary-activity with personnel of support agencies. These variables that have been found to account for variations in police boundary-activity can then be used to design an experiment to create conditions for behavioral change to occur.

The rationale for attempting to discover correlates of behavior for model building purposes rather than simply manipulate behavior is due to the complexity of the problem. That is, when attempting in the long run, to change specific behavior of police officers with personnel of several support agencies, there is the question of actually being able to legitimize unconventional policy changes that dictate change in behavior without having favorable conditions for changes to take place. For example, a policeman's job could be structured to require him to increase his interaction and referral activity with agencies. However, given the power of police unions today, it is contended that if the conditions are not favorable for reinforcing that policy change,

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[7]Support was defined by Cumming (1968) as "the diffusely positive quality of encouragement or reward that is offered to the individual to keep him performing acceptably, or, when necessary, to persuade him to return to conformity."

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then the probability of success is low. An alternative approach to directly change behavior is to locate possible explanations of why policemen do not interact or refer clients and then attempt to construct a change model which would create conditions that will encourage policemen to work with and utilize the service of specific support agency personnel.

A secondary objective of this investigation is to explore the use of statistically powerful data-analysis techniques which can more accurately describe and explain individual behavior between organizations than the previous method of analyzing interorganizational data. Specifically, the emphasis will be on determining the applicability of multivariate data analysis procedures for research in the area of interorganization relations.

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CHAPTER II

THE DEVELOPMENT OF A CONCEPTUAL MODEL WHICH EXPLAINS POLICE BOUNDARY-ACTIVITY

Given the objectives of this study, it is useful to present an analytical framework which logically links specific predictor variables to police boundary-activity with personnel of other regulatory organizations. Because of specific conditions of the investigation, the conceptual model is based on empirically derived concepts. That is, as a result of the present study being a part of a larger evaluation research project conducted in Muskegon, Michigan, questionnaire items which measured several general phenomena, i.e., interorganizational behavioral, social psychological, and structural phenomena were subjected to a cluster analysis. This analysis discovered specific clusters of items which operationally defined specific concepts of interest. Following the discovery of empirically derived concepts was a survey of the literature to justify further empirical inquiry. Before presenting these concepts and the process by which they are tied together conceptually, the scheme of studying more than one dyadic relationship is presented.

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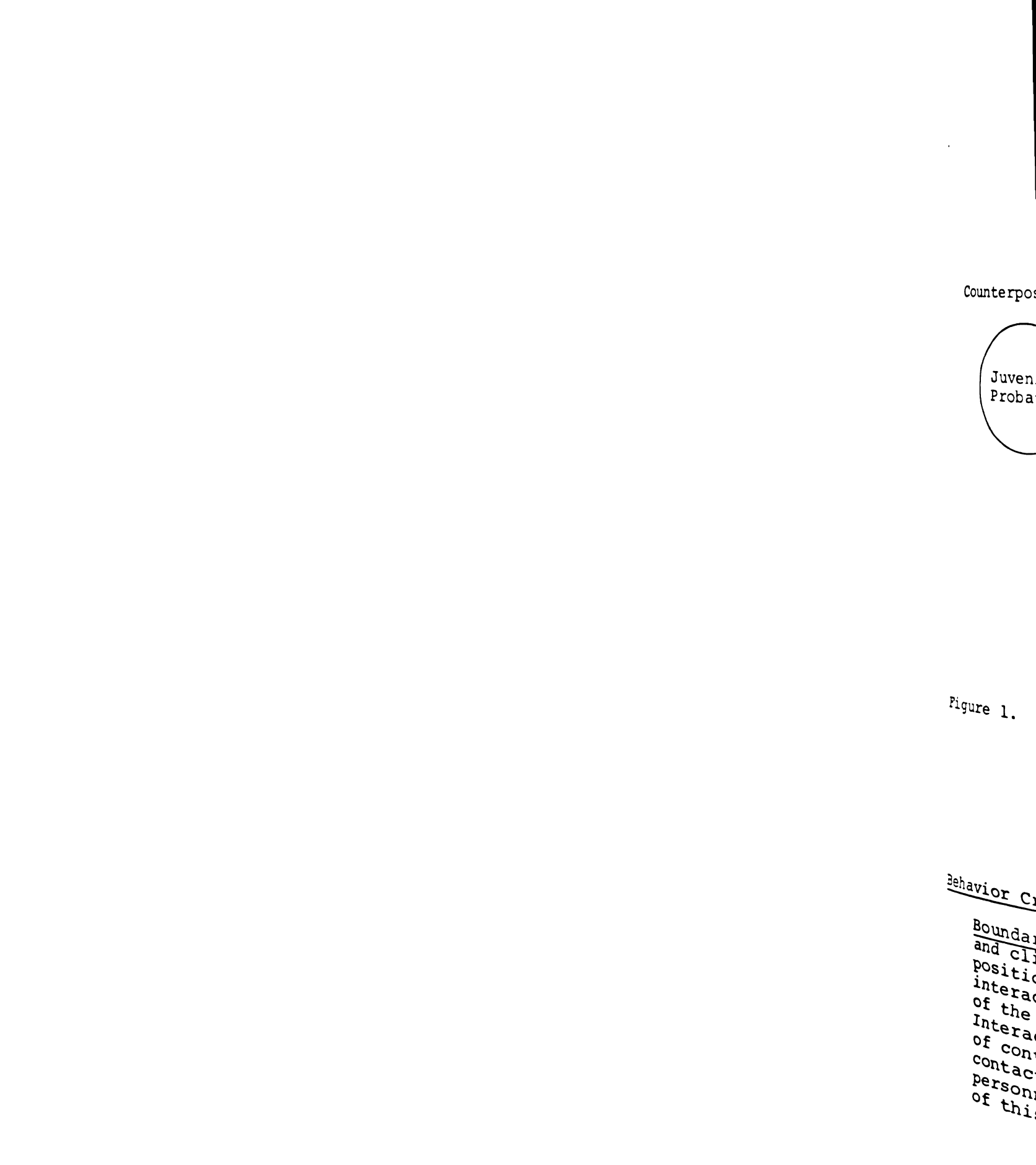
Position-Centric Comparative Scheme

The frame of reference for conceptualizing relations between personnel of one regulatory agency formally designed to "control" and three regulatory agencies formally designed to "support," is what Gross and associates (1958) call a "position-centric" scheme. This means that a specific position, called focal position, is identified by its relationship to several counterpositions. These authors refer to position as the location of an actor or class of actors in a specified system of social relationships. Various social relationships within this specific system are referred to as positional sections. According to these authors, a positional sector is "specified by the relationship of a focal position to a single counterposition." That is, each dyadic relationship which has as its elements one focal position and one counterposition is a positional sector. In the present study, police personnel are designated as a class of actors in the focal position. Members of three support agencies are designated as actors located in three counterpositions. Figure 1 shows the relationship between the three positional sectors being studied.



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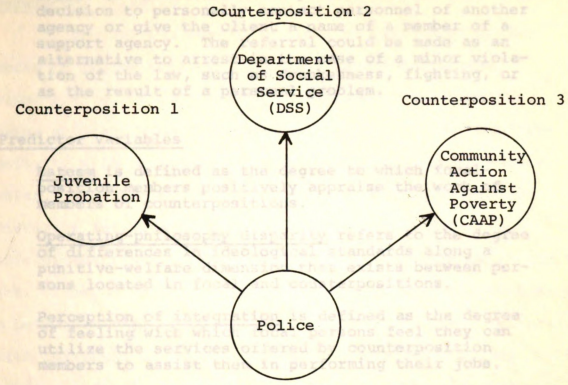

Figure 1. Position-centric comparative scheme of police and three support agencies.

Concepts of the Model

Behavior Criteria

Boundary-activity refers to the level of interaction and client referral activity that persons in a focal position have with counterposition members. Level of interaction includes the amount of contact that members of the police department have with support personnel. Interaction is operationalized by measuring frequency of contact in two ways. One item asked the number of contacts that police officers had with support agency personnel. Another item asked the medium of exchange of this contact, i.e., face to face, telephone, etc.

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If an officer had only one kind of contact, then he was given a score of one, etc. Referral activity refers to situations where police officers make the decision to personally contact personnel of another agency or give the client a name of a member of a support agency. The referral could be made as an alternative to arrest in the case of a minor violation of the law, such as drunkenness, fighting, or as the result of a personal problem.

Predictor Variables

Esteem is defined as the degree to which focal-position members positively appraise the work of members of counterpositions.

Operating-philosophy disparity refers to the degree of differences in ideological standards along a punitive-welfare dimension that exists between persons located in focal and counterpositions.

Perception of integration is defined as the degree of feeling with which focal persons feel they can utilize the services offered by counterposition members to assist them in performing their jobs.

Job satisfaction is the focal position member's positive attitude toward his job as affected by such administrative functions as decising disciplinary action, promotions and job evaluations.

Work style is defined as the degree to which a focal person views his job along a control-support continuum. That is, to what extent does an individual in the focal position feel compelled to suppress or isolate disruptive behavior as opposed to offering encouragement or reward as a strategy of compliance.

Perception toward Blacks refers to the degree to which focal-position members have preconceived judgments or opinions about Black people along a negative-positive continuum.

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Construction of the Model[1]

Behavioral Criteria

The initial step in explaining individual differences in police officers' behavior toward designated counterparts, is to describe the nature of the behavior being studied. The literature shows that police boundary-activity with personnel of other regulatory agencies does exist. A number of social scientists whose work will be discussed later have found that policemen do establish interoccupational relationships with people outside of their job. Cumming and associates (1965) found that the nature of a policeman's job required him to work to a certain extent with personnel of other agencies. In several American studies and one Japanese study, Clark and his associates discovered that policemen do have various levels of avoidance and interaction with regulatory agents from a variety of organizations.[2] Recently, Johnson (1971) found that in a larger evaluation study, of which the present study is a part, the police reported friendship linkages and various

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[1]The format for the development of this conceptual model will first be to discuss reasons why the researcher expects certain results to emerge or why specific concepts of interest should be considered in this study. Second, each specific expectation or discussion of the importance of a particular concept will be presented in the form of a hypothesis.

[2]Clark (1965), Haurek and Clark (1967), and Clark and Darroch (1968).

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amounts of interaction with probation and social service agencies. In all of these studies, it was also found that the level of police behavior varied according to the type of the organization to which the behavior was directed.

Given that policemen do engage in boundary-activity with personnel outside of their own agency, it is assumed that the police and other social regulatory agencies should share goals of regulating similar kinds of problem behavior. In lieu of a special interagency training program (to be discussed in detail later), it is further assumed that the police have been made aware of the functions of personnel located within juvenile probation, DSS, and CAAP. One empirical question of interest which stems from these assumptions is to what extent do police officers' level of interaction and referral activity with members of each support agency differ?

It is expected that there will be significant differences in the level of police boundary-activity across the three support agencies being studied. The basis for this expectation stems from the degree to which the police and each support agency are formally interdependent, as defined by law. The disposition of youth offenders in criminal cases functionally links Juvenile Probation closer to police than either DSS or CAAP. Consequently, police should have more boundary-activity with members of this agency than with DSS or CAAP personnel. Similarly, but to a lesser degree, police have an established formal

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interdependence with DSS. This interdependence is the result of both police and DSS personnel in Muskegon, Michigan handling neglected children and youth on parole from correction institutions. The number of clients that brings the personnel of these two agencies together is less than in the case of police and Juvenile Probation, but more than in the case of police and CAAP. Thus it would seem that policemen should have less boundary-activity with DSS personnel than with members of Juvenile Probation, but more than with CAAP personnel. Finally, the police and CAAP have no formal interdependence established by law. Consequently, police would probably have the least boundary-activity with members of this agency.

These specific expectations stated in the form of a hypothesis are as follows:

Hypothesis 1

Police officers will have the highest level of boundary-activity with Juvenile Probation personnel; second highest with DSS personnel; and the lowest level of boundary-activity with members of CAAP.

It is also expected that police interaction activity will be higher than their referral activity with members of the respective support agencies. The primary basis for this expectation stems from how the police and support agencies' roles are operationalized. That is, policemen in Muskegon are assigned to patrol the city by car and to respond to trouble situations as needed. Similarly, the job responsibilities of the support agencies' personnel of this study

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also take them out of their offices and into the community. As a result of both policemen and support agency personnel working in a community setting of a small city (the population of Muskegon is less than 50,000), it is expected that by chance alone the personnel of the agencies being studied should have some contact.

On the other hand, police referral activity as was operationally defined in this study, i.e., the police being asked to indicate the referrals which were made to specific persons in the three support agencies, would require policemen to have personal relationships established with members of the specific support agencies. This condition would seem to restrict police referral activity. Thus, Hypothesis 2 states:

Hypothesis 2

> Police officers will have a higher level of interaction activity than referral activity with members of the respective support agencies.

A third descriptive aspect of police boundary-activity which is of interest in this study concerns the extent to which police officers' levels of interaction and referral activity are the same. As a result of empirically deriving the specific types of boundary-activities to be studied, it is known that the correlation between police interaction and referral activity is low in each positional sector. These relationships suggest that a relatively low number of policemen's level of interaction with personnel of

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a specific agency is the same as their level of referral activity. Correlations, however, present only a global description of the data. Consequently, it would be desirable to know the actual number of police officers whose interaction and referral patterns are similar and at what level these behavior patterns are relatively the same.

The only preconception regarding similarity of policemen's interaction and referral patterns is based on the low correlation between the two types of behavior found at the cluster analysis stage of the study. Thus, Hypothesis 3 is as follows:

Hypothesis 3

> A majority of the police officers' level of interaction will be dissimilar from their level of referral activity with members of support agencies.

Predictor Variables

Being able to make accurate predictions about specific behaviors of man has been a primary focus of social science research for many years. The task is a difficult one for there are many variables to account for in the attempt to explain individual differences in particular behavior. Additionally, introduction of a whole host of predictor variables makes results difficult to interpret unless most of the variation in the behavior criteria is explained. Blalock (1960) contends that when the relationship between several predictor variables and some dependent measure is not reasonably high, prediction equations are not

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practical and can be misleading. He further suggested that unless interval scale measures are used, the amount of change in some dependent measure is meaningless.

He proposes that rather than being concerned with discovering a prediction equation which can accurately determine change in a dependent measure from a fixed set of predictor variables, the analyst use the same data analysis procedures to assess the relative importance of each predictor variable in explaining variation in the dependent measure, while controlling for the effect of the remaining variables.

Given that the primary objective of this study is to discover important variables which can be used to construct a change model designed to manipulate police boundary-activity, and variables that are ordinal measures, the focus will not be on finding a prediction equation which can efficiently predict changes in the behavior criteria from a fixed set of predictor variables. Rather the techniques will be used to locate those predictor variables that significantly (in a statistical sense) contribute to explaining variations in police boundary-activity. This then establishes a necessary condition for variables identified to be considered when constructing a model. To determine whether these variables are important enough to satisfy a sufficient condition (i.e., only those variables discovered in this study have to be considered in the change model),

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the magnitude of the relationship between each predictor variable and the behavior criteria will be assessed.

There has been no previous research regarding the assessment of the relative importance of each predictor variable in explaining police interaction and referral activity with support agency personnel of the type considered in this study while controlling for the effect of the remaining variables. Thus, theoretical considerations of this study will only be concerned with considering variables which may only meet necessary conditions. That is, it is expected that the predictor variables being considered will significantly contribute to the explanation of interaction and referral activity of policemen with the support agency personnel of this study. However, determining whether these variables meet sufficient conditions is an empirical question which will be considered in this study. This leads to the consideration of certain predictor variables which can explain variations in individual police officers' level of boundary-activity.

Clark and Hall (1969) have identified three domains of variables from which to sample[3] when studying inter-organizational relations. These domains are: (1) general environmental variables (political, economic, cultural

[3]The notion of sampling variables from larger domains is analogous to sampling people from a larger population: the constraints of both procedures are similar. See Tryon and Bailey (1970) for a more detailed theoretical discussion of domain sampling.

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conditions, etc.), (2) organization structural variables (complexity, formalization, power, etc.), and (3) individual variables (personality and social psychological in content).

In the present study, it was decided that only possible social psychological correlates of behavior would be sampled. This investigation was restricted to the social psychological domain for the following reasons: First, this research endeavor was not designed to sample from the environmental or organizational domain; this would have entailed a much larger research project cutting across many communities and organizations. Second, only social psychological explanations of police boundary activities were sampled from the individual variable domain because those variables which make up the psychological theroetical model have been developed and validated as explanations of atypical behavior. Since this study deals with normal behavior, it is felt that psychological variables can be excluded.

The first variable deemed important in explaining boundary-activities of policemen is their level of esteem for personnel in specific counterpositions. The relevance of this factor stems from the thesis that individuals holding jobs with inherent discretionary powers will be influenced to develop interagency relationships based on the degree to which the other agency persons are perceived as competent in performing their respective jobs. Cumming

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(1968) reported that where social workers and psychologists negatively evaluated the performance of clergymen, these agency personnel seemed to be less motivated to develop relationships which would increase interaction and referral. Haurek and Clark (1967) found that personnel in social control agencies tended to consciously avoid each other when the evaluation of each other's performance was low and vice versa. Following Homan's proposition of favorable image and high interaction, Clark and Darrach (1968) found in their Japanese study support for a strong positive relationship between interorganization image and a number of interaction measures. This supporting evidence for performance-evaluation (esteem) as an important variable in explaining variation in levels of boundary-activities of policemen, suggests the following hypothesis.

Hypothesis 4

> The level of esteem of police officers for members of each support agency will significantly contribute to the explanation of police boundary-activity with members of the respective agencies.

A second factor suggested by the literature as related to behavior of personnel on an interorganizational level is operating philosophy disparity. In the early 1950's, Walter Miller (1958) identified ideological discrepancies between the different agency personnel of a delinquency prevention project. He suggested that these disparities may have been the basis for non-cooperation among specific community organizations involved in the

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project. In the late 1950's William Dienstein (1960) examined approaches used by police, probation, and school personnel to deal with delinquency. He contended that differences in approaches to handling similar problems, "control and punishment" on the one hand, and "treatment" on the other, minimizes mutual understanding, communications and cooperation. Most recently, Clark and Darroch (1968) found in their study of nine social control organizations in Tokyo, Japan, that,

> those agencies with similar operating philosophies were more likely to choose each other as professionally close and easiest to work with.

This evidence which tends to link disparity in operating philosophy to interorganizational relation suggests the following hypothesis:

Hypothesis 5

> Operating philosophy disparity between police and support agency members will significantly contribute to the explanation of police boundary-activity with members of the respective support agencies.

When identifying factors relevant to the explanation of differences in individual police officers' boundary-activities with supportive agencies, it is logical to contend that one important consideration is the degree to which police feel that the functions of their job require them to be independent or isolated from other supportive-type personnel. That is, given various inherent discretionary

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powers of police work, it is expected that the degree to which officers are "open" to working with and using supportive agency service is related to their behavior toward support agency personnel. Thus, Hypothesis 6 is as follows:

Hypothesis 6

Police officers' perceptions of integration with support agencies will significantly contribute to the explanation of police boundary-activity with members of each specific support agency.

Factors explaining why police personnel engage in boundary-activities with supportive-type agencies are not necessarily restricted to interorganizational sociopsychological phenomena. Social processes within the police organization may create degrees of work dissatisfaction which in turn could effect an individual officer's behavior toward support agency personnel.

The relationship between work satisfaction or dissatisfaction and various behavioral measures has been in a state of recurring theoretical dispute. Connelly (1970) and Bass (1965) reviewed the literature regarding this controversy. Both of these authors point out that while evidence seems to indicate that satisfied workers are no more productive than dissatisfied ones, there is also evidence to support the fact that there is a negative relationship between job satisfaction and various forms of withdrawal (accidents, illness, absenteeism turnover). Given this support that job satisfaction is related to some kinds of behavior, Hypothesis 7 is suggested.

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Hypothesis 7

Police officers' degree of satisfaction with their jobs will significantly contribute to the explanation of their boundary-activity with members of each specific support agency.

In addition to these factors which may account for a substantial proportion of the variation among individual police officers, it is also logical to suggest that the work style of individual police officers may be related to their behavior toward support-personnel. Even though the police organizations are formally designed to control behavior, there are certain kinds of problem behavior in which individual officers may feel that adopting a supportive work style may be the best solution to the problem rather than a controlling work style. Cumming (1968) found that when policemen respond to a call that involves a request for help or some form of support for a personal or interpersonal problem, the officer(s) usually guide the complainant to another person to solve the problem or tried to solve it himself. Cumming states, "to do this, he must often provide support, either by friendly sympathy, by feeding authoritative information into the troubled situation, or by helping a consensual resolution take place." The works of Banton (1964), Bittner (1967), and Wilson (1968) seem to suggest that some policemen cater to a strict traditional definition of "enforcement of the law," a controlling function, while other officers seem to see their job as providing a helping hand to citizens with problems, a supportive function. This

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variation in police officers' emphasis on control vs. support as it may relate to behavior suggests the following hypothesis.

Hypothesis 8

> Police officers' work style along a controlling-supportive continuum will significantly contribute to the explanation of their boundary-activity with members of each specific support agency.

A final factor to be considered in explaining individual differences in police officers' boundary-activities with personnel of specific support agencies, is perception of Blacks. Attitudes toward Blacks is a necessary component of this conceptual model because the actors in one of the counterpositions (CAAP) are predominantly Black.

There has been an extensive amount of research done in the area of prejudice. The work of Alport in 1954, Adorno and associates in 1950, Rokeach in 1960, and others has established the fact that prejudice toward Blacks is pervasive. Results from research using police as the population under study have shown that anti-Black attitudes exist within this occupational group. Black and Reiss (1967) have found that approximately 40 percent of a police sample drawn from three major cities were highly prejudiced and extremely anti-Black. Another 40 percent of the same population were only moderately prejudiced. Bayley and Mendelsohn (1969) also found prejudice in the police population that they studied. The evidence, however, of being able to predict certain kinds of behavior from prejudice tends to be

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somewhat inconsistent. In the area of social control, Black and Reiss (1967) found in his police-study that although there was evidence of a high degree of prejudice toward Blacks, few policemen actually discriminated against Blacks while on the job. On the other hand, while in the role of a uniformed officer in several cities, the present author has observed that policemen who had prejudices toward Blacks were inclined to avoid interaction as well as to discriminate against these minority group members. In any event, whether or not prejudice will account for variation in police boundary-activity toward Black personnel is an empirical question. The following hypothesis is suggested:

Hypothesis 9

> Police perception toward Blacks along a negative-positive continuum will contribute significantly to the explanation of their boundary-activity with personnel from CAAP.

In summary, Figure 2 below shows the conceptual model that includes those variables which are being considered as significantly contributing to the explanation of police boundary-activity. Based on the literature surveyed, it is expected that these variables will at least be necessary when building a change-model designed to manipulate police behavior toward personnel of other agencies.

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Chapter V

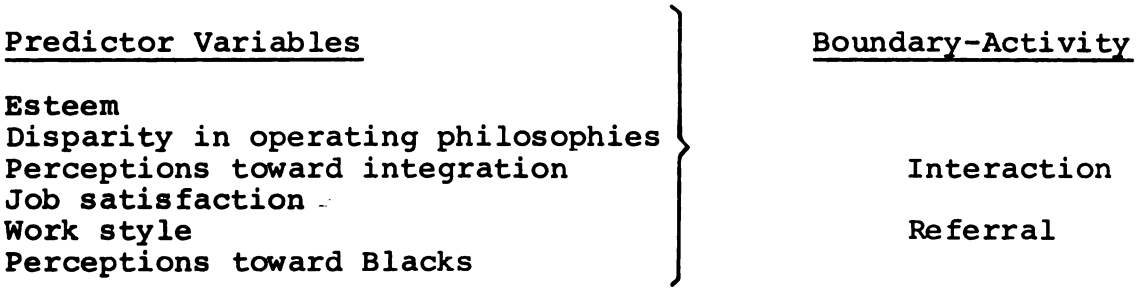

Figure 2. Conceptual model.

Following this discussion of the development of the conceptual model, Chapter III discusses the methodology of the investigation. In Chapter IV there is a detailed description of the setting and background information with regard to the personnel located in both the focal and counterpositions. The nature of police behavior toward members of respective counterpositions is described in Chapter V. Following these descriptions, Chapter VI describes the operational definitions of the predictor variables and reports the extent to which the conceptual model explains police boundary-activity. Finally, the Conclusions and Implications for further research are discussed in Chapter VII.

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CHAPTER III

METHODOLOGY OF THE INVESTIGATION

The data for the present study were taken from the final data-gathering stage of an evaluation of a human relations in-service training program conducted in Muskegon, Michigan. Since the study was part of the large evaluation study, methodological considerations up the the analysis stage were identical. Consequently, the initial discussion in this chapter pertains to the training program and its evaluation procedures, questionnaire construction and data processing. The discussion of the analysis strategy pertains only to the present study.

The Larger Evaluation Study

The Training Program

In response to apparent conflict between minority group members and social regulatory organizations, representatives from the Michigan Civil Rights Commission (MCRC) developed a human relations training program to reduce the conflict. In mid-October, 1969, representatives from MCRC and the Muskegon Police Department met several times. The program was reviewed and necessary changes were made. The following objectives were decided upon by these

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representatives and later confirmed by the Michigan Law Enforcement Planning Commission for funding.

Primary objectives:

1. To influence the police officers to perceive their police role as "peace officers" and thus:
   a. consider extenuating circumstances when deciding dispositions of certain types of offenses
   b. adopt a social service orientation
   c. see the service function of a policeman's job as important
   d. see the law enforcement function in cases of minor violations as an unimportant part of a policeman's job.
2. To improve the police officers' perceptions of minority group members.

Secondary objectives:

1. To improve the police officers' appraisal of other service agencies in the community.
2. To increase the percentage of officers who accept and are aware of community resources.
3. To increase the police supervisors' (sergeant and up) knowledge of the characteristics of good and poor leadership.

To achieve the foregoing objectives, the training was divided into three components. In the first part of the training, inter-agency visitation, two patrolmen were assigned each week to visit a court-related agency (Juvenile or Adult Probation), and a social service agency (either the Department of Social Service (DSS), or Community Action Against Poverty (CAAP)). Twenty-eight patrolmen spent two and one-half days with Adult Probation officers and two and one-half days with CAAP workers. The remaining 28 patrolmen visited juvenile probation officers and DSS employees for the same length of time. No officer above the rank of patrolman participated in this component. To lessen the

strain of the few agencies involved in the program, the agency visits were spread over 28 weeks (January 19 to August 14).

The second component of the in-service training program involved 17 supervisors (policemen with the rank of sergeant and above). In a three-week period (February 19 through March 5), they received eight hours of instruction in their role as supervisors.

The third training component was human relations classroom sessions for the entire Muskegon Police Department. This training was divided into ten two-hour sessions. Because of several cancellations, it lasted from March 17 to June 17.

Program Evaluation: Design and Procedure

Shortly following the development of the training, this researcher was contacted to assess its effectiveness. With the assistance of a small research grant from the Office of Criminal Justice Programs, a one-group multi-tested longitudinal research design was adopted (Figure 3).

Data were collected from all personnel from each of the agencies involved in the training program prior to the beginning of the agency visitation (evaluating Period I in

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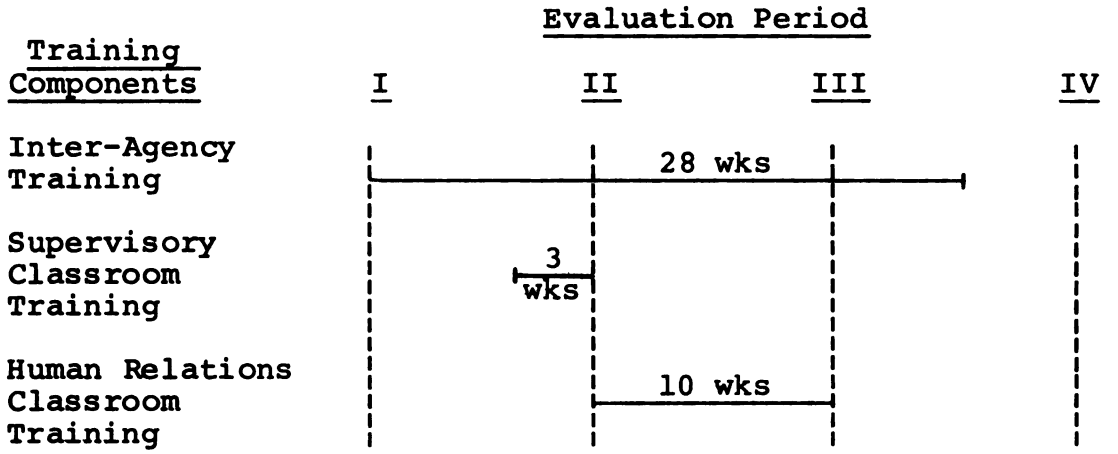

Figure 3. Multi-test longitudinal study design: training components by evaluating periods.

Figure 3). After 14 randomly assigned patrolmen[1] had visited two designated agencies and the supervisor training component had been completed, data were gathered from all police officers a second time (Evaluating Period II in Figure 3). After all police officers had completed the human relations classroom training sessions, and an additional 22 patrolmen had visited the support agencies, data were

[1]Random assignment in this situation consisted of assigning each of the 56 patrolmen a number and then using a table of random numbers, to assign the first 14 officers to visit the social and probation agencies prior to the classroom training, and the remaining 22 officers to visit the social agencies along with the classroom training, and the remaining 20 officers to visit the social and probation officers after the classroom training. To begin the inter-agency visitation component on a positive note, however, the first two officers visiting the agencies were not randomly assigned but selected by the police captain of the patrol division.

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collected for a third time (Evaluating Period III in Figure 3). The final data collection occurred one month after the last two patrolmen completed the agency-visitation training component. Again, data were collected from all personnel in each of the agencies involved in the training program.

Data from all personnel from each of the agencies were obtained from self administered questionnaires. The response rates for probation, social, and police agencies at each evaluating period are found in Tables 1 and 2.

Police personnel responded to the questionnaire in small groups and the support agency personnel were given the

Table 1. Number of agency personnel who completed evaluation questionnaire

Agencies	No. Who Responded	Total Possible	% of Response
Evaluation Period I			
Adult Probation	5	5	100
Juvenile Probation	10	10	100
DSS	57	65	89
CAAP	12	14	86
Evaluation Period II			
Adult Probation	5	5	100
Juvenile Probation	10	10	100
DSS	57	75	76
CAAP	12	14	86

Table 2. Number of police who responded to the evaluation questionnaire

Evaluation Period	No. Who Responded	Total Possible	% of Response
I	70	74	93
II	69	74	92
III	62	76	83
IV	69	76	91

questionnaire and told to return it at a later date.[2] No names were placed on the questionnaire and confidentiality was stressed.[3]

Questionnaire Construction

Initially, for the first data gathering period, the development of assessment measures was largely determined by the training program objectives. That is, the program objectives were conceived as outcome variables which in

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[2]The police personnel were paid overtime rates for coming in one hour early during the first data-collection period. Subsequent evaluating periods were either scheduled during a classroom training session (phases 2 and 3) or during working hours (phase 4). The support agency personnel filled out the questionnaires on their own time and returned them to designated representative agencies.

[3]During the first data-gathering period, the police personnel were asked to list the last five numbers of any credit card for matching purposes. Because of the possibility of being identified, however, the officers rejected this procedure. Thus, individual questionnaires for each of the four evaluating periods could not be matched.

turn measured the effectiveness of the training. One questionnaire was designed for police officers and one (comparable) constructed for support agency personnel. In order to generate data for one research-team member's Criminal Justice Master's Thesis, the support agency questionnaire was administered to ten agencies of which only four were involved in the training program. See Christian (1971) for this questionnaire. In addition to providing data for a thesis, it helped the present researcher to begin establishing sponsorship with those agencies involved in the study.

Beginning about midway into the project, the present researcher began to construct measures which could generate data pertaining to interorganizational relationships between police and various supportive-type organizations in the field of social control. The information elicited specifically for this investigation operationalized those concepts included in the conceptual model discussed in Chapter II. An attempt was made to define the operation of each major concept from several perspectives. That is, the concepts have two or more indicators which in turn have several items constructed on a rational basis. An inspection of these items (see Appendices B-D) will verify that the various items could "logically" be selected to measure the concepts of interest. Several instruments of previous research provide some guidance in how to operationalize a number of concepts

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of interest.[4] In addition, several measures were created by the present researcher. The various evaluation periods that preceded the stage in which data for this study were gathered (final evaluating phase), served as excellent pretests for all of the measures of this study.

As a whole, both the police and support agency questionnaire that generated data for the present study were structured. Questionnaire items were either completely "closed-ended" or structured in such a way as to allow the respondent to write in responses in addition to the alternative responses offered.

Data Processing

After questionnaires had been returned from all personnel involved in the final evaluation phase of the training program, the structured questions were coded by Michigan State University undergraduates. All open-ended responses were either coded by this researcher or a doctoral student assisting in the analysis of these data. To establish intercoder's reliability, a 20 percent sample of the total questionnaires gathered were taken and recoded by a different MSU undergraduate. With the exception of three or four questions, less than 2 percent coder's error was

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[4]Bojean and associates (1967), Haurek and Clark (1967), McNamara (1967), Clark and Darroch (1968), and Wilson (1968). See Appendices for each researcher's items that were used in the present study.

found. For those questions where more than a 2 percent was found, all questionnaires were rechecked on those particular questions and errors corrected.

Keypunching onto IBM cards was done directly from the questionnaires, and all punched cards were verified. The police-data set, information taken from the questionnaires administered to the police, was made up of five cards per observation. There were three cards of data for each person from the support agencies. To further check for coding errors and to generate some preliminary results to add in a more in-depth analysis, both decks of data were processed through FCC 123, a computer-package program designed to do error checks, and to compute percentages and basic statistics.

Since the initial data processing was part of the larger evaluation study, further preparation of the data was necessary for the present investigation. Two Computer Institute for Social Science Research (CISSR) student programmers assisted in this stage. In order to cross-check all programs written, one programmer was assigned to each of the data sets.

This stage of the data-processing entailed sampling from the total number of items in the questionnaire, those variables that described specific domains of interest. The items selected for the new data sets were recorded for further analysis. There were three types of recoding done. First, no responses codes (code of 0) were recoded to blanks

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specifically for later analyses. Second, in order to aid in the interpretation of the correlation analysis, all positively stated items were reflected so that the direction of all items would be the same. Third, with the assistance of frequency distributions, the categories of some items were collapsed.

In addition to the recoding, eight new variables were created by writing a computer program that computed operating philosophy disparity scores between individual police officers and members of each counterposition. The equation used for these computations $D = \frac{\Sigma d^2}{N}$ is a restatement from Gross and associates' (1958) role consensus study of high school superintendents and school board members. This method of deriving disparity scores not only takes into consideration the differences between an individual policeman's operating philosophy score and the average philosophy score in any particular support agency, but it also considers the variance of the support agency members' responses. The method consists of nothing more than taking each police officer and finding the dispersion of each group of support agency members' responses around the policeman's responses. Thus, the disparity (D) between each police officer and each group of support agency members, is simply the sum of differences squared divided by the number of personnel in the support agency.

The final data processing stage dealt with taking those standardized behavior cluster scores discovered in

the cluster analysis, and combining them on the same card with the predictor cluster scores. The combined deck of all of the cluster scores will be used in later analyses. Further, raw cluster scores were constructed. The defining items for each cluster that were discovered by cluster were properly weighted and summed to form a composite score for each cluster. These raw cluster scores were used in subsequent analyses.

Analysis Strategy

A fundamental question with respect to this study's analysis strategy concerns the most appropriate statistical techniques for these data. The decision rules were formulated on the basis of the following criteria: (1) scale construction (composite scores), (2) power of the analysis, and (3) general applicability.

There are two divergent schools of thought regarding scale construction. One school contends that when the levels of measurement are nominal or ordinal, then the analyst is restricted to single items in the case of categorical data and must adhere to the logical structure of an ordinal scale when analyzing ranked data (Blalock, 1960; and Stouffer, 1950). Guttman's scale analysis is one of the most popular procedures for establishing an uni-dimensional scale made up of ranked data.

The opposing school of thought begins with the development of a scale with a matrix of item intercorrelations,

and proceeds to find a set of dimensions that maximize the amount of common variance accounted for. The multivariate analyst adheres to the continuous-data requirement, but assumes an interval scale level of measurement. Burke (1953) states that,

> the statistical technique begins and ends with the numbers and with statements about them. The psychological interpretation given to the experiment does take cognizance of the origin of the numbers but this is irrelevant for the statistical text as such.

Cohen (1965) points out that,

> among the numerous and troublesome assumptions in the mathematical derivations of parametric methods, one does not find any assumptions with regard to the nature of the scale, equal-interval or otherwise. The mathematics is concerned with the properties of certain classes of number, and the "numbers don't remember where they came from."

Lord (1953) and Anderson (1961) have presented empirical evidence regarding this controversy. These authors also contend that the level of measurement used has little relevance to the selection of parametric or nonparametric techniques in one's data analysis.

A second consideration when selecting appropriate statistical techniques is the amount of information that an analysis can generate. In order for the analyst to maximize what can be said about any data, he has to find the most powerful statistical techniques that can be used on his particular type of data. If the analyst adheres to the level of measurement requirements, the researcher has to rely on contingency-table analysis unless interval or ratio

data are gathered which is seldom the case. At best, zero order correlation analysis (gamma coefficients) can be done. Further, unless large samples are obtained, this leaves the analyst the task of making decisions regarding spuriousness and effects of other extraneous variables based on rationality rathter than empiricism. If, on the other hand, the assumption about interval data is made, then a whole host of multivariate techniques is at one's disposal. The appropriate multivariate techniques are determined in part by the structure of the data. In any event, the extent to which the analyst can explore and explain various relationships of his data by using empirical evidence to assist him in decision-making, greatly enhances the accuracy of his interpretation of the findings.

Another question that confronts the analyst regarding the use of statistical techniques is to what extent the findings can be generally applied to a larger population. Brady (1968) and Conover (1971) contend that one has to meet the normality, equality of variance, and random sample assumptions before parametric tests of generality can be used appropriately. If the analyst can not determine if the population is normal, then an appropriate nonparametric test that has no normality assumption should be used. Further, if the sample is nonrandom, then nonparametric statisticians contend that the analyst is restricted to the sample being studied.

Some parametric statisticians (e.g., Cornfield and Tukey, 1956) argue, however, that first of all research is for the purpose of generalizing to some universe whether the sample is random, nonrandom, or a target population. Given that generalization of research findings is made either directly or indirectly, these researchers contend that it is better to construct part of the bridge from the sample to a larger universe by inferential statistics, and part by logic, rather than build the entire bridge logically. That is, if the analyst's findings are found to occur beyond chance within the group being studied, then he can generalize to populations with similar characteristics. Second, Cohen (1965) reports the finding of a number of studies which have demonstrated that where there was severe departure from parametric assumptions, e.g., normality, equality of variance, etc., the validity of two parametric significant tests, t and f tests, were hardly impaired. He reports that these conclusions were reached on the basis of both analytic and empirical investigations.

For the present study, it was decided that the most important consideration regarding the analysis of these data was to develop scales, maximize the power of the analysis and to restrict the generality of the finding to a sample with similar characteristics. Since multivariate techniques are the most powerful analysis procedures, they will be used.

In stage one of the analysis, the redundance among the variables operationalized in the questionnaire will be reduced by constructing scales using Robert Tyron's cluster analysis procedures. (A discussion of this procedure precedes the reporting of the results from this analysis.) Stage two of the analysis consists of describing police boundary-activity by using several other multivariate analysis techniques, i.e., multivariate analysis of variance using a repeated measures design and "O" or object analysis. A discussion of these procedures precedes the reporting of the results from these analyses. The final stage of the study involves the selection of important predictor variables of police boundary-activity by multiple correlation analysis using a least squares stepwise deletion procedure. The results of this analysis will be checked for possible spuriousness as a result of correlated dependent measures by Finn's multivariance multiple regression analysis. A discussion of these techniques precedes the report of the results for this stage of the study.

CHAPTER IV

THE RESEARCH SETTING

The study was conducted in four social regulatory agencies in Muskegon, Michigan. The city of Muskegon, located on Lake Michigan, has a population of approximately 50,000. Approximately 10 percent of the population is Black. A large majority of these Black residents live in one area referred to as "Jackson Hill." The Standard Metropolitan Statistical Area (SMSA) population in 1960 was 149,943. U.S. Census (1960) reports that about three-fifths of the labor force were manual workers and about one-half were employed in the industries (primarily metal industries) when located in the SMSA. When comparing the median family income of Muskegon ($6,048), with metropolitan areas in the United States ($6,324), it was found that there was little difference.

The proximity of the organizations being studied is relatively close. The Muskegon Police Department recently moved into a modern City Hall which is centrally located in the City. The juvenile division of Probate Court, and the headquarters for the Department of Social Services (DSS) and Community Action Against Poverty (CAAP) are located in the Muskegon County Building located two blocks away from City

Hall. DSS has one Aid to Dependent Children's office located in "Jackson Hill" and a halfway house for delinquent boys elsewhere in the city. CAAP has one neighborhood center (provides community services to minority group members) located on "Jackson Hill" and a Legal Aid office established in downtown Muskegon. The number of personnel employed by each of the respective regulatory organizations is reported in Table 3.

Table 3. Number of personnel employed by each of the regulatory agencies involved in the study

Agency	Number of Personnel
Police	76
Juvenile Division of Probate Court	10
Department of Social Services[a]	75
CAAP Coordinating Agency	2
CAAP Neighborhood Center[a]	7
CAAP Legal Aid[a]	5

[a]These agencies serve the county of Muskegon; only personnel who serve the city of Muskegon are reported.

Setting with Respect to the Police and Its Personnel

With respect to organizational structure, the police in general have patterned themselves after Max Weber's classical model. As Angell (1971) states, "the structures of modern American police organizations are rationalized, hierarchical arrangements that reflect the influences of

classical organizational theory. . . ." The most salient characteristics of these departments, as of all organizations based upon classical theory, are:

1. Formal structures are defined by a centralized hierarchy of authority.
2. Labor is divided into functional specialties.
3. Activities are conducted according to standardizing operating procedures.
4. Career routes are well established and have a common entry point; promotions are based on impersonal evaluations by supervisors.
5. Management proceeds through a monocratic system of routinized superior-subordinate relationship.
6. Status among employees is directly related to their positions [jobs] and rank (Angell, 1971).

To a large extent these characteristics describe the Muskegon Police (MPD). After numerous visits and informal interviews with Muskegon policemen, it was found that their structure is centralized with a distinct hierarchy of authority; labor is divided functionally, such as into Juvenile and Traffic Divisions; career routes are well established and everyone enters the department as a patrolman; the military rank structure explicitly denotes superior-subordinate relationships; and status among MPD employees is directly related to these relationships.

However, as McNamara (1968) found in his study of the New York Police Department there are several ways in which this department differs from the classical model. First, limited authority is delegated below the administrative level. Second, the decision-making powers of

middle-management are restricted primarily to daily routine operations. Further, it was noticed that although a classical police model adheres strictly to the "chain of command" concept bypassing this procedure was not uncommon in MPD. Men at the patrolman level could talk directly with the Chief without going through "proper" channels. A third principle of classical organization theory that was not adhered to in the strictest sense was the standardization of operating procedures. Police activities were conducted in a routine way; however, at the time of this study there was no written manual of policy and procedures.

Further description of the Muskegon Police Department and its personnel, the distribution of "sworn" personnel according to job level, job function, years of experience, and years of education, is found in Table 4. It is interesting to note that approximately one-third of the men have been with the department for less than six years and one-third have been there for twenty or more years. The remaining third have from six to twenty years of police experience. Sixty-eight percent of the Muskegon Police officers have completed high school. Of the remaining 32 percent, 11 percent failed to complete high school, while 21 percent have from one to three years of college.

Table 4. Description of Muskegon policemen according to job level, job function, job experience and education[a]

	Number of Men	Percentage of the Total Staff
Job Level:		
Patrolman	58	77
Sergeant	9	12
Lieutenant	5	6
Captain	3	4
Chief	1	1
Total	76	100
Job Function:		
Patrol	56	74
Investigation	10	13
Traffic	7	9
Administration	3	4
Total	76	100
Years of Experience:		
0-5	26	34
6-10	8	11
11-15	13	17
16-20	6	8
20 or more	23	30
Total	76	100
Educational Level:		
Less than high school	8	11
Graduation from high school	52	68
One year of college	8	11
Two years of college	7	9
Three years of college	1	1
Four years of college	0	0
Graduation from college	0	0
Total	76	100

[a]These data were obtained from MPD records.

Setting with Respect to Support Agencies and Their Personnel

While the structure and operations of MPD reflect a highly formal organization model, the characteristics of the supportive-type organizations observed by the author indicate less formal structures. First, the personnel wore no uniforms and there was no military-rank structure and this in turn created less obvious superior-subordinate relationships. Second, in the case of DSS or CAAP, there was decentralization. Both of these organizations have special community programs which have established units permanently located in the community. For example, DSS in Muskegon County has established a halfway house for delinquents in the city of Muskegon. Some Aid to Dependent Children workers also work out of a community office. CAAP has established a Neighborhood Center in the Black Community, which offers help to families in lower economic groups. Legal Aid which provides legal services to the economically deprived is also under the auspices of CAAP but is physically separated from the main CAAP office.

To further describe the supportive-type organization and their personnel, Table 5 presents the distribution of personnel of each agency according to job position, experience, and educational levels.

The major difference in staffing of the three support agencies is that the Legal Aid component of CAAP has two lawyers, and those DSS personnel who responded to the

Table 5. Description of personnel from Juvenile Probation, Department of Social Services, and Community Action Against Poverty according to job position, experience, and educational levels

	Juv. Probation Number of Personnel	%	DSS Number of Personnel	%	CAAP Number of Personnel	%
Job Position:						
Community worker	--	--	--	--	7	58
Lawyer	--	--	--	--	2	17
Caseworker	6	60	50	88	--	--
Supervisor	2	20	4	7	1	8
Administration	2	20	1	2	2	17
No response[a]	0	0	2	3	0	0
Total	10	100	57	100	12	100
Years Experience:						
0-3	3	30	45	79	4	34
4-6	2	20	7	12	6	50
7-10	2	20	2	4	--	--
11-15	1	10	--	--	--	--
16-20	1	10	2	4	1	8
20 or more	1	10	--	--	--	--
No response	0	0	1	1	1	8
Total	10	100	57	100	12	100
Education:						
Less than 4 years h.s.	--	--	--	--	1	8
4 years high school	1	10	5	9	5	41
1 year college	1	10	1	2	--	--
2 years college	2	20	6	11	2	17
3 years college	--	--	3	15	--	--
4 years college	3	30	35	60	--	--
Graduate school	3	30	6	11	3	24
No response	0	0	1	2	--	--
Total	10	100	57	100	12	100

[a]No response refers to the number of subjects who failed to answer a specific questionnaire item.

questionnaire are predominantly case workers. The most interesting observation concerns the years that the respective personnel have served one employer. The distribution of DSS workers' experience is highly skewed toward the low experience end of the continuum. Eighty percent of the DSS employees in the study's sample have been with the agency for three years or less. This indicates that there is a much larger turnover of personnel in DSS than in the other agencies of the study. With respect to education, 71 percent of the DSS personnel, 60 percent of the Juvenile workers, and 24 percent of the CAAP workers have four or more years of college. Comparison of the educational levels of police with that of Juvenile Probation, DSS, and CAAP, indicates that Juvenile Probation and DSS are similar with a majority of personnel having attended college, while the police and CAAP are similar with a majority of their personnel being high school graduates.

Setting with Respect to the Inter-Agency Training Program

A relevant consideration for the present investigation is that the data were gathered after the inter-agency training program (described in Chapter III) had been completed. In this training program all of the Muskegon Police officers who held the rank of patrolman spent one week in the Adult and Juvenile Probation office and the DSS or CAAP office. Personnel with the rank of sergeant and

above did not visit any agency. Even though this differential contact with members of supportive-type agencies occurred, it is assumed that the informal communication networks provided means for the police to become familiar with personnel of specific agencies actually visited or not. There was some evidence for this assumption in Johnson's (1971) report of the larger evaluation study. Johnson found that positive changes in friendship, interaction, and need to interact, were indicated by patrolmen whether they had or had not visited a specific agency.

To give the reader a feeling for the perceived effects of Muskegon police and support-agency personnel working together for several days, data are presented regarding personnel perceptions of benefit received from the inter-agency training and the question of whether there should be more training of this nature. Table 6 presents a comparison of mutual benefits received by police and respective support agency personnel who were involved in the Inter-Agency Training Program. Twenty-eight randomly assigned officers visited both Juvenile Probation and DSS while 26 patrolmen visited CAAP and Adult Probation. Adult Probation is not included since this agency was not part of the present study.

By studying Table 6, it can be seen that 70 to 75 percent of those police who visited both with Juvenile Probation and DSS personnel for a week felt that they received some to a lot of benefit from the experience.

Table 6. Comparisons of mutual benefit received by police and respective support agency personnel who were involved in the Inter-Agency Training Program[a]

Support Agency and Perceived Benefit	Police Personnel Who Visited Agency		Agency Personnel Having Contact with Police		χ^2 (d.f.=1)
	Number of Personnel	% of Total	Number of Personnel	% of Total	
Juvenile Probation:					
No benefit	7	25	2	20	
Some benefit	14	50	7	70	1.00
Great deal of benefit	7	25	1	10	
Total	28	100	10	100	
DSS:[b]					
No benefit	10	39	8	17	
Some benefit	12	46	33	60	1.83
Great deal of benefit	4	15	6	13	
Total	26	100	47	100	
CAAP:					
No benefit	22	85	1	10	
Some benefit	3	11	7	70	5.97**
Great deal of benefit	1	4	2	20	
Total	26	100	10	100	

**Significant at the .01 level.

[a]Questionnaire item: "To what extent do you feel that you benefitted from visiting several social agencies in Muskegon?

[b]Policemen who visited DSS also visited Juvenile Probation.

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Likewise, approximately the same percentage of personnel from these agencies being visited reported that they had benefitted from the training. The results of a median test found no significant difference between either policemen and Juvenile Probation workers or policemen and DSS workers perceived level of benefit.

With respect to those police officers who visited with CAAP personnel, the percentage who perceived benefit from the experience was substantially lower than the percentage who perceived benefit from those visits to Juvenile Probation and DSS. Only 15 percent reported that some or much benefit had been received. Conversely, 90 percent of those CAAP members who had contact with the officers visiting their agency felt that they had received some to much benefit from interacting with the policemen. This difference of perceived benefit of inter-agency training by policemen and CAAP workers was found by a median test to be significant at the .01 level even after correcting for continuity.

Table 7 shows a comparison of all police and support agency personnel preconceptions regarding the degree to which they felt there should be more inter-agency training.

Approximately 75 percent or more of all the personnel felt there is need for more inter-agency training. When police perceptions were compared with the personnel's perceptions of each of the agencies, there were no significant differences found by the median test.

Table 7. Comparison of social regulatory agents' perception of the need for more inter-agency training in Muskegon after police officers had visited support agencies[a]

Perceived Need	Police		Juv. Probation		DSS		CAAP	
	Number of Personnel	%	Number of Personnel	%	Number of Personnel	%	Number of Personnel	%
No need	18	28	--	--	4	8	2	18
Some need	31	47	6	60	32	69	5	46
Great deal of need	16	25	4	40	18	33	4	36
Total	65	100	10	100	50	100	11	100

[a]Questionnaire item: "There should be more police in-service training involving social agencies."

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The brief description of the setting and relevant background information about the personnel involved in the study has been included to create the proper perspective for interpretation and generalization of the research findings to be discussed in subsequent chapters. The data presented in this chapter are especially important since generalizing from this study of several small organizations in one community is relevant only to settings with similar characteristics.

CHAPTER V

POLICE BOUNDARY-ACTIVITY

As can be seen in the discussion in Chapter II, the literature suggests that personnel of different organizations designed to regulate people with problem behavior, do establish interoccupational relationships. The nature of these relationships varies according to the type of organization and to the type of individual employed by a specific organization. With respect to these phenomena, regulatory agents in Muskegon, Michigan are no exception. Johnson (1971) found that members of the major social control agency (Muskegon Police Department) reported friendship linkages as well as having contact with specific supportive-type regulatory organizations (Adult and Juvenile Probation, DSS, and CAAP). Similarly, he found that members of these support-organizations reported friendship linkages as well as contact with the police. There were also reports of variations in the extent to which these interorganization relations vary according to agencies and individual policemen.

These preliminary findings regarding individual and organizational differences in behavior toward other regulatory agents suggest that an extensive examination is needed to present an accurate description of the nature of

this phenomenon. The scheme which will be used to study police behavior toward members of three other regulatory agencies is referred to as a position-centric model (see Chapter II for a discussion of this approach). In this model, Muskegon Police personnel are classified as actors in a focal position, and personnel from each of the three support agencies (Juvenile Probation, DSS, and CAAP) are actors in counterpositions. Each dyadic relationship (police:Juvenile Probation, police:DSS, and police:CAAP) is referred to as a positional sector. The behavior of interest here is the boundary-activity of the focal position members with members of each of the three counterpositions. In this chapter, the process of selecting the specific police boundary-activity with support agency personnel for further empirical inquiry will be presented first. Following this discussion, there is an in-depth description of the variations in individual policemen's behavioral patterns formed by these selected activities.

Two Police Boundary-Activities, Interaction and Referral, Discovered by Cluster Analysis

There is a variety of boundary-activities in which policemen can engage in with personnel from other regulatory agencies. Listed below are the operational definitions (items) of self-reported behavior elicited from Muskegon Police Officers.

1. Police avoid situations best handled by support-personnel.
2. Police take action themselves rather than contact such an agency.
3. Frequency of interaction per month.
4. Kind of interaction (face to face, telephone, etc.).
5. Need for change in interaction.
6. Frequency of no-arrest for minor crimes.
7. Frequency of referrals which are made to a specific agency as an alternative to jail.
8. Frequency of non-law enforcement situations where referral is made to specific agency.

The first five items are taken from Clark and Darroch's Japanese study, and the last three items were developed by the present researcher specifically for the Muskegon study. These latter items were part of a questionnaire administered to the personnel of Muskegon Police Department. See Appendix B for a list of these items (Questionnaire Items 1-8) as they appeared in the questionnaire.

The initial concern in the analysis of these data is empirical selection of specific boundary-activities to be used for further study. This process involves not only elimination of unreliable measures, but also reduction of the amount of redundancy found among the operational definitions of the specific boundary-activity of the study by forming scales. That is, measures found to be defining similar types of activity will be combined. In addition,

the process of empirically selecting boundary-activities for further study involves three separate domains of boundary activity (police boundary-activity with Juvenile Probation, DSS, and CAAP personnel). Consequently, three separate analyses are performed.

An important consideration at this point concerns selection of the most appropriate cluster or factor technique for the purpose of scale construction. The decision was made to use Robert Tryon's "Cumulative Communality Clustering Technique" (also called Empirical V, Analysis). Tryon's Cluster Analysis has several advantages over other cluster and factor analysts' techniques. First, his method has been developed within a clustering theoretical framework; he is interested in grouping together only a minimal set of variables that are most independent and also account for the maximum amount of variation among individuals. Contrary to this notion, factor analysts are concerned with discovering a set of underlying factors explaining some reality. See Tryon (1958B) for a comparison of his cluster analysis with factor analysis. Second, Tryon's V Analysis combines cluster analysis and factor analysis techniques. See Tryon (1958A and 1970) for a full description of Cumulative Communality Cluster Analysis. Third, Tryon and his associates' (1968) extensive computerized package of their analysis (BCTRY Package) is built into Michigan State University's CDC 6500 Computer System.

For the present analysis, raw scores were initially processed through the BCTRY Package Computer Program and converted to standard scores with a mean of 50 and a standard deviation of 10. After this procedure, the standard scores were submitted to a key cluster analysis which forms clusters made up of variables found to define similar types of boundary-activity. Second, a cluster-structure analysis was done. This analysis consisted of performing an oblique factor analysis on the original data matrix, giving the analyst additional information about the structure of the data. Finally, the derived clusters were plotted on a sphere.

Six criteria were used to determine the items finally retained as members of each cluster or scale; the items of each cluster can be thought of as definers (Tryon, 1970). These criteria are as follows:

1. Reliability of the cluster.--Tryon defines the reliability coefficient of a cluster "as its correlation with a second composite consisting of definers strictly comparable to the existing first set." This second composite is a theoretical construct constructed by estimating the scores on an indefinitely large domain of scores. Operationally, it is simply the square of what Tryon refers to as domain validity (the degree to which individual differences on fallible scores reflect individual differences on "true" scores). See Tryon (1957) for comparison of this method of computing reliability with the traditional methods.

2. Generality of each oblique cluster and of the variables that define it (communality).--One method of determining the generality of a cluster is by the communality of the variables in the cluster. Communality refers to that portion of the variation among individuals on a particular

variable which is shared by other variables of the domain.

3. Degree of collinearity of the variables of each cluster.--The property of collinearity means that definers "fall on the same line," i.e., variables that are collinear have the same profile of correlations. When the correlations of a pair of variables being compared are the same across all other variables of the domain, the maximum index of collinearity is 1.00.

4. Cluster common to each dyadic relationship of interest.--This fourth criterion is unique to the particular study. It was added because in order to compare across three dyadic relationships, each cluster has to consist of the same items.

5. Meaning of each defining oblique cluster as a construct. The fifth criterion for forming composite scores is the content of the items. It is possible for an item to satisfy the other criteria, but yet to have no face validity. Thus, if the content of a variable does not seem to fit, it will be removed.

6. Degree of independence of the oblique cluster that defines each cluster.--Tryon contends that the analyst should select those clusters that are the most independent for further analysis. Independence is determined by the degree to which each cluster correlates with each other.

Using the foregoing criteria, two types of behavior, interaction and referral activity, were selected for further study. The primary reason for the deletion of other items was their low communality. An inspection of Table 8 reveals that reliabilities for the definers for each cluster of behavior are below Tryon's recommendation of .90; however, the factor loadings, communalities, average correlation with the other definers of each cluster, and the collinearity are sufficient to warrant forming composite scores. These same

Table 8. Final inner-cluster structure of police boundary-activity

	Variable[a]			
	C_1 Interaction		C_2 Referral	
	Item 4	Item 3	Item 7	Item 8
Juvenile Probation:				
Definer[b]	D	D	D	D
Oblique fc[c]	.81	.66	.64	.63
h^2[d]	.67	.46	.41	.39
$\overline{R}$	.60	.49	.41	.40
Collinearity[f]		.82		.87
Reliability		.71		.58
DSS:				
Definer	D	D	D	D
Oblique fc	.80	.87	.78	.64
h^2	.65	.75	.61	.42
$\overline{R}$[e]	.59	.48	.55	.46
Collinearity		.55		.77
Reliability		.70		.68
CAAP:				
Definer	D	D	D	D
Oblique fc	.95	.87	.65	.76
h^2	.90	.75	.43	.58
$\overline{R}$	.86	.79	.46	.54
Collinearity		.93		.80
Reliability		.90		.67

[a]See pages 60-61 for description of items.

[b]Variables discovered in the key cluster analysis.

[c]Factor loadings as a result of the cluster structure analysis.

[d]Communality.

[e]Average correlations of definer variables with other definers of the same cluster.

[f]The degree to which the two definers of each cluster covaries across all other variables of the behavioral domain.

items also cluster together in each positional sector and appear to be similar in content. The interaction and referral-activity clusters emerged as nearly independent in the police;Juvenile Probation positional sector (correlation = .11), however, less independence was found between these two clusters of behavior in the police:DSS and CAAP positional sectors (correlation = .30 and .27, respectively). These low correlations between interaction and referral activities of this study, different explanations of the two types of behavior will be found, i.e., explanations of why policemen only interact with members of the supportive-type agencies may emerge as different from why they refer clients to the respective agencies.

Differences in Police Interaction and Referral Patterns Across Positional Sectors

From the foregoing section, the level of interaction and referral activity of each participating Muskegon Police Officer with members of three support agencies, is now characterized by composite scores or scales. The second stage of the analysis deals with describing the extent to which police interaction and referral activity patterns vary across support agencies.

The specific expectations stated in the form of hypotheses are as follows:

Hypothesis 1

Police officers will have the highest level of boundary-activity with personnel of Juvenile Probation, second highest with DSS personnel, and lowest with members of CAAP.

Hypothesis 2

Police officers will have a higher level of interaction activity than referral activity with members of the respective support agencies.

An inspection of Table 9 will reveal that both types of boundary-activity are the highest with personnel of Juvenile Probation (interaction activity mean = 6.71 and referral activity mean = 4.41). Boundary-activity with DSS workers is the second highest (interaction activity mean = 4.99 and referral activity = 3.80). The least interaction and referral activity occur with members of CAAP with means of 3.34 and 2.75, respectively. In addition, the means for police interaction activity were higher than the means for referral activity in every case.

To determine if these observed differences were more than coincidental, a multivariate analysis of the variance using a repeated measure 2x3 design was used. The model allows the analyst to compare the same police officers across three different conditions on two correlated behavior criteria. The multivariate model is appropriate as in the case of the present study when the assumptions of equality of variance across measures and within groups cannot be met.

Table 9. Means and standard deviation of police boundary-activity with support agency personnel

Boundary-Activity	Police Boundary Activity With		
	Juv. Probation Personnel	DSS Personnel	CAAP Personnel
Interaction	$\bar{X}$ = 6.71 S.D. = 2.13	$\bar{X}$ = 4.99 S.D. = 1.45	$\bar{X}$ = 3.34 S.D. = 1.45
Referral	$\bar{X}$ = 4.41 S.D. = 1.79	$\bar{X}$ = 3.80 S.D. = 1.49	$\bar{X}$ = 2.75 S.D. = 1.38

These assumptions are taken care of in a special transformation designed to handle correlated data. See Boch (1963) for a detailed discussion of the multivariate analysis of analysis design for repeate measure data.

This analysis was performed by Finn's (1968) Multivariance Computer Package Program at Michigan State University. The only addition to this program was a transformation written especially for a multivariate analysis of variance design when repeated measure data are analyzed.

Table 10 shows that police boundary-activity significantly differs across support agencies. The step-down F's were significant beyond the .01 level for tests of difference first, between police boundary-activity with Juvenile Probation and with DSS personnel, and second, difference between police activity with Juvenile Probation and CAAP personnel. Because only two degrees of freedom were allowed

Table 10. Summary table of the multivariate analysis of variance of police boundary-activity according to support agencies (repeated measures 2x3 design, N=54)

Source of Variation	D.f.	Mean Square	Step-Down F
Difference in police interaction and referral activity with Juvenile Probation and CAAP	1	155.74	17.93***
Differences in police interaction and referral activity with DSS and CAAP	1	51.53	13.94***
Differences between police interaction activity and referral activity	1	138.82	11.28**
"Interaction effect"[a] of interaction and referral activity across the three support agencies		36.17	4.56*
	2	49.03	11.29**

*Significant at .05 level.

**Significant at .01 level.

***Significant at .001 level.

[a]Since both interaction effects were significant, there was no need to pool variance-covariance matrix.

for tests of differences between repeated measures, only two contrasts were tested. However, since the mean differences between police boundary-activity with DSS and with CAAP personnel presented in Table 9 are similar to the contrasts tested, it is assumed that police boundary-activity with members of DSS is significantly different from their activity with CAAP personnel.

In addition to significant differences between police boundary-activity across support agencies (repeated measures), it was found that differences between interaction activity and referral activity were also significant across support agencies ($p < .01$). The officers reported that they consistently interacted with supportive-type agency personnel more than they referred clients to these agencies. These differences in the level of boundary-activity, however, are not the same for all agencies; if the means for interaction activity with each of the agencies is plotted against the respective means for referral activity, it can be seen that the differences are the greatest in descending order with respect to Juvenile Probation, DSS, and CAAP, respectively. This occurrence produced what is referred to as an "interaction effect" which was significant beyond the .05 level. One explanation for an "interaction effect" emerging is possibly that the police level of referral activity is relatively low with all support agency personnel.

In conclusion, it was found that Hypotheses 1 and 2 were supported. Differences do exist with respect to the

extent to which Muskegon policemen interact with and refer clients to the three supportive type agencies of this study. Both types of boundary-activity were the highest with members of Juvenile Probation. This finding is logical since the common goal in dealing with youth who have violated the law helps establish a formal interdependence between these two agencies. This condition gives policemen more opportunity to engage in activities with this agency than with either DSS or CAAP.

Similarly, interaction and referral activity with DSS workers is higher than with members of CAAP. Again, there is more opportunity for police to engage in activities with members of this agency than with CAAP personnel, since some of the functions of DSS are related to police work, e.g., responsibility for youth on parole from correctional institutions and responsibility for child-neglect cases.

The least police boundary-activity was discovered to be with members of CAAP, a finding consistent with the formal interdependence interpretation. Presently, CAAP is designed to provide various services to minority group members and technically none of its functions concern legal sanction of problem behavior. Thus, there is no formal linkage between this agency and the police. Any interaction or referral activity has to be initiated by individual members of these agencies. Consequently, there is the least

amount of opportunity for police to engage in boundary-activities with them.

It was also found that police officers reported generally higher rates of interaction than referral activity with members of each support agency. As suggested earlier, this finding may be the result of how interaction and referral activity were operationalized. That is, questionnaire items measuring referral activity asked the respondent to indicate the number of referrals made to a specific person employed by one of the three support agencies being studied. On the other hand, the questionnaire items that measured interaction activity asked the respondent to give the number of contacts he had had with personnel of specific agencies, or the number of different mediums of exchange (i.e., face to face, telephone) and this was used as an indicator of the amount of contact. It is conceivable that the constraints built into referral activity measurement (referral to specific person), while the interaction-activity measures included any kind of contact under any conditions, may account for the significant differences between these two types of boundary activities.

Another interpretation is that since policemen and the members of the three support agencies all work in a small community (less than 50,000 population), contact in general is to be expected. On the other hand, referral activity as was operationally defined required policemen to have a personal relationship established with a specific

support agency. It is logical that the latter condition may cause referral activity to be lower than interaction.

Similarities in Police Interaction and Referral Patterns Within Positional Sectors

From the preceding analysis it is clear that, on the average, police officers' level of interaction and referral activity varied from highest to lowest with respect to Juvenile Probation, DSS, and CAAP personnel, respectively. It was also discovered in the same analysis that policemen's level of interaction was consistently higher across all support agencies than referral activity. In addition to these descriptions of police boundary activity, it is of interest to determine the extent to which individual police officers' level of interaction and referral activity within each positional sector are similar relative to other officers in the department. By using Robert Tryon's "O" analysis, policemen are clustered according to both types of behavior considered simultaneously. The resulting typologies (cluster of policemen) describe the distribution of police officers' interaction and referral activity in a multivariate sense, that is, the analysis shows the frequency with which policemen are distributed with respect to two scores considered simultaneously rather than separately. From this analysis the actual number of officers can be found where interaction and referral scores are

similar. Further, it can be seen at what level these similarities occur.

To perform this analysis, the interaction and referral scores which are standardized (mean = 50, standard deviation = 10), are introduced to O type, a component of the BCTRY Package Computer Program. This stage consists of clustering the subjects temporarily into Core-O types based on a cluster-score space. This score space is a function of the number of clusters and the broad categories into which the dimensions are divided. The three broad categories are: a below average category containing cluster scores of less than one-half standard deviation (S.D.) away from the mean; an average category consisting of scores plus or minus one-half S.D. away from the mean; and an above average category which contains scores more than one-half S.D. away from the mean. For example, a problem with two clusters discovered by the cluster analysis would be sectioned into $2^3 = 8$ sections. After establishing these sections, the individuals of the problem would be sorted according to their standard scores into the appropriate section. Given a sample of 56 for example, it is expected that 7 subjects will fall into each section.

After the initial types have been formed, successive trials are performed by an iterative procedure. Ultimately all the O types will converge on centers of density.

Upon discovering the final types, the "tightness of each cluster is determined by computing the homogeneity

coefficient (H) for each selected group." The H value is a function of the "within" variance of each of the cluster scores of each type compared to the total variance of cluster scores of all the subjects. The closer H approaches 1.00, the more homogeneous (tighter) the clusters are. (See Tryon (1967; 1970) for a more detailed discussion of "O" analysis.)

In this study, "O" analysis will be performed on police boundary-activity standardized scores of each positional sector separately. Three analyses will be performed. Since the "within" variance for each set of position-sector scores is different, each standard score has a different meaning as one moves from boundary-activity with personnel from Juvenile Probation to DSS, to CAAP. For example, a score of 45 with respect to interaction with Juvenile Probation members means 1 to 2 contacts per month (raw cluster score = 4). On the other hand, a standard score of 45 with respect to interaction with CAAP workers means no interaction at all (raw cluster score = 2). To keep from getting too removed from the raw data scores, i.e., scores resulting from simply summing-up items taken directly from the questionnaire, a comparison of the range of raw and standardized scores within each positional sector is presented in Table 11.

Since the interaction and referral activity scores have been standardized to a mean of 50 and a standard deviation of 10, "O" analysis does not give any information

Table 11. A comparison of the range of police boundary-activity raw scores and standard score (mean=50, S.D.=10) within three positional sectors

Police Boundary-Activity	Positional Sector					
	Police:Juv.Probation		Police:DSS		Police:CAAP	
	Min. Score (No Activ.)	Maximum Score	Min. Score (No Activ.)	Maximum Score	Min. Score (No Activ.)	Maximum Score
Interaction						
Raw scores	2	10	2	7	2	5
Standard scores	28.5	75.9	32.8	74.6	44.6	70.6
Referral						
Raw scores	2	7	2	7	2	7
Standard scores	35.8	65.5	37.1	71.2	44.6	80.7

regarding the mean of each distribution. This analysis is only concerned with the shape of the distribution and the relative position in the distribution of each policeman's interaction and referral activity scores considered simultaneously.

Given this brief introduction regarding the process by which police interaction and referral activity with personnel of each respective agency will be described, the specific question of interest is stated in the form of a hypothesis as follows:

Hypothesis 3

> A majority of the police officers' level of interaction will be dissimilar from their level of referral activity with members of support agencies.

The empirical test of this hypothesis follows in subsequent sections.

Police Boundary-Activity with Juvenile Probation--Behavioral Types Discovered by "O" Analysis

Table 12 shows that there are six distinct types of police boundary-activity with Juvenile Probation personnel.

Eleven policemen reported that with respect to the other officers, they have below average interaction with members of Juvenile Probation. However, their referral activity is above average. The tightness of scores (called homogeneity) of those officers who were cast into this type is .95. This indicates that the officers of Type 1 have nearly identical responses. There are also eleven men who

Table 12. Condensed types of police boundary-activity with Juvenile Probation personnel (N=60)[a]

Type	Descriptive Names	Frequency of Cases	Profile Level and Homogeneities (H)				
			Interaction		Referral		Overall
			$\bar{Z}$[b]	H[c]	$\bar{Z}$	H	H
T_1	Below-average interaction Above-average referral	11	40	.98	58	.93	.95
T_2	Average interaction Below-average referral	11	46	.95	37	.97	.91
T_3	Average interaction Average referral	12	46	.86	48	.97	.92
T_4	Average interaction Above-average referral	6	50	.96	60	.98	.97
T_5	Above-average interaction Below-average referral	6	62	.96	37	.98	.97
T_6	Above-average interaction Above-average referral	14	62	.89	56	.85	.87

[a]Five subjects had only an interaction cluster score which fell ± half S.D. away from the mean. Two subjects had no cluster scores. Policemen who fall into below-average types have standard Z scores ranging from 29 for no-interaction or 37 for no-referral activity, to 46 which is the cutting point for one-half S.D. from the standard mean of 50. Those policemen who have Z scores of 46 to 55 (plus or minus one-half S.D. away from the mean) are classified as average types. Any Z scores more than one-half S.D., or score of 56 or more, are labeled above-average types. The foregoing cut-off points established three groups with one-third of the sample expected to fall into each group.

[b]Standardized score mean.

[c]Homogeneity.

have average interaction but below-average referral activity with Juvenile Probation workers (Type 2). Again the overall homogeneity of this group indicated that this is a tight group. Type 3 (average interaction and referral activity) consists of twelve police officers with an overall H of .92. Only six men had an average interaction and above-average referral combination (Type 4), however, the tightness of this group is extremely high (H = .97). Similarly, six people had above-average interaction, but below-average referral activity. An overall H of .97 indicates that this is also an extremely tight group. Finally, it was found that the levels of interaction and referral of the largest group of officers (14) were above average with regard to both activities. There was a little more variation among those men cast into Type 6 (H = .87) than in previous groups, however the homogeneity is still high.

Thus, from this analysis, it can be seen that with respect to average interaction and average referral activity, twelve officers (20 percent) had similar level of boundary-activity. Further, fourteen officers (23 percent) who had above-average levels of interaction and referral activity with Juvenile Probation personnel were similar. Combining Types 3 and 6, 43 percent of the police officers' levels of interaction was similar to their level of referral activity with Juvenile Probation, while 57 percent of the officers' interaction and referral patterns were dissimilar.

Police Boundary-Activity with DSS Personnel--Behavioral Types Discovered by "O" Analysis

Table 13 shows that seven types of police behavior emerged from an "O" analysis of policemen's levels of interaction and referral activity with DSS members. Rather than reiterate the information found in Table 13, only the high points and conclusion will be discussed.

1. In the analysis of the police:DSS positional sectors, seven police officers (10 percent) had below-average interaction and below-average referral activity with members from DSS. This type did not emerge in police boundary-activity with Juvenile Probation.
2. Twenty-two officers (37 percent) had average interaction and average referral activity with DSS personnel. Referring back to the police boundary-activity with Juvenile Probation, 22 percent fell into the average type.
3. Only two officers (3 percent) had above-average interaction with DSS personnel. With respect to police boundary-activity with Juvenile Probation 23 percent of the officers fell into the above-average type.
4. In total it was found that 50 percent of the police officers' levels of interaction was similar to their level of referral activity with DSS personnel and 50 percent of the officers had dissimilar interaction and referral patterns.

Table 13. Condensed types of police boundary-activity with DSS personnel (N=60)[a]

Type	Descriptive Names	Frequency of Cases	Profile Level and Homogeneities (H)				
			Interaction		Referral		Overall
			$\bar{Z}$[b]	H[c]	$\bar{Z}$	H	H
T_1	Below-average interaction Below-average referral	7	36	.92	37	.996	.96
T_2	Below-average interaction Average referral	7	35	.93	46	.95	.94
T_3	Average interaction Below-average referral	12	52	.92	40	.94	.93
T_4	Average interaction Average referral	22	53	.91	54	.93	.92
T_5	Average interaction Above-average referral	7	52	.92	67	.95	.94
T_6	Above-average interaction Average referral	4	68	.93	46	.78	.86
T_7	Above-average interaction Above-average referral	2	71	.93	64	1.00	.96

[a]Five subjects had only interaction cluster score which fell one-half S.D. away from the mean. Two subjects had no cluster scores. Policemen who fall into below-average types have standard Z scores ranging from 32 for no interaction or 37 for no referral activity to 46 which is the cutting point for one-half S.D. from the standard mean of 50. Those policemen who have Z scores of 46 to 55 (plus or minus one-half S.D. away from the mean) are classified as average types. Any Z score more than ± one-half S.D. of score 56 or more are labeled above-average types.

[b]Standardized score mean.

[c]Homogeneity.

5. As in the previous analysis within the police: Juvenile Probation positional sector, all of the types that emerged had subjects with responses very close together as denoted by the overall homogeneity.

Police Boundary-Activities with CAAP Personnel--Behavioral Types Discovered by "O" Analysis

Table 14 shows that only four types of police behavior toward members of CAAP were discovered by the "O" analysis.

1. It was found that thirty-three (61 percent) of the police officers fell into the below-average interaction and referral activity type. In fact, with the exception of three men whose boundary activity was slight, thirty officers in Type 1 reported no interaction or referral activity with CAAP personnel. In addition, the thirteen officers who failed to respond to those items which made up either the interaction cluster or the referral activity cluster also fell into the below-average category in those cluster scores that were recorded.
2. Two officers (4 percent) had above-average interaction and referral activity with CAAP personnel.
3. In total, it was found that 65 percent of the police officers' level of interaction was similar to their level of referral activity with CAAP personnel and only 35 percent of the officers had dissimilar interaction and referral patterns.

Table 14. Condensed types of police boundary-activity with CAAP personnel (N=54)[a]

Type	Descriptive Names	Frequency of Cases	Profile Level and Homogeneities (H)				
			Interaction		Referral		Overall
			$\bar{Z}$[b]	H[c]	$\bar{Z}$	H	H
T_1	Below-average interaction Below-average referral	33	45	.98	45	.98	.98
T_2	Below-average interaction Above-average referral	7	44	1.00	68	.45	.78
T_3	Above-average interaction Average referral	12	67	.92	50	.76	.85
T_4	Above-average interaction Above-average referral	2	72	.99	77	.94	.96

[a]Nine subjects had only interaction cluster score below-average interaction; four subjects had only a referral cluster score below-average referral; two subjects had no cluster scores. Policemen who fall into below-average types have standard Z scores of 45 for no interaction or referral activity. Those police officers who have Z scores of 46 to 55 (plus or minus one-half S.D. away from the mean are classified as average types. Any Z score more than one-half S.D. or score of 56 or more are labeled above-average types.

[b]Standardized score mean.

[c]Homogeneity.

Based on the results from the "O" analysis, Hypothesis 3, that a majority of the police officers' levels of interaction will be dissimilar to their level of referral activity with members of each support agency, is partially accepted. Contrary to expectations, it was found that a majority of the police officers' level of interaction with members of CAAP was similar to their level of referral activity. It was further discovered that a majority of these officers who had similar interaction and referral activity scores were in the below-average interaction and referral activity type. One explanation for this occurrence is possibly, as has been discussed previously, the fact that no formal ties as defined by law exist between the police and CAAP; this could account for a majority of the officers having no contact or referral activity with this agency. On the other hand, it is possible that some social psychological variable(s) that will be considered in the next chapter will explain variations in police boundary-activity with members of this agency.

Another interesting finding is that when the correlations between interaction and referral for each of the positional sectors are compared with the percentage of officers whose level of interaction is similar to the level of referral activity, it can be seen that the two analyses generate different kinds of information. The correlations for the police:Juvenile Probation; police:DSS; police:CAAP

positional sectors were in descending order: .16, .30, and .27, respectively. The percentage of policemen with levels of interaction similar to referral for the same sector are in descending order: 43 percent, 50 percent, and 65 percent, respectively.

CHAPTER VI

DISCOVERING IMPORTANT VARIABLES FOR MODEL-BUILDING

Having described police interaction and referral activities, the next task is to explain the nature of the boundary-activity with members of specific support agencies. Since one of the primary objectives of this study is to discover important variables for constructing a change model, there will be an attempt to locate predictor variables that satisfy both necessary and sufficient conditions for model building. That is, if a variable is to be classified as an important variable, not only will it have to be significantly related to police boundary-activity, but it will also have to be relatively strongly correlated with the behavior criteria.

As a result of this study being a part of a larger research project, 89 questionnaire items representing various social, psychological, and structural phenomena were available for the selection of predictor variables. This selection process was performed by the same cluster analysis technique that was used to select the specific boundary-activity being studied.

The second step of this stage of the present investigation involved the process of determining which

predictor variables could be deemed important for model-building purposes. The task was performed by multiple correlation procedures.

Predictor Variables Discovered by Cluster Analysis

This phase of the study consists of taking 89 variables and reducing the sample by cluster analysis to a small set of predictor variables (scales) which will be used to explain variations in police boundary-activity with members of three support agencies. Appendix C contains a list of these variables as they appeared in the questionnaire. The six criteria used to select the specific clusters of boundary-activities will also be used in making decisions about which variables will define the clusters emerging in this analysis. Reiterating, these criteria are as follows:

1. Reliability of the cluster
2. Generality of the cluster
3. Collinearity of the items in each cluster
4. Commonness to each positional sector
5. Content of each item
6. Independence of clusters.

Using the above criteria, six clusters (scales) were discovered. Justification for considering the content of these clusters as relevant predictor-variables was supported by a review of the literature discussed in Chapter II. The structure of each predictor-variable cluster of defining

variables is presented below. Any theoretical significance regarding the structure of each cluster is beyond the scope of the present study.

In addition to describing cluster structure, a description of the distribution of the six predictor-variable scores (cluster scores) for individual police officers across each cluster's minimum and maximum range of scores will be presented. After the distribution of all six predictor variables has been presented, several interpretations of the interrelationships of these variables will be offered.

Cluster 1: Police evaluation of support agency personnel performance on a poor vs. excellent scale (designation: esteem).

As a result of the cluster analysis, seven of the original eight variables which had been rationally selected to measure esteeem comprised Cluster 1. The one variable which was not selected failed to meet the requirement of being common to each of the three positional sections of interest. Listed in Table 15 for each positional sector are the defining variables, oblique factor coefficients, communalities, average correlation of each variable with other variables of the cluster and internal consistency reliabilities.

An inspection of Table 16 shows that the mean level of police esteem for Juvenile Probation personnel workers is 19.98. This typical value represents an average rating of <u>good</u> with respect to performance evaluation of the members

Table 15. The inner cluster structure of police esteem for support agency personnel[a]

Item[b]	Positional Sector								
	Juvenile Probation Personnel			DSS Personnel			CAAP Personnel		
	Oblique Factor Coefficients	h^2	$\bar{r}$	Oblique Factor Coefficients	h^2	$\bar{r}$	Oblique Factor Coefficients	h^2	$\bar{r}$
Type of person in general	.83	.70	.67	.60	.45	.46	.70	.62	.52
Working relationship with police	.83	.72	.67	.89	.80	.67	.72	.55	.54
Agency in general	.81	.69	.65	.82	.68	.62	.81	.66	.60
Actual way of handling related police matters	.81	.68	.65	.86	.76	.65	.85	.79	.64
Emphasis on community welfare	.79	.70	.63	.75	.63	.57	.74	.58	.56
Knowledge of handling related police matters	.77	.66	.61	.75	.59	.57	.73	.58	.54
Freedom from non-professional influences	.75	.59	.60	.65	.47	.49	.68	.56	.51
Reliability	.93			.92			.91		

[a]The order that such variable was selected for the cluster is based on the size of the factor coefficient in descending order.

[b]See Appendix C for these items as they appeared in the questionnaire.

Table 16. Distribution description of police esteem for personnel of supportive-type agencies

Police Esteem for Personnel in	Number of Policemen	Percentage	
Juv. Probation			
Below average[a]	5	8	$\bar{X}$ = 19.98
Average[b]	48	77	S.D. = 4.25
Above average[c]	9	15	Min. Max.
Total	62	100	Range = 7 to 28
DSS			
Below average	9	15	$\bar{X}$ = 17.15
Average	49	80	S.D. = 4.11
Above average	3	5	Min. Max.
Total	61	100	Range = 7 to 28
CAAP			
Below average	14	25	$\bar{X}$ = 12.37
Average	35	61	S.D. = 4.11
Above average	8	14	Min. Max.
Total	57	100	Range = 7 to 28

[a]Less than -1 standard deviation away from the mean.

[b]Plus or minus 1 standard deviation away from the mean.

[c]Greater than +1 standard deviation away from the mean.

of this support agency. A look at the frequency distribution shows that it is slightly skewed to the high end of the esteem scale, with a majority (77 percent) of the police officers' scores being ±1 standard deviation away from the mean.

Policemen's esteem for DSS workers follows second with a mean of 17.15. The average policeman rates the performance of these workers as fair to good. The frequency distribution of these scores shows a skew toward the low end of the esteem scale. However a large majority of the scores is still within standard deviation of the mean.

With respect to police esteem for CAAP workers, the scores on the average are the lowest with a mean of only 12.37. This typical value reflects an average police-rating of poor on the performance of CAAP personnel. As in the case of DSS workers, the distribution of scores regarding esteem for CAAP workers is skewed toward the low end of the esteem scale. Also, a smaller percentage (although still a majority of the scores) than was found in esteem for other personnel, fell within one standard deviation of the mean.

No test for significant differences between police esteem for personnel of the three support agencies was made. However, it appears that police esteem of Juvenile Probation and DSS personnel is higher than it is for members of CAAP.

Cluster 2: Differences between police and support-agency personnel regarding punitive vs. treatment methods of handling law violators (designation: disparity in operating philosophy).

Past research concerned with measuring the degree to which personnel of different social-regulatory organizations have different operating philosophies, has simply compared several organizations according to the median or mean (Clark, 1968; Dienstein, 1960). To determine the extent to which policemen's operating-philosophy disparity with members of a specific agency is related to their behavior toward these personnel, it was necessary for each individual police officer's operating philosophy to be compared with that of each of the support-agency personnel. The method for deriving disparity scores for individual police officers was taken from Gross and associates (1958), role-consensus study of high-school superintendents and school board members. The equation used for these computations ($D = \frac{\Sigma d^2}{N}$) not only takes into consideration the differences between an individual policeman's operating-philosophy score and the average philosophy score for a particular support agency, but it also considers the variance among the support agency members' responses. Thus, the disparity (D) between each police officer and each group of support agency members, is simply the sum of the differences squared, divided by the number of personnel in the support agency.

Policemen were compared with personnel from each of the three support agencies on eight variables denoting

punitive vs. treatment philosophy of handling law violators. Through cluster analysis, four of these eight variables met the requirements as specified previously for treating variables as a composite. Listed in Table 17 are the defining variables and the oblique-factor coefficients, communalities, average correlation of each variable with other variables of the cluster, and the consistency reliabilities for each positional sector for Cluster 2.

Table 18 presents a description of the distribution of disparity scores generated by comparing individual police officers with each member of the three support agencies.

Using the mean as a criterion, the greatest operating philosophy difference exists between policemen and Juvenile Probation personnel. Looking at the frequency distribution of scores, one can see that the distribution is flatter than normal with 45 percent of the scores being more than one standard deviation away from the mean. This reflects more than normal distribution among police officers regarding operating philosophy disparity with Juvenile Probation personnel.

Philosophical differences between the police and CAAP workers are the second highest with policemen and DSS workers having the least disparity ($\overline{X}$ = 14.71 and 12.92, respectively). The distribution of these variable scores is near normal in both cases. As reflected by the standard deviation within the police:CAAP positional sector, there is less variation from the mean with respect to operating

Table 17. The inner cluster structure of operating philosophy disparity between police officers and members of three support agencies

Item[a]	Positional Sector								
	Juvenile Probation Personnel			DSS Personnel			CAAP Personnel		
	Oblique Factor Coefficient	h^2	$\bar{r}$	Oblique Factor Coefficient	h^2	$\bar{r}$	Oblique Factor Coefficient	h^2	$\bar{r}$
Community vs. institutional treatment as a method of rehabilitation	.79	.72	.56	.83	.78	.57	.79	.76	.56
More money for treatment as effective crime prevention	.71	.62	.50	.66	.54	.45	.68	.54	.48
Keeping non-dangerous offenders in community as effective crime prevention	.67	.48	.47	.64	.45	.44	.67	.49	.47
Treatment as effective crime prevention	.66	.53	.47	.61	.51	.41	.68	.53	.48
Reliability	.83			.81			.82		

[a]See Appendix C for these items as they appeared in the questionnaire.

Table 18. Distribution description of disparity between police and personnel of each support agency with respect to operating philosophies

Positional Sector Personnel in	Number of Policemen	Percentage	
Juv. Probation			
Below average[a]	16	24	$\bar{X}$ = 16.56
Average[b]	36	55	S.D. = 8.85
Above average[c]	14	21	Min. Max.
Total	66	100	Range = 4 to 33
DSS			
Below average	10	15	$\bar{X}$ = 12.92
Average	44	66	S.D. = 8.26
Above average	13	19	Min. Max.
Total	67	100	Range = 1 to 31
CAAP			
Below average	12	18	$\bar{X}$ = 14.71
Average	42	63	S.D. = 6.86
Above average	13	19	Min. Max.
Total	68	100	Range = 5 to 29

[a]Less than -1 standard deviation away from the mean.

[b]Plus or minus 1 standard deviation away from the mean.

[c]Greater than +1 standard deviation away from the mean.

philosophy disparity between policemen and members of CAAP than with other agency personnel. These findings offer support to Dienstein's (1960) comparisons of police, Juvenile Probation, and school teachers' beliefs about the causes of delinquency. He found that police and Probation personnel were less alike in their beliefs than were policemen and teachers.

An interesting finding emerged when the disparity scores within each positional sector were correlated with police officers' operating philosophy. It was found that there is a strong inverse relationship between policemen's operating philosophy along a punitive-treatment continuum and the extent to which his philosophy differs from personnel of support agencies. The correlation within the police:Juvenile Probation, DSS, and CAAP positional sectors are: -.94, -.95, and -.94, respectively. That is, the less treatment-oriented a police officer is, the greater the disparity between his philosophy and the philosophy of support agencies. This result also shows that for these high correlations to emerge, a large majority of the members of the three support agencies have to be highly treatment-oriented.

Cluster 3: Perceived isolation vs. integration with community service agencies (designation: integration).

From seven items which were intended to measure integration, five were discovered by cluster analysis (Table 19). These variables operationally define the

Table 19. Inner cluster structure of police officers' integration with support agencies

Item[a]	Oblique Factor Coefficient	h^2	$\bar{r}$
Policemen should refer more to social agencies	.78	.76	.54
Policemen should be involved more in social work	.77	.62	.54
Inter-agency training should be increased	.69	.52	.48
Minor crimes should be referred to social agencies	.66	.45	.46
Individuals guilty of minor violations should be referred for effective crime prevention	.60	.51	.42
Reliability .85			

[a]See Appendix C for these items as they appeared in the questionnaire.

extent to which officers feel that police work does not involve community service type agencies in general. One structural variable, friendship linkage, which is operationally defined as the number of members in each agency that police officers knew well enough to discuss mutual problems with, was found to be moderately correlated with this cluster. However, since the theoretical considerations of the study concerns social psychological variables, this variable will be treated as an extraneous variable and included in the multiple-correlation stage of the analysis.

Table 20 shows that on the average, Muskegon policemen tend to fall into the middle of the continuum between

Table 20. Distribution description of police officers' perceptions of integration

	Integration			
	Below Average	Average	Above Average	Total
No. of policemen	12	42	12	66
Percentage	18	64	18	100

$\bar{X}$ = 11.85

S.D. = 3.61

Min. Max.

Range = 5 to 25

feeling isolated from social services type agencies and feeling that police and support agencies should work as a team. Further, the distribution is near normal with 64 percent of the officers within plus or minus one standard deviation of the mean.

Cluster 4: Job satisfaction vs. dissatisfaction (designation: job satisfaction).

Police officers were asked to respond to fourteen items dealing with job satisfaction as it relates to internal operations within the police department, e.g., disciplinary action, performance evaluation, etc. Only five of the fourteen variables which were rationally selected were discovered by cluster analysis. It was also discovered that

police rank is highly positively correlated with this cluster. However, because rank is conceptualized as a structural variable it will be treated as an extraneous variable and considered when empirically testing the validity of the prediction model. A list of those variables in Cluster 4 is shown in Table 21.

Table 21. Inner cluster structure of police officers' satisfaction with their job

Item[a]	Oblique Factor Coefficient	h^2	$\bar{r}$
Fairness of departmental disciplinary action	.85	.73	.61
Fairness of departmental promotion	.74	.60	.54
Level of morale in department	.73	.54	.53
Opportunities given by department to individual policemen	.61	.51	.48
Adequacy of departmental job evaluations	.63	.47	.45
Reliability .86			

[a]See Appendix C for these items as they appeared in the questionnaire.

Table 22 shows that Muskegon policemen's satisfaction scores are nearly normally distributed with regard to how the police department is being managed. A correlation of .50 in the positive direction between police rank and job satisfaction suggests that a majority of these officers who are highly satisfied are supervisors, and a majority of those officers who are not satisfied are patrolmen.

Table 22. Distribution description of police officers' job satisfaction

	Job Satisfaction			
	Below Average	Average	Above Average	Total
No. of policemen	13	39	14	66
Percentage	20	59	21	100

$\bar{X}$ = 14.57

S.D. = 4.85

	Min.	Max.
Range =	5	to 25

Cluster 5: Supporting or helping citizens is an important or an unimportant aspect of police work (designation: work style).

Of five rationally selected items measuring the extent to which policemen perceived part of their job as supporting or helping citizens with problems, four clustered to form a scale. The variables in Cluster 5 are listed in Table 23.

As shown by the mean of the distribution of work-style scores in Table 24, Muskegon policemen feel that supporting or helping citizens with problems has relatively low priority as an important aspect of their job. The frequency distribution shows that these scores are normally distributed. This finding regarding policemen's work style supports a number of authors' (e.g., Bantan, 1964; and

Table 23. Inner cluster structure of police officers' work style

Item[a]	Oblique Factor Coefficient	h^2	$\bar{r}$
Assisting in settling neighborhood disputes as an important aspect of police work	.94	.91	.74
Settling tenant-landlord disputes as an important aspect of police work	.87	.69	.65
Handling family disputes as an important part of police work	.71	.55	.56
Handling unwanted guest complaints as an important aspect of police work	.69	.54	.55
Reliability .88			

[a]See Appendix C for these items as they appeared in the questionnaire.

Table 24. Distribution description of police officers' work style

	Work Style			
	Below Average	Average	Above Average	Total
No. of policemen	11	43	12	66
Percentage	17	65	18	100

$\bar{X}$ = 10.22

S.D. = 3.62

Min. Max.

Range = 4 to 20

Brittner, 1967) contentions that policemen do not generally perceive as part of their job those tasks which are outside the realm of enforcing the law.

Cluster 6: Positive vs. negative perception toward Blacks (designation: perceptions toward Blacks).

Fifteen items were initially operationalized to measure police perceptions of Blacks. These items were reduced to nine defining variables by cluster analysis. Following in Table 25 is a list of these nine items.

Table 25. Inner cluster structure of police officers' perception toward Blacks

Item[a]	Oblique Factor Coefficient	h^2	$\bar{r}$
Negroes have lower morals than Whites	.77	.64	.51
Keep Negroes separate from Whites	.73	.59	.49
Unskilled jobs for Negroes	.73	.57	.49
Negroes more likely to be troublemakers	.68	.49	.45
To get cooperation from Negroes you must indicate that you mean business	.67	.54	.44
Negroes live poorly because of laziness	.62	.49	.41
Mistake to have mixed Negro-White band	.61	.56	.41
Mistake to have Negro as leaders over Whites	.60	.45	.40
Negro can do as well as any other group	.56	.48	.37
Reliability .90			

[a]See Appendix C for these items as they appeared in the questionnaire.

An inspection of Table 26 reveals that the mean of 38.57 indicates that on the average, Muskegon policemen reported slightly positive perceptions toward Blacks. The distribution, however, shows that approximately one-fifth of the officers did report negative feelings. These findings although operationalized differently are relatively speaking inconsistent with the results reported by Black and Reiss (1967). These researchers found that approximately 40 percent of a sample of policemen drawn from three major cities were highly prejudiced and extremely anti-Black and another 40 percent were moderately prejudiced.

Table 26. Distribution description of police officers' perceptions toward Blacks

	Perceptions Toward Blacks			
	Below Average	Average	Above Average	Total
No. of policemen	11	43	11	65
Percentage	17	66	17	100

$\bar{X}$ = 38.57

S.D. = 11.44

	Min.	Max.
Range =	9	to 63

It is possible that as a result of the evaluation of the human relations training program of which the present study is a part, the officers were reluctant to express their true feelings toward Blacks. The questionnaire which contained these items was anonymous. However it was observed that some policemen were still suspicious of the evaluation procedures; i.e., approximately 30 percent would not answer any of the background information items which could be perceived as a way of identifying them individually.

In summary, Muskegon police officers on the average, evaluated in descending order the performance of personnel of Juvenile Probation, DSS, and CAAP as good, fair, and poor, respectively. Second, it was found that the greatest disparity in operating philosophies existed in descending order between police and Juvenile Probation, CAAP, and DSS, respectively. Third, on an average, officers are characterized as being undecided about whether they should be more integrated with support agencies. Fourth, on an average, the officers reported that they were somewhat satisfied with how the internal affairs of the department were being handled. Fifth, as Bantam (1964), Bittner (1967), and Cumming (1968) have suggested, policemen generally perceive the task of helping citizens with problems as only a slightly important part of their job. Sixth, Muskegon police officers' perceptions of Blacks were found to be on the average slightly positive. Approximately 20 percent of

the officers, however, reported distinct negative feelings toward Blacks.

Based on the descriptions of the distributions formed by these six cluster scores, it has been found that individual differences are either near or exactly normally distributed about the cluster means. A discussion of the interrelatedness of the predictor variables follows in the next section.

Independence of the Predictor Variables

In order to maximize the amount of variance which can be explained, the predictor variables should be independent of one another. That is, there should be no correlation among the off-diagonal values of the correlation matrix. An inspection of Table 27 reveals that even though none of the positional sectors have zero correlations in the off-diagonals, the correlations between predictor variables are generally small. The only relationship consistently strong over all positional sectors, is between operating-philosophy disparity and perceived integration. The inverse relationship shows that the more police officers feel that they should be integrated with supportive-type agencies, the less these officers and support-agency personnel differ in operating philosophies. The only other correlation above .40 is between police esteem for CAAP workers and police perceptions toward Blacks. A correlation of .48 shows that the higher the esteem for CAAP workers, the higher the

Table 27. Intercorrelations among predictor variables within three positional sectors

	Positional Sector															
	Police:Juvenile Probation					Police:DSS					Police:CAAP					
	X_1	X_2	X_3	X_4	X_5	X_1	X_2	X_3	X_4	X_5	X_1	X_2	X_3	X_4	X_5	X_6
X_1	1.00					1.00					1.00					
X_2	-0.08	1.00				-0.26	1.00				-0.32	1.00				
X_3	0.14	-0.58	1.00			0.18	-0.59	1.00			0.16	-0.46	1.00			
X_4	-0.00	-0.10	0.10	1.00		0.17	-0.05	0.09	1.00		0.30	-0.09	0.14	1.00		
X_5	-0.03	-0.16	0.14	-0.04	1.00	0.16	-0.12	0.13	-0.09	1.00	0.12	-0.06	0.03	-0.17	1.00	
X_6											0.48	-0.22	0.15	-0.13	0.23	1.00

X_1 = Esteem for members of support agencies.

X_2 = Operating philosophy disparity between members of police and support agencies.

X_3 = Perception of integration with support agencies.

X_4 = Work styles of policemen.

X_5 = Job satisfaction of policemen.

X_6 = Perception toward Blacks.

positive perception of Blacks. This relationship is logical since CAAP workers are predominantly Black.

Discovering Important Predictor Variables by Multiple Correlation

In this section, the focus will be on determining the degree to which individual police officers' level of boundary-activities with support agency personnel can be determined by six predictor variables selected on empirical and theoretical grounds. In addition to the social psychological variables being considered as predictors, there are two structural variables, police rank and friendship linkage, which will also be introduced into the multiple-correlation analysis. These additional variables are being considered because they are correlated with either the social psychological variables or the behavior criteria, thus possibly causing a spurious relationship.

The analysis techniques to be used in generating empirical information for deciding which predictor variables are important are multiple regression and partial correlation procedures. Multiple regression will be used to delete those predictor variables possibly due to chance. Partial correlation will be used to determine the relative importance of those variables found in the final regression equation. This approach involves initially obtaining a least squares equation using all of the predictor variables. Then the variables which contribute the least to explaining variation around the mean of some dependent measure are

deleted from the equation and a new least square equation is estimated. This procedure continues until a preset stopping criterion (minimum significant = .05 in the present study) is satisfied.

Since the objective of this analysis is not to discover a prediction equation consisting of beta weights, only partial correlation coefficients will be reported. In a sense beta weights and partial correlations can be interpreted in the same way. Both represent the slopes of a least squares line with all other predictor variables held constant. The only difference between the measures of variation is a slight difference in computation. See Blalock (1960) for these differences.

When using multiple-correlation technique there are three basic assumptions, linearity, homoscedasticity, and uncorrelated-behavior criteria which have to be met. Since this is an exploratory study and the results are restricted to population with similar characteristics, a fourth assumption of normality does not have to be adhered to.

Linearity refers to the degree the graphically plotted predictor-variable scores and boundary-activity scores can be described by a straight line. Homoscedasticity refers to the condition in which prediction is the same in the lower reaches of two variables (both variables having low scores) as in higher reaches (both variables having high scores). To determine if the linearity and homoscedasticity could be met, scattergrams are made of all

possible zero-order relationships between each social psychological predictor variables and the behavior criteria. After a study of these scattergrams, it was decided that given that relatively small sample for each of the three positional sectors and the characteristics of these data, linearity and homoscedasticity were present.

From the analysis presented in Chapter V it is known that the two types of police boundary-activity under study, interaction and referral activity, are slightly correlated. Consequently, it is also necessary to check to see if the third assumption regarding uncorrelated dependent measures was met. To check for probable spuriousness resulting from this condition, the data were subjected to a multivariance multiple regression analysis which takes into account the correlated dependent measures. See Finn (1968) for a description of the multivariance packaged computer program used for this analysis. It was found that even though the two behavior criteria were correlated, the strength of the relationship was not strong enough to affect the results which will be reported in subsequent sections.

Prediction of Police Boundary-Activity with Juvenile Probation Personnel

Data on 60 policemen[1] for seven predictor variables (five social psychological variables and two structural variables) were initially included in the multiple regression analysis of police interaction with members of Juvenile Probation. These seven variables produced a multiple R of .493 and explained 24.4 percent of the individual differences found in police interaction with Juvenile Probation workers.

When those variables of the overall regression equation which could have been included by chance were deleted, police rank was left as the only variable that significantly contributed to explanation of a portion of the total variance. Table 28 shows that this variable produced a correlation of .39 in the positive direction and explained 15.7 percent of the variation in police interaction with Juvenile Probation personnel.

The results of the multiple regression analysis to explain police referral activity are similar to the previous

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[1]The number of subjects for the multiple-correlation analysis and the five subsequent analyses will be reduced from the original N=69 because of a complete data requirement of the least square-deletion computer program. The frequency distributions, means, and standard deviations for all variables were computed using both the original sample and the reduced sample within each positional sector. It was found that as a result of reducing sample sizes there was little change in the shape of the distributions, means and standard deviations of the variables included in subsequent analyses.

Table 28. Proportion of variation in police officers' interaction with Juvenile Probation personnel explained by one predictor variable (N=55)

Predictor Variable	Correlation Coefficient	F
Rank	.392	10.6**
	$R = .392$ $R^2 = .157$	

**Significant at the .01 level.

analysis in this positional sector. After seven predictor variables were introduced into the least square deletion program, only one variable, rank, emerged as a significant contributant to the explanation of police referral to this agency. An inspection of Table 29 reveals that even though rank is a predictor, the relationships between this variable and police referral activity (.275) is weak.

With respect to both types of police boundary-activity with Juvenile Probation, the multiple correlation analysis revealed that none of the social psychological variables or the friendship linkage emerged as significant correlates of police boundary-activity. Only a relatively weak relationship was found between police rank and boundary-activity. Supervisors were slightly more inclined than patrolmen to have above-average interaction and referral activity with members of Juvenile Probation.

Table 29. Proportion of variation in police officers' referral activity with Juvenile Probation personnel explained by one predictor variable (N=55)

Predictor Variable	Correlation Coefficient	F
Rank	.275	4.34*
	$R = .275$ $R^2 = .076$	

*Significant at the .05 level.

Prediction of Police Boundary-Activity with DSS Personnel

Within the police:DSS positional sector, rank along with one social psychological variable, esteem, emerged as significantly contributing to the explanation of police interaction with members from this agency. Table 30 shows that combined, these variables produce a multiple correlation of .436 and explain 19 percent of police variation in interaction with DSS personnel. This means that given officers' rank and number of friends in DSS, the predicted interaction correlates .443 with the officers' actual interaction scores and accounts for 19 percent of the variation around the actual interaction mean.

The partial correlation coefficients reveal that both rank and esteem contribute equally to the amount of variance explained, and are positively related to interaction with DSS personnel. Police supervisors who favorably evaluate the performance of DSS personnel are inclined to

Table 30. Proportion of variation in police interaction with DSS personnel explained in two predictor variables (N=59)

Predictor Variable	Partial Correlation Coefficients	F
Rank	.308	5.85*
Esteem	.320	6.40**
	$R = .436$ $R^2 = .190$	

*Significant at the .05 level.

**Significant at the .01 level.

have above-average interaction with members of this agency. The magnitude of these relationships is, however, low.

The multiple correlation explanation of police referral activity with DSS personnel was found to be different from police interaction with members of this agency. Table 31 shows that police referral and friendship linkage emerged as correlated with police referral activity. Together these variables produced a multiple R of .398 and explained 15.8 percent of the total variance.

Given these findings, one would expect police supervisors who personally know an above-average number of DSS personnel to be inclined to above-average referral activity with these personnel. As in the case of other police boundary-activity discussed earlier, the relationships between the predictor variables and police referral activity is weak.

Table 31. Proportion of variation in police officers' referral activity with DSS personnel explained by two predictor variables (N=55)

Predictor Variable	Partial Correlation Coefficients	F
Rank	.30	5.29*
Friendship linkage	.28	4.31*
	$R = .398$ $R^2 = .158$	

*Significant at the .05 level.

It has been determined in the analysis within the police:DSS positional sector that slightly more of the total variation in police boundary-activity could be explained by considering several variables. In addition to rank, esteem emerged as related to police interaction and friendship linkage emerged as related to police referral activity. Even though one has confidence that these relationships do exist, the nature of them is such that they would not be classified as important enough for model-building purposes. That is, the risk of developing an experimental change model based on manipulating esteem and friendship in an effort to change police interaction and referral activity would be relatively great.

Prediction of Police Boundary-Activity with CAAP Personnel

Eight predictor variables were included in the multiple-regression analysis of police interaction with members of CAAP. An additional social psychological variable, police perception of Blacks, was considered because the members of CAAP are predominantly Black. It is logical to suspect that the more negative police perceptions are of Blacks, the less interaction these policemen will have with an agency made up of Blacks. However, this was not the case in Muskegon, Michigan. Perception toward Blacks was the second variable to be deleted because of insignificance in the prediction of police interaction with members of this agency.

With respect to the predictability of other variables, it was found that three variables, esteem, rank, and friendship linkages, produced a multiple R of .593 and explained 35 percent of the police officers' variation in interaction with members of CAAP. The partial correlations in Table 32 show that the magnitude of the relationship between each predictor variable and police interaction is approximately equal. Police supervisors whose level of esteem is above average and who know an above-average number of CAAP members on a personal basis are inclined to have above-average interaction with these personnel. These findings show that given the set of predictors of this study, more variation in police interaction with CAAP personnel can

Table 32. Proportion of variation in police officers' interaction with CAAP personnel explained by three predictor variables (N=51)

Predictor Variable	Partial Correlation Coefficients	F
Esteem	.365	7.21**
Rank	.345	6.35*
Friendship linkage	.320	5.35*
	$R = .593$ $R^2 = .351$	

*Significant at the .05 level.

**Significant at the .01 level.

be explained than interaction with members of other agencies. However, the magnitude of the relationship between the predictor variables and the behavior criteria is still as weak as was found in the prediction of police boundary-activity in other positional sectors.

In the analysis of the explanation of police referral activity with CAAP personnel, seven predictor variables were included in the multiple correlation analysis. Job satisfaction was not included in this analysis because it produced what is known in multiple correlation analysis as a "suppressor effect." A "suppressor effect" results from a condition where job satisfaction was found to be negatively correlated with police referral activity (-.10) and was highly positively correlated with police rank (.52).

Given this condition and a small sample of 48 subjects, the partial correlations were inflated and highly unstable. Job satisfaction was selected as causing this problem of analysis rather than police rank because only in the analysis regarding police referral activity with CAAP personnel did job satisfaction emerge as negatively correlated with police referral activity. Table 33 shows that two variables, police esteem for CAAP members and friendship linkage, emerged as being significantly correlated with police referral activity with members of this agency. It was found that the higher police esteem is for CAAP members and the more CAAP personnel are known on a personal basis, the more policemen will be inclined to refer clients to this agency. Combining these predictor variables produced a multiple R of .52 and explained 27 percent of the total variance. The magnitudes of these relationships as shown by the partial correlation coefficients is slightly stronger than was found between predictor variables and behavior criteria of previous analyses; however, the relationship is still considered to be low.

Within the police:CAAP positional sectors, the proportion of variation in police boundary-activity with members of CAAP which can be explained by several of the predictor variables of this study increased over previous analyses in other positional sectors. It was discovered, however, that the amount of variance left unexplained was still high for the magnitude of the relationship between

Table 33. Proportion of variation in police officers' referral with CAAP personnel explained by four predictor variables (N=48)

Predictor Variables	Partial Correlation Coefficients	F
Friendship linkage	.392	8.18**
Esteem	.350	6.33*
	$R = .521$ $R^2 = .271$	

*Significant at the .05 level.

**Significant at the .01 level.

those predictor variables emerging as significant, and police boundary-activity was still relatively weak.

One additional finding emerged from the prediction of the activity of police with CAAP. Two variables, esteem and friendship linkage, were found to contribute to most of the explained variance regarding both types of police boundary-activity. This suggests that if an experimenter intended to construct a change model designed to alter police boundary-activity with members of CAAP, his model should consider esteem and friendship linkages relatively important variables. Given the amount of variance unexplained in this study, however, additional predictor variables will have to be found before one could have sufficient confidence that police boundary-activity with this agency could be changed.

Summary and Discussion of Findings From the Multiple Correlation Analysis

The decision rule for deciding which predictor variables are important enough to be considered when developing a future change-model designed to manipulate policemen's level of interaction and referral activity, is made up of two criteria discussed earlier. Reiterating, these criteria are as follows:

1. There must be a significant contribution to explaining police boundary-activity.
2. There must be a realtively strong relationship between the predictor variable and police boundary activity.

The first criterion regarding statistical significance is a necessary, but not a sufficient condition for a variable to be selected as an important predictor variable. Table 34 summarizes the degree to which the social psychological and structural predictor variables meet this necessary condition.

When each social psychological variable's contribution to the explanation of police boundary-activity was assessed while controlling for all other predictors, esteem for personnel of each support agency emerged as the only significant predictor. It was found that this variable accounted for a significant portion of the total accountable variation in policemen's level of interaction with DSS and CAAP personnel, and referral to CAAP.

Table 34. Summary of the conditions under which predictor variables significantly contribute to the explanation of police boundary-activity with support agency personnel

Predictor Variable	Position Sector											
	Police:Juvenile Probation				Police:DSS				Police:CAAP			
	Interaction		Referral		Interaction		Referral		Interaction		Referral	
	Partial Correlation Coefficients	Level of Significance	Partial Correlation Coefficients	Level of Significance	Partial Correlation Coefficients	Level of Significance	Partial Correlation Coefficients	Level of Significance	Partial Correlation Coefficients	Level of Significance	Partial Correlation Coefficients	Level of Significance
Esteem	--	NS	--	NS	.33	*	--	NS	.39	**	.35	*
Operating philosophy disparity	--	NS	--	NS	--	NS	--	NS	--	NS	--	NS
Perceived integration	--	NS	--	NS	--	NS	--	NS	--	NS	--	NS
Job satisfaction	--	NS	--	NS	--	NS	--	NS	--	NS	--	NS
Work style	--	NS	--	NS	--	NS	--	NS	--	NS	--	NS
Perception toward Blacks	--	NS	--	NS	--	NS	--	NS	--	NS	--	NS
Rank	.39	**	.28	*	.31	*	.29	*	.35	*	--	NS
Friendship linkage	--	NS	--	NS	--	NS	.28	*	.32	*	.39	**

*Significant at .05 level. **Significant at .01 level. NS = Not significant.

Contrary to expectations, five of the six social psychological variables failed to meet the conditions necessary for consideration as important predictor variables. The most surprising aspect of the failure of these five variables to explain police boundary-activity was disparity in operating philosophy. As has been found by Miller (1958), Dienstein (1960), and Clark and Darroch (1968), disparity in operating philosophy along a punitive-treatment continuum does exist among social-control agents in Muskegon, Michigan. The results of this study also give some support to Dienstein's (1960) findings that larger discrepancies in ideologies exist between police and Juvenil Probation personnel than between police and personnel of several other social control agencies. This study showed that police and Juvenile Probation personnel were the most different in operating philosophy, and police and DSS personnel were the most alike.

It was found, however, that even though operating philosophy disparity between police officers and support-agency personnel does exist in Muskegon, there is no relationship between it and police boundary-activity with members of the respective support agencies. This finding indicates that differences between personnel of two agencies is not as problematic as suggested by the literature. This finding suggests that it is not important for future change-models designed to manipulate police interaction with, and

utilization of, support-agency services to be concerned with whether the police are punitive or treatment oriented.

Both structural predictor variables were found to be significantly related to police interaction and referral activity with members of at least two of the three support agencies. Police rank emerged as significantly related to interaction and referral activity with Juvenile Probation and DSS personnel, and to interaction with CAAP members. Friendship linkage emerged as related to police referral activity with DSS personnel and to both interaction and referral activity with CAAP members.

The emergence of both structural predictor variables as significantly related to police boundary-activity further suggests that the social psychological variables of this study are not appropriate predictors of police boundary-activity with personnel of the support agency being studied. Implications regarding those predictor variables which would possibly contribute more to explaining police boundary-activity will be discussed in Chapter VII.

Given the empirical findings generated by the multiple correlation analysis determining whether the necessary condition of significant contribution to the explanation of police boundary-activity was met, the acceptability of the hypotheses is stated with revised and further hypotheses added.

Hypothesis 4

The level of esteem of police officers for members of each support agency will significantly contribute to the explanation of police boundary-activity with members of the respective agencies.

Acceptability: This hypothesis was found to be accepted in part.

Revised Hypothesis 4

a. Police officers' level of esteem for DSS and CAAP personnel will significantly contribute to explaining their level of interaction with these personnel.

b. Police officers' level of esteem for CAAP personnel will significantly contribute to explaining their level of referral activity with members from this agency.

Hypothesis 5

Operating philosophy disparity between police and support agency members will significantly contribute to the explanation of police boundary-activity with members of the respective support agencies.

Acceptability: This hypothesis cannot be accepted.

Hypothesis 6

Police officers' perceptions of integration with support agencies will significantly contribute to the explanation of police boundary-activity with members of each specific support agency.

Acceptability: This hypothesis cannot be accepted.

Hypothesis 7

Police officers' degree of satisfaction with their jobs will significantly contribute to the explanation of their boundary-activity with members of each specific support agency.

Acceptability; This hypothesis cannot be accepted.

Hypothesis 8

Police officers' work style along a controlling-supportive continuum will significantly contribute to the explanation of their boundary-activity with members of each specific support agency.

Acceptability: This hypothesis cannot be accepted.

Hypothesis 9

Police perception toward Blacks along a negative-positive continuum will contribute significantly to the explanation of their boundary-activity with personnel from CAAP.

Acceptability: This hypothesis cannot be accepted.

Additional Hypotheses

Hypothesis 10

Police officers' rank in a police organization will significantly contribute to explaining their level of interaction with members of each support agency.

Hypothesis 11

Police officers' rank in the police organization will significantly contribute to explaining their level of referral activity with Juvenile Probation and DSS personnel.

Hypothesis 12

Police officers' friendship linkage established with CAAP members will significantly contribute to explaining their level of interaction with members of this agency.

Hypothesis 13

Police officers' friendship linkages established with DSS and CAAP members will significantly contribute to explaining their level of referral activity with members of these agencies.

Given that the selected predictor variables have met the necessary conditions for consideration as important variables for model-building purposes, the magnitude of the relationship between each significant predictor (in a statistical sense) and police boundary-activity while controlling for all other predictor variables, has to be assessed. This assessment is to determine whether that variable is important enough to meet sufficient conditions for constructing a change model.

It was found that although the three predictor variables emerged as significantly related to police boundary-activity with specific support agency personnel, the magnitude of these relationships were relative low. The two highest partial correlations to emerge were between police rank and interaction with Juvenile Probation (.39), and police friendship linkages with CAAP (.39). These findings suggest that while rank, esteem for DSS and CAAP personnel, and friendship linkages with DSS and CAAP personnel may be necessary variables to consider when developing a change model designed to alter either police interaction or referral activity, they alone do not sufficiently account for enough of the total variation in individual police officers' level of boundary activity. In the case of police boundary-activity with Juvenile Probation and DSS personnel, the highest R^2 was .19, while 35 percent was the highest amount of variance explained

with respect to police activity with CAAP personnel. As can be seen, much of the variance is left unexplained.

CHAPTER VII

CONCLUSIONS AND IMPLICATIONS

The rapid social changes which have occurred during the 1900's--increased population, migration to cities, the quest of minority-group members for upward mobility--have possibly created a setting that requires social-regulatory agencies to join together in an effort to deal more effectively with problems of social control. Any one regulatory agency may be at a disadvantage if it attempts to isolate a set of social control responsibilities and function in a vacuum separate from other regulatory agencies. Failure to establish working relationships with other agencies may lead to less effective regulation of, and assistance to, people with problem behavior. Several national commissions established to study social control problems have also suggested that lack of cooperation among control organizations could be contributing to the ineffectiveness of prevention and control of community problems (National Advisory Commission on Civil Disorders and the President's Commission on Law Enforcement and Administration of Justice, 1967). Literature discussed in Chapter I further suggests that adoption of common goals and working relationships among

social-regulatory organizations is necessary for effective dealing with problems in the area of social control.

It would seem that the conditions of interorganizational linkage would be especially important to law-enforcement agencies, for society has required that personnel of these agencies have a variety of responsibilities ranging from purely supportive to purely controlling in nature. That is, on the one hand Cumming's (1965) description of the policeman as a "philosopher, guide and friend" is expected, and on the other hand his role requires him to suppress and isolate disruptive behavior. Past research has shown that some citizens expect the police to concentrate more on service kinds of tasks (supportive function) while other citizens feel that the police should be primarily responsible for "enforcing the law," (controlling function) (Moore, 1970).

Given this wide range of responsibilities, police working relationships with other agencies retaining a variety of specialists, could possibly assist policemen in effectively dealing with particular problems requiring skills beyond the scope of their own training. Thus, operationally working relationships require that police officers have regular interaction with, and utilization of, various services of other agencies which are at his disposal.

A literature survey discussed in Chapter I found that even though relations between the police and other regulatory agencies can be considered an important phenomena

to be studied, there is a paucity of research. In an effort to generate more knowledge about these relationships, this investigation has dealt in detail with police interaction and referral activity with three supportive-type organizations. It is the first of its kind to be concerned with describing and explaining individual differences occurring with respect to policemen's behavior across the boundary of their own organization.

Conclusions

The important findings generated by this investigation are as follows:

1. It was discovered that there are significant differences in Muskegon police officers' levels of interaction and referral activity with members of support agencies. Officers had in descending order the highest level of interaction and referral with Juvenile Probation, DSS, and CAAP personnel, respectively.

2. It was discovered that the police had significantly higher levels of interaction than referral activity with members of each of the support agencies.

3. Given that significant differences exist between levels of police interaction, it was further determined that police officers' levels of interaction with CAAP personnel were similar to the level of referral activity with these personnel for a majority of the police officers (65 percent). It was also found that 56 percent of the officers had no interaction or referral activity with personnel of CAAP.

4. It was determined that police officers in descending order had the highest level of esteem for Juvenile Probation, DSS, and CAAP personnel, respectively.

5. It was found that the greatest discrepancy in operating philosophy along a punitive-treatment continuum was between policemen and Juvenile Probation personnel, and the least discrepancy existed between policemen and members of DSS.

6. It was discovered that police officers' scores pertaining to perception of integration with social service agencies, their satisfaction with how the departmental affairs were being managed, e.g., handling disciplinary action, probations, etc., and their perception toward Blacks were normally distributed over the entire range of the scales. Approximately 20 percent of the officers had distinct negative feelings with respect toward: (1) working in general with social service agencies (integration), (2) being satisfied with promotions, disciplinary action, job evaluation, etc. (job satisfaction), and (3) Blacks as a minority group.

7. It was found that on the average policemen felt that helping citizens with personal problems such as family disputes, neighborhood disagreements, etc., was perceived as only a slightly important aspect of his job.

8. The multiple correlation analysis revealed that no predictor variables considered in this study met both necessary and sufficient conditions for construction of a

change-model, i.e., conditions where a predictor variable emerged as making a statistically significant contribution to explaining either interaction or referral activity and the magnitude of the relationship was relatively strong. It was found, however, that one of the six social psychological predictors, policemen's level of esteem for DSS and CAAP personnel, emerged as significantly contributing to the total amount of variance explained in cases of police interaction activity with members of DSS and CAAP and referral activity with members of CAAP. The direction of the relationships indicated that those policemen who had an above-average level of esteem were inclined to have above-average interaction activity with members of these agencies. Assessing the magnitude of relationships, it was found that this predictor variable could only meet necessary conditions regarding its importance in the development of a change model designed to change police officers' level of interaction and referral activity with DSS and CAAP personnel.

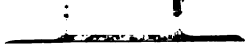
9. In addition to esteem emerging as a statistically significant predictor, two structural variables, police rank and friendship linkage, also made a contribution to explaining specific types of police boundary-activities. Police rank helped explain interaction and referral activity with juvenile probation and DSS personnel and interaction with members of CAAP. This predictor variable's relationship with the behavior criteria indicates that police supervisors (sergeants and above) were more

inclined to have above-average interaction and referral activity than patrolmen were.

It was also found that police officers' friendship linkage with members of DSS and CAAP produced a significant contribution to explaining police referral activity with DSS personnel and both types of boundary-activities with members of CAAP. The relationship between this variable and the behavior criteria indicates that officers who know an above-average number of DSS and CAAP personnel on a personal basis are inclined to have above-average interaction and referral activity with members of these agencies.

As in the case of police esteem, both rank and friendship linkage were found to be relatively weakly related to police boundary-activity. Thus, one can conclude that it may be necessary to consider these variables along with other variables found to be important only when developing a change model to change police officers' level of interaction and referral activity with DSS and CAAP personnel.

10. It was found that those predictor variables of this study which emerged as significant in the explanation of police interaction and referral activities accounted for nearly twice as much variance within the police:CAAP positional sector than either the police:Juvenile Probation or the police:DSS positional sectors. However, in the case of explaining police interaction and police referral activity



with members of this agency, 65 percent and 69 percent were still left unexplained.

Reliability of the Findings

Reliability is an important concept when making statements about the phenomena under study. In this investigation three checks were made to ensure that reliable results would be produced. First, through the use of cluster-analysis, only reliable variables were chosen for further study. The reliability of the behavior criteria discussed in this analysis was found to be lower than is desirable, however when other criteria, factor loadings, communality, collinearity, were considered, these behavior variables were deemed acceptable. In the case of the predictor variables, the reliability ranged from .80 to .91.

Given reliable measures, a second reliability check was made in cases where mean differences and correlations were of interest, by determining whether the findings occurred beyond chance. Normally, significance tests are used to assure the analyst that his findings can be generally applied to a larger population; however in this study it assured the analyst that if the study were repeated using the same sample, the same findings would emerge.

A third reliability check was made in the use of multiple-correlation procedures to locate an important predictor variable explaining a portion of the variation in police boundary-activity, by observing the extent to which

a predictor emerged in more than one positional sector. This check is necessary since it is known that beta weights and partial-correlation coefficients are unstable when using multiple-correlation techniques with a small sample size. In this study those predictor variables that were identified as satisfying necessary conditions for model-building purposes were found to be significant in at least two of the three sectors. Thus, it was concluded as a result of this cross-validation, that the relationships found were real.

Implications

In Muskegon, Michigan, it was found that the police have established working relationships with Juvenile Probation personnel and to a lesser degree with members of DSS. Little interaction and referral activity of policemen with CAAP personnel was interpreted as an indication of little or no relationship being established between the police and this agency. Further, it was found that referral activity with personnel of these three support-agencies was relatively low for all three agencies. This indicates that although interaction occurs between the police and support agencies, policemen are attempting to handle problems encountered in their job without requesting actual assistance.

In this study an attempt was also made to determine why the working relationships varied according to support-agency, and why there was a relatively low referral activity with members of these agencies. Social psychological predictor variables were suggested by the literature as possibly

determining the foregoing behavioral patterns. In addition, two structural variables which were found to cause a possibly spurious relationship were considered as extraneous variables. The findings of this analysis suggested foremost that in order to sufficiently explain why Muskegon policemen interact with, and refer clients to, supportive-type agencies, predictor variables other than those social psychological variables of the present study will have to be considered. Similar findings regarding the predictability of social psychological variables have been found in research pertaining to other phenomena. Deutscher (1966) discussed a number of studies where attitudes were found not to be related to behavior. This author stated,

> A cursory review of the conceptual frameworks within which most of us work suggests that no matter what one's theoretical orientation may be, he has no reason to expect to find congruence between attitudes and actions.

Similarly, Fairweather (1960, 1970) found that when over 200 variables of his mental-health studies were subjected to a cluster analysis, no perceptions or attitude variables clustered with the behavior criteria.

The ultimate question then is what domain of predictor variables could be sampled in an effort to find variables to sufficiently explain police officers' levels of boundary-activity with personnel of support agencies. The findings of the present study offer several suggestions. First, two structural variables, rank and friendship linkage, when introduced into the analysis, produced nearly consistent

contributions toward partial explanation of police boundary-activity with members of all of the support agencies in the study. These findings suggest that elements of the police organization and established structural networks linking the two organizations tend to be related to individual police officers' behavior across organizations.

Second, the patterns regarding the level of police interaction and referral activity with each of the three, offers additional evidence for sampling predictor variables from a structurally variable domain. Recalling these patterns from Chapter V, it was found that more police boundary-activity occurred with Juvenile Probation than with either DSS or CAAP personnel. It was found that police interaction and referral activities were greater with DSS personnel than with members of CAAP. Possibly one explanation for this occurrence, as suggested earlier, is in the formal structural ties, such as common goals, between the police and each of the three support agencies.

In the case of police and Juvenile Probation, one common goal is that personnel from both agencies be involved in processing youthful offenders. That is, the criminal process is designed so that the police apprehend and the Juvenile Probation agency handle the processing after the youth has been turned over to the court. Given this common goal, individual differences among police officers' interaction and referral activity with members of this agency could be partially explained by the number of youth

processed, one operational definition of an interagency network.

Similarly, police and DSS also have common goals such as processing cases of neglected children (a DSS responsibility in Michigan) and dealing with youth on parole from correctional institutions. Since police tend to have fewer cases legally requiring them to utilize the service of DSS, one would expect less interaction with, and referral to, this agency than in the case of Juvenile Probation.

On the other hand, there are no formal ties as defined by law, between police and CAAP. Consequently, it is expected as was found in this study, that police interaction and referral activity with members of this agency would be least.

Common goals that define formal interdependence are only one category of the structural variables that could be considered in attempting to explain specific police behavior. It may be found that such variables as reward systems or performance evaluation are highly related to specific police behavior; which in turn could be manipulated to encourage police to interact or refer clients to support agencies. These are all empirical questions.

A secondary objective of this study was to explore the use of multivariate data-analysis techniques in social science research. As can be seen from the presentation of the results generated by various multivariate analysis procedures, a vivid picture of the phenomena being studied

can be presented. Using these techniques, the analyst has at his disposal means of looking at all of the data simultaneously and in a variety of ways. For example, in the present study nearly 100 variables (questionnaire items) were reduced by cluster analysis to 11 reliable cluster variables characterizing the original set of variables. Further, by using the multivariate analysis of variance and "O" analysis and multiple correlation techniques, the various relationships of interest were observed while taking into consideration the influence of the other variables being studied.

An additional advantage of using multivariate analysis of variance-model and "O" analysis is that there are fewer assumptions regarding the structure of the data that have to be met. This advantage is highly desirable since often when studying social science phenomena, assumptions such as equal variance across groups and "within" groups cannot be met.

There are, however, several disadvantages to be noted. First, analyses using the various techniques of this study are expensive. The complex packaged computer program available to do the analysis is so designed that large amounts of computer time are needed to perform the computations. Second, several of the techniques, multivariate analysis of variance and Tryon's "O" analysis, are relatively new data-analysis procedures. Thus, availability of a computer package program to do the computations is a

problem. Few universities have these procedures in computer-packaged form.

Summary Statement

The primary objective of this pilot study has been, first, to generate detailed descriptions of police officers' interaction and referral activity patterns, and second to locate important predictor variables which can satisfy necessary and sufficient conditions for consideration when constructing a future change model to manipulate these police behaviors.

A secondary objective has been to explore the use of powerful data-analysis techniques which can efficiently describe the phenomena being studied and identify important predictor variables of interest. The emphasis has been on determining the applicability of a multivariate data analysis to research in the area of interorganization relations.

Since this study exclusively concerns a specific set of regulatory organizations in one relatively small city, its findings can be generally applied only to a setting with similar characteristics. It can be viewed as a trial unit on a small scale for future research and construction of experimental change models.

BIBLIOGRAPHY

Adorno, T. W., Else Frenkel-Brunswick, D. J. Levinson, and R. N. Sanford. The Authoritarian Personality. New York: Harper, 1950.

Agricultural Experiment Station. Stepwise Deletion of Variables from a Least Squares Equation. STAT Series Description No. 8, 1969.

Aiken, Michael, and Jerald Hage. "Organizational Interdependence and Intra-Organizational Structure." American Sociological Review, XXXII (1968), 912-920.

Alport, G. W. The Nature of Prejudice. Cambridge: Addison-Wesley, 1954.

Anderson, N. H. "Scales and Statistics: Parametric and Nonparametric." Psychological Bulletin, LXVIII (1961), 305-316.

Angell, John E. "Toward an Alternative to the Classical Police Organizational Arrangements: A Democratic Model." To be published in Criminology, 1971.

Banton, Michael. The Policeman in the Community. New York: Basic Books, 1965.

Bard, Morton. Training Police as Specialists in Family Crisis Intervention. Washington, D.C.: Government Printing Office, 1970.

Bass, Bernard M. Organizational Psychology. Boston: Allyn and Bacon Inc., 1965.

Bayley, D. H., and H. Mendelsohn. Minorities and the Police: Confrontation in America. New York: The Free Press, 1969.

Bittner, Egon. "The Police on Skid Row: A Study of Peace Keeping." American Sociological Review, XXXII (1967), 699-715.

Black, D. J., and Albert J. Reiss, Jr. Studies in Crime and Law Enforcement in Major Metropolitan Areas. Washington, D.C.: Government Printing Office, 1967.

Blau, Peter M., and Richard Scott. Formal Organizations. San Francisco: Chandler Publishing Company, 1962.

Blalock, Hubert M. Social Statistics. New York: McGraw-Hill Book Company, 1960.

Boch, Darrell R. "Multivariate Analysis of Variance of Repeated Measurements." In Problems in Measuring Change. Edited by Chester W. Harris. Madison: University of Wisconsin Press, 1963, pp. 85-103.

Bonjean, Charles M., Richard J. Hill, and S. Dale McLemore. Sociological Measurement: An Inventory of Scales and Indices. San Francisco: Chandler Publishing Company, 1967.

Bradley, James V. Distribution-Free Statistical Tests. New Jersey: Prentice Hall, Inc., 1968.

Burke, C. J. "Additives Scales and Statistics." Psychological Review, LX (1953), 73-75.

Christian, Thomas. "The Perception of Social Agency Personnel Toward the Police: A Study Conducted in Muskegon, Michigan." Unpublished Master's thesis, Michigan State University, 1971.

Clark, Burton R. "Interorganizational Patterns in Education." Administrative Science Quarterly, X (1965), 224-237.

Clark, John P., and Dorothy Darroch. "Inter-Organizational Imagery and Relations Among Social Control Agencies in Japan." Paper presented for the American Sociological Association, Boston, Massachusetts, 1968.

Clark, John P., and Richard Hall. "Toward the Measurement of Interorganizational Relationships." Paper read at American Sociological Association Annual Meeting, 1969, pp. 1-12.

Clark, John P. "Effectiveness of Regulatory Systems for Problem Youth Research Plan." Preliminary research proposal submitted to Law Enforcement Administration Assistance, 1970.

Cohen, Jacob. "Some Statistical Issues in Psychological Research." Handbook of Clinical Psychology. Edited by B. Wolman. New York: McGraw-Hill, 1965, pp. 95-121.

Connelly, Richard A. "Monitoring Communication Behavior of Organizational Employees as a Predictor of Work Satisfaction." Unpublished Master's thesis, Michigan State University, 1970.

Conover, W. J. Practical Non-Parametric Statistics. New York: Wiley, 1971.

Cornfield, Jerome, and John W. Tukey. "Average Values of Mean Square in Factorials." The Annals of Mathematical Statistics, XXVII (1956), 907-949.

Cumming, Elaine, and Charles Harrington. "Clergyman as Counselor." The American Journal of Sociology, LXIX, No. 3 (1963), 234-243.

Cumming, Elaine. "Phase Movement in the Support and Control of the Psychiatric Patient." Journal of Health and Human Behavior, III, No. 4 (1962), 235-241.

Cumming, Elaine, Ian M. Cumming, and Laura Edell. "Policeman as Philosopher, Guide and Friend." Social Problems, XII, No. 3 (1965).

Cumming, Elaine. Systems of Social Regulation. New York: A. Therton Press, 1968.

Deutscher. "Words and Deeds: Social Science and Social Policy." Social Problems, XIII, No. 3 (1966).

Dienstein, W. "Conflict of Beliefs About Causes of Delinquency." Crime and Delinquency, VI, No. 3 (1960), 287-293.

Dill, William R. "The Impact of Environment on Organizational Development." (1958) In Concepts and Issues in Administrative Behavior. Edited by Sidney Mailick and E. H. VanNess. Englewood Cliffs, New Jersey: Prentice-Hall, 1962.

Evan, William M. "The Organization Set: Toward a Theory of Interorganizational Relations." In Approaches of Organizational Design. Edited by James Thompson. Pittsburgh: University of Pittsburgh Press, 1966.

Fairweather, G. W. Social Psychology in Treating Mental Illness. New York: John Wiley and Sons Inc., 1964.

Fairweather, G. W., D. H. Sanders, David L. Cressler, and Hugo Maynard. Community Life for the Mentally Ill. Chicago: Aldine Publishing Co., 1969.

Gross, N., Ward S. Mason, and Alexander W. McEachern. Explorations in Role Analysis. New York: John Wiley and Sons Inc., 1958.

Haurek, E., and John Clark. "Variants of Integration of Social Control Agencies." Social Problems, XV, No. 1 (1967), pp. 46-60.

Johnson, Knowlton W. "Examining Probation Behavior and Perceptions of Law Enforcement, and Social Agency Personnel: An Evaluation of In-Service Training Program." Final Report submitted to Michigan Crime Commission, 1971.

Lancaster, Richard Bailey. "Interdependency and Conflict in a Consortium for Cooperation in Higher Education: Toward a Theory of Interorganizational Behavior." Unpublished Ph.D. dissertation, University of Michigan, 1969.

Litwak, Eugene, and Lydia Hylton. "Inter-Organizational Analysis: A Hypothesis on Coordinating Agencies." Administrative Science Quarterly, VI, No. 4 (1962), 395-420.

Levine, Sol, and Paul E. White. "Exchange as a Conceptual Framework for the Study of Inter-Organizational Relationships." Administrative Science Quarterly, V, No. 4 (1961), 584-601.

Livingston, James A. "Unification and Fragmentation Among Educator Organizations: An Interorganizational Analysis." Unpublished Ph.D. dissertation, University of California, Berkeley, 1968.

Lord, F. M. "On the Statistical Treatment of Football Numbers." American Psychologist. VIII (1953), 750-751.

McCaffrey, I., Elaine Cumming, and Claire Rudolph. "Mental Disorders in Socially Defined Populations." American Journal of Public Health, LIII (1963), 1025-1030.

McNamara, John H. "Role Learning for Police Recruits; Some Problems in the Process of Preparation for the Uncertainties of Police Work." Unpublished Ph.D. dissertation, University of California at Los Angeles, 1967.

McNamara, John H. "Uncertainties in Police Work: The Relevance of Police Recruits' Backgrounds and Training." In The Police: Six Sociological Essays. Edited by D. Bordua. New York: John Wiley and Sons, 1967.

March, James G., ed. Handbook of Organization. Chicago: Rand McNally, 1965.

Miller, Walter B. "Inter-Institutional Conflict as a Major Impediment to Delinquency Prevention." Human Organization, XVIII, No. 3 (1958), 20-23.

Moore, Merlyn D. "A Study of Certain Community Characteristics in Relation to Community Attitudes of the Police in the City of Muskegon, Michigan." Unpublished Master's thesis, Michigan State University, 1970.

Morris, Robert. "Basic Factors in Planning for the Coordination of Health Services, Part I." Journal of Public Health, LIII, No. 3 (1963), 463-472.

Osgood, Constance. "Interorganization Transactions: A Model for the Study of Organizational Relationships." Unpublished Ph.D. dissertation, University of Kansas, 1969.

Pfiffner, John M. The Function of the Police in a Democratic Society. Los Angeles: University of Southern California: Civic Center, 1967.

President's Commission on Law Enforcement and Administration of Justice. Report of the Commission. The Challenge of Crime in a Free Society. Washington, D.C.: Government Printing Office, 1967.

Pruden, Henry O. "The Industrial Salesman: A Study of Interorganizational Conflict and Cooperation." Unpublished Ph.D. dissertation, University of Oregon, 1968.

Reid, William. "Interagency Coordination in Delinquency Prevention and Control." Social Service Review, December, 1964, pp. 418-428.

Reiss, Albert J., and David J. Bordua. "Environment and Organization: A Perspective of the Police." In The Police: Six Sociological Essays. Edited by David Bordua. New York: John Wiley, 1967.

Report of the National Advisory Commission on Civil Disorders. New York: New York Times Company, 1968.

Ridgeway, V. F. "Administration of Manufacturer-Dealer Systems." Administrative Science Quarterly, II (1967), 464-483.

Rokeach, Milton. The Open and Closed Mind. New York: Basic Books, 1966.

Stouffer, S. A., et al. Measurement and Prediction. Princeton: Princeton University Press, 1950.

Tryon, Robert C. "Reliability and Behavior Domain Validity: Reformulation and Historical Critique." Psychological Bulletin, LIV, No. 3 (1957), 229-249.

Tryon, Robert C. "Cumulative Communality Cluster Analysis." Educational and Psychological Development. XVIII, No. 3 (1958), 3-35.

Tryon, Robert C. "General Dimensions of Individual Differences, Cluster Analysis vs. Multiple Factor Analysis." Educational and Psychological Development. XVIII, No. 3 (1958), 477-495.

Tryon, Robert C. "Person-Clusters on Intellectual Abilities and on MMPI Attributes." Multivariate Behavioral Research, II, No. 1 (1967), 5-34.

Tryon, Robert C., and Daniel Bailey. Users' Manual of the BCTRY System of Cluster and Factor Analysis. Berkeley, California, 1968.

Tryon, Robert C., and Daniel E. Bailey. Cluster Analysis. New York: McGraw Hill, 1970.

Turk, Herman. "Comparative Urban Studies in Inter-organizational Relations." Sociological Inquiry, XXXIX (1969), 108-110.

U.S. Census of Population, General Summary, Social and Economic Characteristics. Washington, D.C.: Government Printing Office, 1960.

Warren, Roland L. "The Interorganizational Field as a Focus for Investigation." (1967) Strategies of Organization, Edited by Fred M. Cox, John L. Erlich, Jack Rothman, and John E. Tropmans. Chicago, Illinois: F. E. Peacock, Publishers, 1970.

Wharf, Brian W. "Boundary Personnel: An Exploratory Study of Their Role Responsibility and Interorganizational Behavior." Unpublished Ph.D. dissertation, Brandeis University, 1969.

Wilson, James Q. Varieties of Police Behavior. Cambridge, Massachusetts: Harvard University Press, 1968.

APPENDICES

APPENDIX A

QUESTIONNAIRE ITEMS PERTAINING TO THE INTER-AGENCY TRAINING PROGRAM

APPENDIX A

QUESTIONNAIRE ITEMS PERTAINING TO THE INTER-AGENCY TRAINING PROGRAM[1]

1. The item that measured benefit perceived by police from visiting support agencies.

   To what extent do you feel that you benefited from visiting several social agencies in Muskegon?

	Visits to Either Circuit Court or Juvenile Court	Visits to Either Dept. of Social Services or CAAP
(4) Benefited a great deal	( )	( )
(3) Benefited somewhat[2]	( )	( )
(2) Benefited slightly	( )	( )
(1) Did not benefit at all	( )	( )

2. The item that measured benefit perceived by support agency personnel from police visits to their respective agencies.

   To what extent do you feel that you benefited from the officers visiting your agency?

   (4) _____ Benefited a great deal
   (3) _____ Benefited somewhat[2]
   (2) _____ Benefited slightly
   (1) _____ Did not benefit at all

---

[1]Numbers preceding or above response categories are assigned codes. They did not appear in the questionnaire. Additionally, these items were developed by the present researcher.

[2]Benefited-somewhat and benefited-slightly categories were collapsed into one category referred to as some benefit.

3. The item that measured police and support agency personnel's perception of the need for more inter-agency training.

	(4) Strongly Agree	(3) Agree More Than Disagree	(2) Some What Agree	(1) Do Not Agree At All
There should be more police in-service training involving your department	( )	( )	( )	( )

APPENDIX B

QUESTIONNAIRE ITEMS THAT MEASURE TYPES OF BOUNDARY-ACTIVITY

APPENDIX B

QUESTIONNAIRE ITEMS THAT MEASURE TYPES OF BOUNDARY-ACTIVITY[1]

Instruction

Now I would like to ask you some questions about your job as it relates to several agencies in Muskegon--Circuit Court, Juvenile Court, Department of Social Services, and Community Action Against Poverty (CAAP) which includes Townsend Neighborhood Center and Legal Aid. Some possible answers are given for each question, however these responses listed for several of the questions may not be exhaustive. Feel free to write in additional information that is not provided.

1. (C1) How many times each month on the average do you have contact with each of the following agencies?

	(1) 0	(2) 1-2	(3) 3-5	(4) 6-10	(5) 11-19	(6) 20 or Over
Circuit Court[2]	( )	( )	( )	( )	( )	( )
Dept. of Social Services	( )	( )	( )	( )	( )	( )
Juvenile Court	( )	( )	( )	( )	( )	( )
CAAP (includes Townsend Neighborhood & Legal Aid)	( )	( )	( )	( )	( )	( )

[1](C1) indicates that this item was used to form composite scores for police officers' level of interaction. (C2) indicates that this item was used to form composite scores for police officers' level of referral.

[2]Information in this and subsequent items that pertain to Circuit Court is not included in the present study.

2. (C1) In the usual pursuit of your job, what kind of contact (if any) do you generally have with personnel of the agencies listed below? (Check the right answer(s) for you for each agency.)[3]

	No Contact	Telephone	Face to Face Contact	Written Information	Talking with Clients	Other (specify at bottom of page)
Circuit Court	( )	( )	( )	( )	( )	( )
DSS	( )	( )	( )	( )	( )	( )
Juv. Court	( )	( )	( )	( )	( )	( )
CAAP (includes Townsend Neighborhood Center and Legal Aid)	( )	( )	( )	( )	( )	( )

If you checked Other in Question 2, please specify the kind of contact in the space below.

3. All things considered, do you see any need for a significant change in the contact between your agency and the others listed below?

	No	Yes, Increase	Yes, Decrease
Circuit Court	( )	( )	( )
Dept. of Social Services	( )	( )	( )
Juvenile Court	( )	( )	( )
CAAP (includes Townsend Neighborhood Center and Legal Aid)	( )	( )	( )

4. Thinking back over this past summer (June to now) you can probably recall situations where you as a police officer decided for one reason or another not to take into custody an adult or youth who had committed some minor offense (e.g., public intoxication, public fighting, etc).

How often this summer have you decided not to take an adult or youth into custody for committing some minor offense?

_____0 _____1-2 _____several _____many

---

[3]No contact responses received a code of 1;
1 medium of exchange received a code of 2;
2 mediums of exchange received a code of 3; and
3 or more mediums of exchange received a code of 4.

5. (C2) In those cases this past summer where you decided not to take into custody some adult or youth for committing a minor offense, how often did you personally contact or inform the involved person(s) to contact a specific helpful person employed with the folling agencies?

	0 Times	1-2 Times	Several Times	Many Times
Circuit Court	( )	( )	( )	( )
Dept. of Social Services	( )	( )	( )	( )
Juvenile Court	( )	( )	( )	( )
CAAP (includes Townsend Center and Legal Aid)	( )	( )	( )	( )

6. (C2) During this past summer (June to now) you probably have had a number of calls in which there was no violation of the law (family disputes, trouble with youth, etc.), however it was apparent that there were problems which should be taken care of by someone. In these kind of cases how often have you personally contacted or informed the people involved to contact a specific helpful person employed with the following agencies?

	0 Times	1-2 Times	Several Times	Many Times
Circuit Court	( )	( )	( )	( )
Dept. of Social Services	( )	( )	( )	( )
Juvenile Court	( )	( )	( )	( )
CAAP (includes Townsend Center and Legal Aid)	( )	( )	( )	( )

Instructions

In the following section you are asked questions about several other agencies within the community with which Muskegon policemen may have had contact in the past. Express your opinion by checking the appropriate space following each statement. (Each statement is preceded by a number.)

In the course of your work, you find a situation which is best handled by Juvenile Court, DSS, or CAAP workers, to what degree do you:

	(4) Almost Always	(3) Often	(2) Some-times	(1) Never
7. Avoid or ignore the situation. Turn to someone else for aid.[4]	( ) ( )	( ) ( )	( ) ( )	( ) ( )
8. Take care of things yourself rather than contacting a Juvenile Court worker.	( )	( )	( )	( )

In the course of your work, you find a situation which is best handled by CAAP (includes Townsend Neighborhood Center and Legal Aid), to what degree do you:

	Almost Always	Often	Some-times	Never
7. Avoid or ignore the situation. Turn to someone else for aid.[4]	( ) ( )	( ) ( )	( ) ( )	( ) ( )
8. Take care of things yourself rather than contacting the appropriate agency.	( )	( )	( )	( )

In the course of your work, you find a situation which is handled by welfare workers, to what degree do you:

	Almost Always	Often	Some-times	Never
7. Avoid or ignore the situation. Turn to someone else for aid.[4]	( ) ( )	( ) ( )	( ) ( )	( ) ( )
8. Take care of things yourself rather than contacting the appropriate agency.	( )	( )	( )	( )

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[4]Because of response inconsistencies, it was felt that this item was ambiguous; consequently, it was not included in the cluster analysis.

APPENDIX C

QUESTIONNAIRE ITEMS THAT WERE CONSIDERED AS MEASUREMENTS OF PREDICTOR VARIABLES

APPENDIX C

QUESTIONNAIRE ITEMS THAT WERE CONSIDERED AS MEASUREMENTS OF PREDICTOR VARIABLES

Items that were considered as measurements of police esteem (Cluster 1).[1]

Would you evaluate Juvenile Court, DSS, and CAAP (includes Townsend Neighborhood Center and Legal Aid) workers according to the following criteria:

		(4) Excellent	(3) Good	(2) Fair	(1) Poor
*1.	Type of persons they are, in general	( )	( )	( )	( )
*2.	Their knowledge of how to handle matters related to your work.	( )	( )	( )	( )
*3.	The actual way they handle matters related to your work.	( )	( )	( )	( )
*4.	Their working relationship with your organization.	( )	( )	( )	( )
*5.	The emphasis they put upon the welfare of the whole community.	( )	( )	( )	( )
6.	The emphasis they put upon the welfare of the individual.	( )	( )	( )	( )
*7.	Their freedom from nonprofessional influence (like personal interests and those of politicians, and others)	( )	( )	( )	( )
*8.	Everything about the agency (being evaluated) in general.	( )	( )	( )	( )

Items which were used to determine differences in police and support agency personnel's operating philosophy along a punitive-treatment continuum (Cluster 2). An asterisk indicates that the item was used to form composite scores.

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[1]These items are a product of Clark (1967). An asterisk indicates that the item was used to form composite scores for Cluster 1.

For each of the following issues select that side of the issue which comes closest to being in line with your thinking. Please indicate by circling the latter preceding your side. Read both sides of the issue (a and b) before indicating the side with which you agree.[2]

For Example:

a. The church is an institution which restricts itself solely to religious affairs.
(b.) The church is an institution which becomes involved in social problems.

1(3)a. As a whole home-staying treatment (probation, halfway houses, etc.) is better than institutional treatment (prison) as a method of rehabilitation.
(1)b. As a whole institutional treatment (prison) is better than home-staying treatment as a method of rehabilitation.

2(3)a. Protecting the community should be the most important goal of any agency who handles persons labelled criminals.
(1)b. Helping the individual should be the most important goal of any agency who handles persons labelled criminals.

3(1)a. Sentencing should be based on the type of crime.
(3)b. Sentencing should be based on the needs of the offender.

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[2]These items are modifications of items used by Clark and Darroch (1968).

Below is a list of approaches which can be used to combat the crime problem.[3] How effective do you feel that each of these approaches are in reducing crime:

		(5) Very Effective	(4) Effective	(3) Somewhat Effective	(2) Slightly Effective	(1) Not Effective
4.	Placing primary emphasis on correcting a person's deviant behavior as opposed to punishing him.	( )	( )	( )	( )	( )
*5.	Remove recent Supreme Court restrictions on police use of wiretapping, Miranda warning, search and seizure and confessions.	( )	( )	( )	( )	( )
6.	Allocate more money for treatment of criminals than for apprehension of criminals.	( )	( )	( )	( )	( )
*7.	More emphasis on keeping non-dangerous offenders in the community (probation, halfway house, etc.)	( )	( )	( )	( )	( )
*8.	Stricter penalties for committing certain crimes.	( )	( )	( )	( )	( )

[3]These items were developed by the present researcher.

The items below were considered measurements of police officers' perceived integration with supportive-type agencies (Cluster 3). An asterisk indicates that the item was used to form composite scores.[4]

		(4) Strongly Agree	(3) Agree More Than Disagree	(2) Somewhat Agree	(1) Do Not Agree At All
1.	There should be more team work among court workers, social welfare workers and police.	( )	( )	( )	( )
2.	A policeman should be involved in social work to some extent.	( )	( )	( )	( )
3.	A policeman should refer more cases to social agencies than he does.	( )	( )	( )	( )
4.	There should be more police in-service training involving social agencies.	( )	( )	( )	( )
5.	A Muskegon policeman should consider the possibility of referral to an agency within the community rather than arresting an individual for a misdemeanor offense.	( )	( )	( )	( )

The two items below evolved as approaches which can be used to combat the crime problem. Police officers were asked how effective they felt that these approaches were in reducing crime.

		(5) Very Effective	(4) Effective	(3) Somewhat Effective	(2) Slightly Effective	(1) Not Effective
6.	More emphasis on police referral of minor crime problems (misdemeanors) to community agencies, rather than to jail.	( )	( )	( )	( )	( )
7.	Cooperative training for agencies concerned with the crime problem.	( )	( )	( )	( )	( )

[4]All items were developed by the present researcher.

The items below were considered as measurements of police officers' job satisfaction (Cluster 4). An asterisk indicates that the item was used to form composite scores.[5]

Instructions:

In this section your task is to express your opinion regarding a number of statements by checking the most appropriate choice given.

*1. On the whole, do you think the police department is giving you a chance to show what you can do?
____ Very good chance (4)
____ Fairly good chance (3)
____ Not much chance (2)
____ No chance (1)

2. How well do you like your present job?
____ Like it very much
____ Like it fairly well
____ Like it a little
____ Dislike it

3. Being a policeman tends to make you cynical.
____ Strongly agree
____ Agree more than disagree
____ Slightly agree
____ Do not agree

4. If you were starting all over again, would you still join the police department?
____ Definitely
____ More than likely
____ Maybe
____ No

*5. How good is morale in the police department today?
____ Very good
____ Fairly good
____ Not too good
____ Low

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[5]The first five items were taken from Wilson's (1968) study of the Chicago Police Department and the last nine items are from McNamara's (1967) study of the New York Police Department.

6. A patrol, for his own good, should never deviate from departmental rules and procedures.
   ____ Strongly agree (5)
   ____ Agree more than disagree (4)
   ____ Somewhat agree (3)
   ____ Slightly agree (2)
   ____ Do not agree at all (1)

7. Most supervisors are careful to fit the departmental rules and procedures to the situation rather than insisting the rules and procedures have to be followed regardless of the situation.
   ____ Strongly agree
   ____ Agree more than disagree
   ____ Somewhat agree
   ____ Slightly agree
   ____ Do not agree at all

8. It is impossible to always follow departmental rules and procedures to the letter and still do an efficient job in police work.
   ____ Strongly agree
   ____ Agree more than disagree
   ____ Somewhat agree
   ____ Slightly agree
   ____ Do not agree at all

9. In general, how do you feel about the fairness of the department's handling of civilian complaints?
   ____ Very fair
   ____ More fair than unfair
   ____ Somewhat fair
   ____ Occasionally fair
   ____ Not fair at all

*10. In general, how do you feel about the fairness of disciplinary action in the department?
   ____ Very fair
   ____ More fair than unfair
   ____ Somewhat fair
   ____ Occasionally fair
   ____ Not fair at all

*11. In general, how do you feel about the fairness of promotions?
   ____ Very fair
   ____ More fair than unfair
   ____ Somewhat fair
   ____ Occasionally fair
   ____ Not fair at all

*12. In general, how adequate is the department's evaluation of how well you do your job?
____ Very adequate
____ Adequate
____ Somewhat adequate
____ Slightly adequate
____ Not adequate at all

13. The department expects supervisors to deal with their patrolmen in a very strict manner.
____ Strongly agree
____ Agree more than disagree
____ Somewhat agree
____ Slightly agree
____ Do not agree at all

14. Patrolmen often fail to take necessary police action due to a feeling that supervisors will disapprove of their actions.
____ Strongly agree
____ Agree more than disagree
____ Somewhat agree
____ Slightly agree
____ Do not agree at all

The items below were considered as measurements of police offficers' work style regarding the degree to which they perceived as an important aspect of their job supporting or helping citizens with personal problems (Cluster 5). An asterisk indicates that the item was used to form composite scores.[6]

Instructions:

Below is a list of tasks for which Muskegon policemen are responsible. How important is it to you for the police to be responsible for these various tasks? Check one for each item.

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[6]All of the items regarding police work style were developed by the present researcher. Other items pertaining to supportive functions of the police were considered in the cluster analysis procedure used in the larger evaluation study, however none of these items clustered together or with items in Cluster 5.

*1. Assisting two neighbors settling a dispute.
____ Very important (5)
____ Quite important (4)
____ Somewhat important (3)
____ Slightly important (2)
____ Not important at all (1)

*2. Assisting a tenant and landlord in settling a dispute.
____ Very important
____ Quite important
____ Somewhat important
____ Slightly important
____ Not important at all

*3. Handling family disputes.
____ Very important
____ Quite important
____ Somewhat important
____ Slightly important
____ Not important at all

4. Quieting down a loud party.
____ Very important
____ Quite important
____ Somewhat important
____ Slightly important
____ Not important at all

*5. Handling an unwanted guest complaint.
____ Very important
____ Quite important
____ Somewhat important
____ Slightly important
____ Not important at all

The items below were considered as measuring police officers' perceptions of Blacks. An asterisk indicates that the item was used to form composite scores.

Items taken from California Ethnocentrism Scale	Strongly Disagree						Strongly Agree
*1. It would be a mistake ever to have Negroes for foremen and leaders over whites.	1	2	3	4	5	6	7
*2. Most Negroes live poorly, it's mainly because they are naturally lazy, ignorant, and without self-control	1	2	3	4	5	6	7

	Items taken from California Ethnocentrism Scale	Strongly Disagree						Strongly Agree
*3.	Negroes have their rights, but it is best to keep them in their own districts and schools and to prevent too much contact with Whites	1	2	3	4	5	6	7
*4.	Negro musicians may sometimes be as good as White musicians, but it is a mistake to have mixed Negro-White bands	1	2	3	4	5	6	7
*5.	Manual labor and unskilled jobs seem to fit the Negro mentality and ability better than more skilled or responsible work	1	2	3	4	5	6	7
6.	The people who raise all the talk about putting Negroes on the same level as Whites are mostly agitators trying to stir up conflicts	1	2	3	4	5	6	7
	Items taken from BoJean and associates (1967)							
7.	Despite the oppressions which they have endured, Negroes tend to be more happy and carefree than other groups	1	2	3	4	5	6	7
8.	In every field where they have been given an opportunity to advance, Negroes have shown that they are good sports and gentlemen	1	2	3	4	5	6	7
*9.	In spite of severe environmental handicaps Negroes have proven that they can do as well as any other group	1	2	3	4	5	6	7
*10.	Even if Negroes had the same living conditions as White people, most Negroes would have lower morals than Whites	1	2	3	4	5	6	7
*11.	One generally has to be tougher when dealing with Negroes since they are more likely to be troublemakers.	1	2	3	4	5	6	7

Items developed by the present researcher	Strongly Disagree						Strongly Agree
12. Respect for the police in a predominantly Negro neighborhood depends on the willingness of patrolmen to use force frequently and effectively.	1	2	3	4	5	6	7
13. Police officers will almost always receive the cooperation needed from citizens of the Jackson Hill area when they are treated fairly.	1	2	3	4	5	6	7
14. The best way to get cooperation from any member of a minority group is to indicate that you mean business.	1	2	3	4	5	6	7
15. Generally, Negroes are appreciative when police officers go out of their way to be nice to them.	1	2	3	4	5	6	7

Item that measured friendship linkage.

1. Would you please indicate below the number of persons you know in each agency listed whom you know well enough right now to have a frank conversation about matters which concern both of your agencies.

	The Approximate Number of Persons Known
Circuit Court	_____
Dept. of Social Services	_____
Juvenile Court	_____
CAAP (includes Townsend Neighborhood Center and Legal Aid)	_____

Item that measured police rank.[7]

2. During the past seven months, did you spend one week in several Muskegon agencies that are involved in the current in-service training program which was sponsored by your police department and the Michigan Civil Rights?

____ Yes

____ No

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[7]All patrolmen visited the support agencies. No supervisor (sergeant and up) was involved in the inter-agency training. This item was used to determine rank because approximately 30 percent of the officers failed to respond to the item pertaining specifically to police job level.

APPENDIX D

ADDITIONAL ITEMS THAT WERE INCLUDED IN THE CLUSTER ANALYSIS

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This item measured the effect of punishment.

3. What is the most likely way that punishment affects people who have been convicted of a serious crime? (check one)

(1) a. ____ If the punishment is severe enough, it will act as a direct deterrent because of the fear of future punishment.

(2) b. ____ As an educational experience by which one learns what is unacceptable behavior.

(3) c. ____ It becomes for them a reason to continue their criminal ways.

d. ____ Other (specify)[1] _____

One variable called "suspiciousness" was included; it consisted of two items (number of years with Muskegon Police Department and present assignment), which the officers felt might identify them individually. An officer received a code of 1 if he failed to respond to both items, and those officers who responded to at least one of the items received a code of 2.

The two items following immediately below were included in the questionnaire with the first three items in Cluster 2.[2]

5 (3) a. ____ Juvenile offenders should receive special treatment.

(1) b. ____ Juvenile offenders should be punished as any adult committing similar offenses.

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[1]Written-in responses were either coded 1, 2, or 3, or not used.

[2]Those police officers who marked both sides of the issue were given a score of 2.

6(3)a. ____ Policemen's role in our society should be that of a public servant.
(1)b. ____ Policemen's role in our society should be that of an enforcer of the law.

The four items following immediately below were included in the questionnaire with the last five items of Cluster 2. They pertain to effective approaches to reducing crime.

7. Increase the number of policemen on the street.
____ Very effective (5)
____ Effective (4)
____ Somewhat effective (3)
____ Slightly effective (2)
____ Not effective (1)

8. Promote citizen observation patrol to assist police, i.e., notify police upon observing a crime.
____ Very effective
____ Effective
____ Somewhat effective
____ Slightly effective
____ Not effective

9. Hire more minority people as policemen.
____ Very effective
____ Effective
____ Somewhat effective
____ Slightly effective
____ Not effective

10. Using juvenile offenders to assist police in confrontation with teenagers.
____ Very effective
____ Effective
____ Somewhat effective
____ Slightly effective
____ Not effective

The items following immediately below were included in the questionnaire with items considered for Cluster 5.

1. Arresting a drunk walking down the sidewalk.
____ Very effective
____ Effective
____ Somewhat effective
____ Slightly effective
____ Not effective

2. Checking I.D. of a person who looks as if he has something to hide.
   ____ Very effective
   ____ Effective
   ____ Somewhat effective
   ____ Slightly effective
   ____ Not effective

3. Issuing traffic citations.
   ____ Very effective
   ____ Effective
   ____ Somewhat effective
   ____ Slightly effective
   ____ Not effective

4. Stamping out gambling.
   ____ Very effective
   ____ Effective
   ____ Somewhat effective
   ____ Slightly effective
   ____ Not effective

5. Stamping out prostitution.
   ____ Very effective
   ____ Effective
   ____ Somewhat effective
   ____ Slightly effective
   ____ Not effective

The five items following immediately below were included in the questionnaire with items considered for Cluster 6.

	Strongly Disagree						Strongly Agree
16. Indians should be allowed to own homes only in certain areas of a city.	1	2	3	4	5	6	7
17. Mexican Americans are usually very conscientious about not violating the law.	1	2	3	4	5	6	7
18. A panhandler is a nuisance to our society regardless of race, creed, or color.	1	2	3	4	5	6	7
19. The trouble with letting Mexicans into a nice neighborhood is that they gradually give it a typical Mexican atmosphere.	1	2	3	4	5	6	7
20. To end prejudice against Mexicans, the first step is for this minority group to try sincerely to get rid of their harmful and irritating faults.	1	2	3	4	5	6	7

The five items following immediately below address policemen's use of force and emphasis on their arrest powers.

21. If a patrolman thinks he may have to use force in a situation he should use it right after his entrance into the situation in order to gain the advantage of surprise.
    ____ Strongly agree
    ____ Agree more than disagree
    ____ Somewhat agree
    ____ Do not agree at all

22. When deciding on whether to arrest for a misdemeanor offense, extenuating circumstances should be weighed heavier than the fact that a law has been violated.
    ____ Strongly agree
    ____ Agree more than disagree
    ____ Somewhat agree
    ____ Do not agree at all

23. When considering any type of offense, the police officer is bound by the law.
    ____ Strongly agree
    ____ Agree more than disagree
    ____ Somewhat agree
    ____ Do not agree at all

24. In a situation where two men are fighting in a public place, generally it is best to arrest both of the men immediately.
    ____ Strongly agree
    ____ Agree more than disagree
    ____ Somewhat agree
    ____ Do not agree at all.