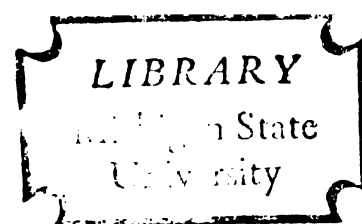ROLE RELATIONS, SOCIAL STRUCTURE
AND PROSOCIAL BEHAVIOR

Thesis for the Degree of M. A.
MICHIGAN STATE UNIVERSITY
JAMES E. WEATHERS, JR.
1977

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ABSTRACT

ROLE RELATIONS, SOCIAL STRUCTURE
AND PROSOCIAL BEHAVIOR

By

James E. Weathers, Jr.

The general premise of this research was that the social

environment in which individuals interact affects their perceptions

in everyday social activity. Within this framework, the present study

investigated the effects of two features of the social environment,

role relations and social structure, on prosocial behavior.

Role relationship--the extent to which two or more people are

bound together in a pattern of activities that attempts to achieve

some goal(s)--was hypothesized to be an important determinant of a

person's orientation towards helping others. If, as assumed, being a

part of a role relationship with another person establishes some

degree of cohesion with him/her, then it is likely that this sentiment

will generalize to other activities (outside of those that are rele-

vant to the role relationship) as well. The present study examined

this hypothesis directly by using a procedure (see below) that per-

mitted separation of this potential effect from that of merely being

exposed to another person.

Role relationships can be categorized according to a number

of dimensions. Of most relevance to the present research is the

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dimension of social structure: the extent to which the participants in a role relationship are equal (in terms of power) versus unequal or hierarchical (superordinate - subordinate). It appears plausible that an egalitarian social structure would generate a greater feeling of mutual responsibility towards the other than a hierarchical social structure. Past research has shown that feelings of responsibility induce a greater amount of helping behavior within a role relationship. The present study examined, and predicted, that: (1) an egalitarian social structure would induce greater amounts of helping behavior--involving an issue that was outside of the framework of the original role relationship--than hierarchical social structures; (2) members occupying a subordinate role in the hierarchical social structure would agree to help more than those occupying a superordinate role in hierarchical social structures; (3) possessing a role relationship will mediate the effects for agreement to help.

Subjects were 120 male introductory psychology students who volunteered to participate for extra course credit. Eighteen male assistants were selected from volunteers who were recruited from two social psychology courses. For each session one assistant served as the experimenter while three others pretended to be subjects.

A 3 x 2 x 2 factorial design examined the effects of social structure, requester of help, and proximity of requester upon agreement to help. Subjects were tested in 120 four-person groups composed of two separate dyads (these groups actually were comprised of one subject and three confederates). The dyads worked separately on a

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"communique development task." One-third of the subjects were given an egalitarian role relationship with their co-worker, one-third were given a subordinate role, and the remainder were given the role of supervisor.

Two types of dependent measures were employed (after the group formation phase of the experiment) to test the effects of the independent variables upon agreement to help: (1) a subjective perception test that served both as a manipulation check and a cohesiveness/liking scale; (2) a behavioral commitment measure of agreement to help.

The results confirmed all of the hypotheses. As expected, members of egalitarian social structures agreed to help significantly more than members of hierarchical social structures. Furthermore, subordinate members of hierarchical social structures helped significantly more than did their superordinate counterparts. As predicted, there was a significant main effect for role relations and social structure. The data was discussed in several ways, among them: (1) role identity generalizations to other relationships; (2) relevance of this data to prior research on prosocial behavior; (3) intervention or corrective strategies.

Approved: _____

Date: _____

Thesis Committee:

Larry A. Messé Co-Chairman

Joel Aronoff, Co-Chairman

Andrew Barclay

ROLE RELATIONS, SOCIAL STRUCTURE
AND PROSOCIAL BEHAVIOR

By

James E. Weathers, Jr.

A THESIS

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

MASTER OF ARTS

Department of Psychology

1977

TO THE PEOPLE, AS ALL THINGS SHOULD BE . . .

ACKNOWLEDGMENTS

Many people have contributed to the completion of this thesis, and it is with love that I acknowledge and express myself to the many helpful contributors.

I would first like to express my humble regards and appreciation to the Creator for directing my path and making all things possible. I offer my most sincere and deepest appreciation to a factory worker in Detroit who is my father, James, Sr. He is a remarkable individual and family head, how sad it is that socio-political constraints never allowed him the opportunity to express and excel himself academically. This appreciation and regard extends to my mother whose lessons were well taught. She is as precious as life itself and I have been blessed to have her as my mother. "Thank you for inspiring me at the age of 43 by re-entering and graduating from college." Both of your sacrifices won't be in vain. This research is dedicated to the memory of my grandmother Reaby Weathers and my other living grandparents. For it is their type of unconditional love that the spirit of this research has been based upon.

I would also like to express my most heartfelt appreciation to Dr. Larry Messé, who served as my co-chairman. My gratitude for his unconditional support and encouragement are second only to my respect for him.

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INTRODUCTION

Social psychologists have historically immersed themselves in the exploration of significant social problems of the times. For example a commitment toward attempting to increase citizen moral and to induce cooperativeness in the purchasing of War Bonds in World War II, psychologists explored in more detail cooperativeness, morale, and attitude change. Similarly in the 1960s, during the peak of the Civil Rights and Anti-War movements, social psychologists increasingly explored situational and structural properties of group functioning.

Social psychologists also have responded professionally through their research to many "troubles of the times." Psychologists have investigated deviant behavior, violence, and many other predominantly negative, anti-social behaviors. In fact, many people associate psychological examinations with problematic behaviors.

Recently, many social scientists have begun investigating positive forms of social interaction. The intent of these examinations was to understand more of the positive aspects and consequences of many social behaviors. These prosocial forms of behaviors have positive social results as the outcome of social interaction. A tradition in thought which demonstrated social psychology's acceptance of the responsibility to investigate both national problems and behaviors of social significance, precipitated psychology's interest in prosocial behavior.

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Prosocial behavior as a major social-psychological focus most likely began when a specific tragic incident captured national attention and stirred a reaction in the psychological community as have few other events. Kitty Genovese was murdered in full view of more than 38 witnesses who offered no assistance nor even called the police. Social psychologists sought to understand why no one assisted, and under what conditions would people more likely come to the assistance of others.

At the onset of these investigations with the above concerns, psychologists had no theories of explanation to offer. Very few, if any, of the elements of the behaviors in question were understood. Therefore, there was a need to gather information about the behaviors and then offer a theoretical explanation that was subject to much further empirical investigation for validation. This process did not occur and, as a result, sources of ambiguity entered into this research area. What did occur was the exploration of a wide array of variables that had no consistent links to a general theoretical orientation of prosocial behavior. The results of these many investigations was the elucidation of many variables that could account for only a portion of prosocial responses under specific conditions. The results of these investigations have yielded many valuable insights, yet the initial theoretical understandings have not altered appreciably. Research at present focuses predominately on two areas of inquiry:

1. The situational variables that enhance or impede assistance; and

2. The attributions or characteristics of the helper, and his attributions or perceptions of the situation

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Typology of Prosocial Behavior

In an overview exploring positive forms of social behavior, Lauren G. Wispé (1972) suggests that different manifestations of positive social behavior be distinguished so that they may be operationalized more precisely, and their genotypic similarities and differences clarified. Wispé's suggestions seek to add clarity and structure to examinations of prosocial behavior in that one major source of ambiguity is the designation of what behaviors are altruistic, helping, intervention, and so on. He proposes a typology of prosocial behavior where all of the specific behavioral types are related in that they have as an element in their base positive forms of social behavior. They also have as another element an assisting component of: one person to other(s), other(s) to a person, other(s) to other(s). With exception to point three, which was suggested by this author, all of the behavioral types below are extracted from Wispe (1972). The specific behaviors, at this time, that are part of this prosocial orientation are as follows:

1. Donating behavior. The giving of all or a portion of a somewhat scarce commodity, such as by making a gift or by making a contribution to a charity type of organization.

2. Sharing behavior. The giving of part or all of a commodity in one's possession to another in need or who is desirous of it.

3. Helping behavior. The giving of assistance or aid toward a definite object or end to another. Where help is characterized by providing what is needed to accomplish a definite end. In this conceptualization "helping" may be either altruistic or

not. Helping that is altruistic is characterized by assistance being given <u>with</u> primary reference to the regard for the interests of another and without primary concern for one's self interests. Non-altruistic help is characterized by the inverse order of the primary reference in helping. This conceptualization assumes that when people contemplate assisting others, their decision is obtained through a reward-cost analysis. Common prosocial behaviors such as favor-giving and courtesy are parts of this typology.

4. <u>Sympathy</u>. The concern with or a sharing of the pain or sadness of another human or object.

5. <u>Cooperation</u>. The willingness and ability to work with others, usually, but not always for a common benefit.

6. <u>Intervention</u>. The personal involvement, with potential personal danger as an outcome of a person using every means at their disposal (including force) in attempts to protect the interests of or prevent harm to another person.

This examination of prosocial behavior specifically places focus upon the investigation of <u>helping</u> <u>behavior</u> as defined in the above typology. In the next section of this chapter the theoretical conceptualization along with the major concepts of this study is presented.

Theoretical Conceptualization

The course of everyday human activity in part is guided by our roles as human actors, the interrelations and structure of these various roles, and more significantly the overriding social structure

within which these roles and role relationships are embedded. Social situations (the social milieu) that individuals encounter and interact within affect the perception and psychological orientation that occurs in everyday social activity. The social-cultural milieu has been suggested to have significant impact upon the physical, intellectual, and emotional state of human beings. It effects the individual's dispositions and predispositions in behavioral activity in his or her social sphere.

Research (e.g., Isen, 1970) has demonstrated that there exists an intricate relationship between prosocial behavior and the behavioral contingencies (outcomes of social situations) within which potential helpers operate. This suggests that previous social situations that people have encountered can affect their responses to others in more immediate social exchanges. One such encounter may be a situation in which an individual or a group is in need of assistance from another individual or a group of individuals. Isen (1970), for example, reports that feeling good about oneself causes a person to do good for others. This conclusion implies that internal feelings of goodness are a motivational factor that predisposes individuals to exhibit prosocial responses to others.

Other researchers (e.g., Howard & Crano, 1974) suggest that the characteristics and/or conditions of an emergency situation are re-viewed in a type of cost analysis by the potential helper, who then decided to respond or not. It is this author's belief that these two explanations of the decision-making component of prosocial behavior are not mutually exclusive. If the social milieu--expressed through

everyday social situations--affects the perception and psychological

orientation of individuals in everyday settings, then it would seem

plausible also that this perspective or orientation to one's environ-

ment also would influence both one's perception of the characteristics

of a needy situation and the estimation of what it would cost to re-

spond. One purpose of this investigation was to assess the validity

of this proposition through an examination of the effects of social

structure and role relationships on the agreement to provide assistance.

Prosocial responses may be viewed in a four-stage sequence:

The first stage represents the perception-recognition of another

person (or persons) needing help. The second stage represents the

decision-making phase. In this stage, rewards and costs of potential

action are assessed, a determination of the appropriate type of assist-

ance required is conceived, and the determination if the potential

assistor is operating for the interests of the victim solely or for

self reinforcement may be made. The third stage represents the emis-

sion of behavior that follows from whatever decision that had been

reached from stage two. The fourth stage is the post-action phase.

Here, the consequences of action or inaction may be assessed.

This study examines the author's contention that one important

factor that may infringe upon prosocial behavior is that of role

within social structure. By social structure, it is meant the system

of role relationships among positions in an operating social entity.

This conceptualization presupposes that role relations in both affec-

tive and behavioral forms capture the internal spectrum, or social

structure, or an operative social entity. This view will be

supported as the concepts of role relations and social structure are more fully presented. Implicit in this conceptualization are many of the traditional topic areas of social psychology, such as group processes, power, social influence, attitude theory, socialization, and social perception. These variables are related to the development and sustenance of social structure. This, then, implies that social structure should be viewed as an operative system where the structure of the system causes reactions among its members, which further causes more development of social structure within the system.

Role Relations

Different writers use the term "role" in different ways. At times it is used to refer to the expectations of other people, sometimes to the way the individual thinks he or she is expected to behave, and at other times to the person's actual behavior. The present study makes a distinction between the expectations associated with a role and the actual performance of behavior, by presenting subjects with role expectations without compliance sanctions.

The present investigation views roles and role relationships as essential elements of social structure. The conceptualization is that when we put the various roles together that allow a system to function, we have represented the social structure of that system. A social system is a group of related social roles in which each role category in the system relates to one or more other role categories.

The term role category refers to a grouping of persons whose behavior is subject to similar expectations. Role expectations are the ways in which an actor in a category is expected to act. In

particular, two features of expectations are especially important for understanding the idea of a social role. These features of expectations are:

1. The anticipatory nature of expectations, which refers to the expectation of regularity and consistency in one's own behavior and the same expectation concerning the behavior of people with whom we interact. This type of expectation has been said to guide behavior.

2. The normative quality of expectations, which refers to the obligatory quality of the shared expectations about the behaviors of ourselves and others. Expectations when perceived as obligations carry the force of normative sanctions toward behavior.

Every social role has others to which it is related. Taken all together these related roles make up a system within which people interact. In this system, each role category relates to one or more other role categories where individuals assume various roles at different times in various circumstances. Within this perspective, the present study explored the significance of role behavior in personal relationships. Before discussing further the conceptualization of social structure that was used in this investigation, a brief review of the utilization of roles and role relationships in previous pro-social behavior examinations is presented.

The Utilization of Roles and Role Relationships in Prosocial Behavior Studies

Berkowitz and his colleagues utilized a common research paradigm in a series of studies that tested the viability of the

social responsibility norm to explain prosocial responses (Berkowitz, et al., 1963, 1964). They shall be summarized to illustrate how super-ordinate-subordinate relationships in this research are similar to those previously used.

Specifically, Berkowitz, Klanderman, and Harris (1964) pre-sented subjects with a set of activities that ostensibly were a test of supervisory ability based upon work samples. Two subjects of the same sex were scheduled for any given session. They were informed that one of them, randomly selected, would be the supervisor and the other the subordinate worker. The supervisor's task was to get the other person to construct paper boxes. The supervisor would be shown one of the finished products and would have to write notes to the worker, who would be in another room, explaining how the boxes were made. The experimenter told each of the subjects individually that he had been chosen to be the worker and the partner was to be the super-visor. Handwritten instructions, supposedly from the supervisor, composed previously to be standard for all conditions, were passed to the subjects from the experimenter. After a 10-minute practice period, two experimental variables were introduced: (1) Dependency: in the high dependency treatment, instructions were given to make the subject feel that his partner's chance of winning a prize (a $5.00 gift certificate) was dependent upon the subject's productivity; in the low dependency treatment, the subjects were led to believe that their output would not affect their partner's chance of winning; (2) Experimenter awareness: in the high experimenter awareness

treatment, the experimenter would count the number of boxes produced at the end of a 20-minute work period; in the low experimenter aware- ness condition, the experimenter would not count the boxes. The major dependent variable was the number of boxes produced by each subject in the actual versus practice periods and the results indicated a main effect for dependency.

Schopler and Bateson (1965) used four-person, same sex groups that were formed into dyads to take part in a "decision-making task." Each dyad was composed of a supervisor and a subordinate. These roles were supposedly assigned randomly but, in fact, all subjects were placed in the supervisor's role. At the beginning of each trial, the supervisor supposedly wrote and sent a message to the subordinate, expressing his/her preference for the alternative he/she would like to have selected. (The messages the supervisors received actually had been prepared beforehand by the experimenter.) The experimenter delivered this message, and the supervisor made a decision, which set the outcome both he/she and his/her partner received for that trial. This procedure was repeated 26 times, after which all subjects were asked to fill out a questionnaire. Two independent variables were manipulated. One of these was the cost to the subject of being in- fluenced by his partner (high or low), and the second variable was the extent of the partner's dependence (high or low). Results indicated that a person whose outcomes were considerably reduced by yielding yielded less than a person whose outcomes suffered only a slight reduction.

Gruder (1974) had male subjects serve as an interviewer for the (fictitious) Public Opinion Institute at the university. Each

subject made a telephone appointment and reported to a room at the university where he was met by the "personnel director" (an experimental assistant). The personnel director explained to the subjects that they would be interviewed individually by four personnel trainees (who were experimental confederates), and that she was trying to evaluate these four to determine which one to keep on permanently. The trainees' task was to hire people for the job of poll taker. The subjects knew that they would not actually be hired, but were serving as practice applicants for the interviewer trainees. Furthermore, subjects were told that the trainees would be evaluated more favorably the lower the wage at which they hired the subject. Therefore, the subject could help the trainees by agreeing to be hired for a low wage or exploit her by demanding a high wage. The independent variables were two levels each (high and low) of cost, dependency, and need. Results indicated a cost by dependency interaction. Gruder suggests this interaction was due primarily to greater exploitation of the highly dependent other under high costs.

Many other examinations of prosocial behavior have varied the utilization of roles and role relationships in presenting paradigms that would allow for both the operationalization-manipulation of the relevant independent variables, and a convincing approach to experimental and/or mundane realism. In the next section of this chapter, a more detailed explanation of the concept of social structure as used in this study is presented.

Social Structure

As previously stated, the concept of social structure as conceptualized for this investigation refers to a system of role relations among positions in an operating social entity. This definition does not describe the associative variables that serve to create, maintain, and coordinate the various roles in the social structure of the social system. These variables include social comparison, social influence, power, technology, status, attraction, communication, role, social mobility, and dependence. These variables can be placed into context in light of their relevance to the presentation of a descriptive picture of the conception and construction of social structure for this investigation. These variables serve to lay the foundation for the parameters of behavior and types of activities that occur in a social system. Social systems are established to promote collective goals, order, progress, lineage, and to reduce the burden of individualness in human progression.

This perspective is similar to one proposed by Moore (1969). Moore states that humans order their lives in terms of a matrix of social expectations. To this extent human beings learn social behavior in some ways, shape, or fashion. "They invent values, for individuals or collectivities, rules for their conduct, knowledge to aid in the predicting and controlling their environment, and many other ingenious elements of the human condition. These inventive activities are behavior." Once behavioral products are established in the human consciousness they in turn are also guides to behavior, suggests Moore. Implicit in this suggestion is a view of behavior as the

concrete manifestation of structural imperatives. Therefore, emphasis

is placed upon the idea of social structure as a framework for

behavior.

Collins and Raven (1969) define social structure as the rela-

tionship among elements of a social unit. They suggest that these

elements may be individuals, or positions for which no individuals

have yet been designated, as in a formal organizational chart. "The

dimensions of structure (the ways in which the elements can be inter-

connected) include communication, attraction, prestige, role, power,

locomotion, and dependence" (p.103).

The concept of social structure is a widely used concept.

Moore (1969) distinguished five uses of the term: (1) patterns of

action; (2) social systems; (3) social differentiation; (4) stati-

stical, distributive categories; and (5) orderly sequence.

The present investigation can be viewed as using aspects of

the three major meanings of the term. These are: (1) patterns of

action; (2) social systems; and (3) social differentiation. These

three terms are presented briefly as Moore (1969) described them.

Patterns of action is probably the most widely used definition

of social structure. In this instance it refers to an observable

uniformity of action or operation. This utilization of the concept

is so general that it seems to be applicable to a wide range of

situations. However, one unanswered question is the etiology of this

patterned action. Can it be explained in terms of common motivational

propensities intrinsic to the actors? Can it be explained in terms of

other unspecified elements of social behavior like values, role

assignments, rewards, punishments, cognitive expectations, or norms? The definition of social structure in this instance is inductive and behavioral, for it is seen as patterned behavior. This limited approach does not allow for answers to questions involving differences between actual and ideal patterns, normal and deviant patterns, or even the relationship between the individual and the group. These limits, among others, are apparent in that the components and explanation of the relationship of patterns is not accounted for in this conceptualization. To do so requires reference to norms and values, or to their psychological counterparts as components of motivation.

The relevance of this view of social structure for the present investigation lies in the emphasis of this approach upon an "observable uniformity of action or operation." This patterned action reflects modeling behavior, social comparison and social influence variables. It suggests that there is a shared expectation with regard to the type and appropriateness of a role and the character behavior that becomes associated with the shared expectation of this role performance. These shared expectations may be conceived of as norms, and this view is similar to the social systems approach to social structure.

The social systems approach to social structure emphasizes the emergent components of any order of phenomena which consist of elements and their interaction. Many social scientists agree that this term, as used here, comprises values, rules of conduct, and interacting individuals. Moore says, "a social system requires that the units be persons--more properly actors or role players--whose

interaction is governed by rules or norms" (p. 286). In any society, complex systems of rules relating to social functions may be identified. Moore suggests that these aggregations of related norms are institutions whose normative properties may be highly integrated, diversified, and potentially inconsistent. Therefore these norms may be considered facilitators of social differentiation in the social system, which leads to questions of role set and resulting conflict, along with status set and resulting conflict between structural units. This approach to social structure is not solely a behavioral one, since, for example, acceptance and internalization of values and compliance with normative expectations are necessary for the social system to operate. Therefore, in this approach, the attributes and actions required by the system are specified for the actors.

This approach, as previously stated, is centrally concerned with the structural order of an emergent social system. The present research only minimally involved the emergent structural order of a social system, since it was a laboratory study in which subjects interacted with each other only for a relatively brief period of time--and real group structure would require several sessions of group interaction to emerge. This approach does relate to the author's conception of social structure in that the system specifies for the actors the desired or required roles and role behavior that are necessary for the system to operate.

Social structure as social differentiation examines the uneven distribution of power, goods, and services in a society. This is, of course, social stratification and may be operationally defined

as the unequal distribution of rewards according to functionally differentiated positions. This of course involves meaningful differences in power, status, communication, mobility, and attraction due to the functionally differentiated roles that individuals possess in relation to one another in the system. On one level the consistency of an individual's role position in social structure allows the conception of class or another type of stratum to be conceived. On another level, the concern of equality or inequality is relevant to all role relationships in that social differentiation may be both lateral or vertical. Regardless, the essential structural dimension is how complementarity or coordination is achieved amongst the behavioral units. In many societies power strategies and social influence processes serve to coordinate role relations.

The present investigation utilizes these approaches to the conceptualization of social structure as a theoretical base. The approaches described above reflect the three basic dimensions that Bates (1974) identified as the basis for model construction of social structures. In the construction of the models of social structure in this investigation, and the subsequent discussion of their impact, the dimensions identified by Bates was utilized and operationalized. These dimensions are: (1) the nature of the division of labor among the parts of a social system; (2) the nature of the system for exchanging inputs and outputs among the parts of the system; and (3) the characteristics of the system for coordinating the behavior of the parts in relation to one another.

The first dimension (the division of labor) is concerned with the extent of specialization in the parts of a social system. The functions they perform or the products they produce, as compared to other parts or units of the same social system. This conceptualization corresponds to the previous discussion of social structure as patterns of action. Bates' view extends the domain of the construct into classes of structural elements or sectors, and, therefore, it encompasses the social-system's view of social structure also reported by Moore (1969). In each sector, specialized groups and multigroup organizations comprise units or parts. At this point an important question is, how are these parts joined together to form a system in which they function as parts operating in relation to one another to comprise a whole?

Bates points out that after identifying elements of a social structure, problems of allocation and integration remain and are concerns as to the nature of the system's structure and functioning. In this light he discussed two questions: (1) how the parts of societies with a high degree of division of labor are related to each other in exchange relationships; and (2) how the behavior of the parts are coordinated in relation to one another. These questions are essentially problems of exchange (the second dimension) and coordination (the third dimension). The exchange dimension helps to place in more specific focus the previous rational offered to explain factors which induce the development of social systems.

Exchange relationships are concerned with specialized parts of highly differentiated systems which are functionally interdependent.

This interdependence (irrespective of the type of social structure) is due to the fact that specialized parts produce only a small portion of the inputs required for their own internal functioning. In many situations they must obtain inputs from their environment, and to do so requires their producing some output to be exchanged for necessary resources. To accomplish this, they must be entwined in a relationship with the other social units or sectors upon which they depend. The present investigation made utilization of this "exchange perspective." The outcome (i.e., completion of a conjunctive task) was identical for all groups (social structures), yet the division of labor in the exchange linkages (role-relationships) was varied across groups.

Bates suggests that there are essentially two forms that these exchange linkages can take. The first is the market form. In the market form of exchange linkage the units that engage in exchange are free to bargain and to agree or disagree upon the terms of the exchange. If exchange occurs, it's because the parties involved desire it, are satisfied with their outcomes, or have practically no other alternative. This relationship has an implicit and structurally derived conflict of interests among the parties. Norms and role definitions which guide and regulate exchange behavior are structured to control conflict, while permitting exchange to occur. These norms are structured not to provoke or produce cooperation through the utilization of exchange as a tool, but to prevent and curtail the development of conflict to the extent of inhibiting exchange.

The second form is the <u>commissary</u> <u>form</u> of exchange (reci-
procal relationship). In this form of exchange, specific social units
are connected to specific other social units and are somewhat uncondi-
tionally obligated to supply them with inputs or to receive outputs
from them. When exchange occurs, those involved in the exchange are
thought of as sharing a common interest in which all parties involved
benefit in some fashion.

The norms and role definitions that direct behavior in this
form of exchange are structurally orientated toward producing coop-
eration among the parties to the exchange, rather than being struc-
tured primarily to control the potential for conflict that may arise
from the divergent interests of the parties involved in the exchange
behavior. In the commissary form one party is not expected to seek
personal advantage at the cost of the other. The social system that
was instituted in the present investigation embodied the commissary
form of exchange since each dyad (unit) possessed intragroup common
interests. The commissary form of exchange also was relevant to the
present research in that the norm and role definitions that direct
behavior in this form of exchange are structurally orientated to
produce cooperation among the parties to the exchange. In light of
the hypotheses of this study (presented below), it was believed that
this approach would be a more conservative approach to operation-
alizing the independent variables.

The third dimension in the Bates model of social structures
is the coordination function. Bates cites two general structural
patterns by which societies perform the coordination function. The

first is labeled the "invisible hand" system. In this system various
specialized parts of the social system are regarded as being autono-
mous with respect to authority. This autonomy is applied both between
sectors of the society and among the various units comprising a sector.
In this system there is not a single authority system for society. In
each autonomous group and organization, a distinct authority system
exists. In most instances the function of government as one special-
ized sector in society is to regulate and control the conditions
where autonomous units engage in exchange for their own self interests.
The function of the "invisible hand" system is to protect and pre-
serve the modes and rules of behavior in the market exchange system,
not to coordinate and control the various parts of society in relation
to one another. In this type of social structure, power differential
is important for order and self maximization.

The second type of control structure is labeled the "Visible
Hand System." This type of structure is exemplified by the hier-
archically arranged authority structure of bureaucratically organized
systems. All parts of the system are accountable to a common
authority structure which coordinates the operation of the various
parts of the system. As various units of an organization are governed
by a unified management system, so may societal governing be viewed
in this light. This dictates that people view government as pos-
sessing a managerial function. In a society like this, the govern-
ment, however selected, is accountable for planning and managing all
parts of society as if it were one large organization. This may

be viewed as a managed society, while the invisible-hand system may be labeled as an unmanaged society.

The discussion to this point has emphasized a society with interlocking smaller units in its representation. These discussions lend themselves equally well to smaller groups and organizations. In fact, the general, broader view states that smaller groups and organizations have social structures that primarily are arrived at through the tolerance, capability, and modeling of the broader social structure (i.e., the social structure of the society).

The form of social organization or social structure reported here (unmanaged society) extends beyond the economic sector of society, for it encompasses all sectors of human activity, in particular the social structure's guidance system that affects norm acquisition and development.

Power

The present investigation viewed power as an important element within social structure. Indeed power becomes in part, a way of operationalizing social structure. The utilization of--and, more importantly, the perception of--power in this investigation is intended to reflect very basic everyday power interactions. The power relationships implicit within the social structures represents the essential, commonplace happenstance of the actors in the situation. To this extent, many of the widespread theoretical examinations of power, both definitive and descriptive, are not reported here.

The present study seeks also to examine the proposition that relational power positions implicit within social structure types

have a mediating effect on prosocial behavior. The concept of relational power is viewed as an integration of two dimensions of Bates' model: the division of labor and the coordination dimensions. In the previous presentations of social structure, one common variable, social stratification, typically was used to characterize the types of social structures that were being examined. Social stratification generally has been operationally defined as the unequal distribution of rewards (power, goods, services) according to functionally differentiated positions are in part the various roles and role relationships within which members of groups, organizations, and societies interact. In many instances these functionally differentiated positions reflect major distinctions in either power or status or both.

Thibaut and Kelley (1959) provide a social exchange framework in which to conceptualize social power. They discuss social power in terms of the various matrices of potential outcomes in which one person, O, may provide another person, P, as well as the outcomes that P may provide O. These "outcomes" are essentially classified by Thibaut and Kelley into three behavioral control paradigms: (1) behavior control; (2) fate control; and (3) converted fate control.

Olsen (1968, 1971) defines social power as "the ability to affect social life (social actions, social order, or culture)." This definition implies that social power is at work when any social actor in any way affects the outcomes of a social or cultural phenomenon. This power conceptualization is the same for both individuals and organizations. It is the fate

control-behavioral control view of power (Olsen, 1971; Thibaut & Kelley, 1959) that the present investigation uses. In this light, power in the present study was not only an important, implicit, variable in social structure. More importantly, social differentiation was achieved, through varying the amount of relational power in the roles the social structure. Relational power was the primary variable that accounted for the construction of the various social structures in this investigation and it's operational relationship to how Moore and Bates described it.

To varying degrees, and usually by accident, some degree of structural relationships have been utilized in prior studies. Following a brief, general, review of the literature, a discussion is presented that explores the utilization of structural relations in past studies of prosocial behavior.

Structural Relationships

Studies on prosocial behavior have identified and made use of three structural types of relationships between the person in need of assistance and the potential assistor. These relationships are: independent, dependent, and interdependent. With two exceptions, these types of relationships have never been primary variables of interest in examinations of prosocial activity. It is almost by necessity of the operationalization of potential prosocial situations that these types of structural relationships have been an implicit concern in prosocial investigations. The ways these relationships typically are presented in prosocial examinations and the references for some of these studies are presented briefly here.

The independent relationship is typically a situation where a stranger or a group of strangers is exposed to a person who might be in need of assistance. The dependent variable is whether or not the individual in need is offered assistance. A partial list of studies that have examined behavior in independent relationship situations follows: Brehm and Sensenig (1966); Bryan and Test (1967); Bickman (1972); Clark and Ward (1972); Darley and Latané (1968); Gaertner and Bickman (1971); Goodstadt (1971); Latané and Darley (1968, 1969, 1970); Piliavin, Piliavin, and Rodin (1969); Schwartz and Clausen (1970); Staub (1970); Wispé and Freshly (1970); Yakimovich and Saltz (1971).

This classical form of independent relations was utilized in the present investigation with some important variations. Past studies appear to have assumed that social structure has no effect on prosocial behavior. In that participants were strangers, it may be argued that they are unaware of the various social structures and positions within social structures in which their encounter was embedded.

The second type of structural relationship that has been examined is a dependent, or hierarchical, relationship. Examinations of this type typically involve a situation where one individual, who is the potential helper, is in a dominant position over another individual, who is dependent upon him or her in a helping situation. This form of dominance-dependency is situationally specific to the potential helping relationship. The present investigation views this type of dependency relationship as a limited view of dependency.

This investigation examined dependency as a structural relationship between units (individuals), and explored the impact this form of relationship has upon helping behavior that was outside the context of that structural dependent relationship. Therefore, this research examined both structural and situational dependency. Typical examinations involving situational dependency are: Berkowitz (1957, 1966, 1968); Berkowitz and Daniels (1963, 1964); Berkowitz, Klanderman, and Harris (1964); Goranson and Berkowitz (1966); Greenberg and Frisch (1972); Hornstein, Fisch, and Holmes (1968); Horowitz (1968); Jakubczak and Walters (1958); Schopler and Matthews (1965); Tesser, Gatewood, and Driver (1968); Wilke and Lanzetta (1970).

The third type of relationship is an interdependent relationship in which interactants have relatively equal power. Studies of this type of relationship have not been specifically directed to understanding helping behavior, but to other, more general, forms of prosocial behavior. Research in the area of cooperation and competition among group members are primary examples of this type of relationship. There is one examination (Masor, Hornstein, & Tobin, 1973) that utilized an interdependent relationship to examine helping behavior. This study was reported previously in this chapter. The typical finding in cooperation/competition studies indicate that groups high in interdependence commonly function more effectively and offer more mutual benefits to its members than do those not high in interdependence. Examinations that have demonstrated this effect are: Deutsch (1949); Thomas (1957); Cottrell (1964); and Cartwright and Zander (1953). In addition, the present research

sought to redress the almost complete lack of research attention with regards to interdependency in prosocial examinations.

As this brief review has indicated, to varying degrees and usually by accident, some degree of structural relationships have been used in prior studies of prosocial behavior. Usually these structures have been of the dependent and independent type. This study directly examines the effects of prior social structural relationships as facilitative or inhibitive processes of prosocial responses. It operationalizes these relationships in forms of structural positions (role relationships) in a somewhat common situation that was comprised of two phases. The first phase consisted of group identification, membership, and interaction. In this phase, social structure, roles, and role-relationships were established. The second phase tested the responses made to the dependent measure.

As indicated previously, the general premise of this research was that the social environment in which individuals interact affects their perceptions in everyday social activity. Within this framework, the present study seeks to investigate the effects of two features of the social environment, role relations and social structure, on prosocial behavior. No previous investigations have explored these variables and their relationship to prosocial behavior. However, a few studies peripherally relate to the idea in question and the specific hypotheses advanced in this study. In the next section of this chapter these studies are presented briefly.

Review of Investigations Relevant to the Major Hypotheses

Berkowitz and Daniels (1963) performed two experiments to study the effects of dependency upon social responsibility. Their subjects were "workers" operating under supposed guidance of a unfamiliar peer, who played the role of their supervisor. Berkowitz and Daniels varied two independent variables to explore their effects upon helping behavior: (1) awareness of the output performance of the worker condition (either immediate for high awareness or not immediate for low awareness); (2) dependency upon the subject for task completion (either high or low). The results indicated that high dependency induced greater performance irrespective of awareness. Immediacy with which the supervisor would learn of the S's productivity (awareness) increased performance only in the low dependency condition. The researchers conclude that significantly greater performance of those subjects in the high dependency condition may be accounted for through a "feeling of social responsibility" for a dependent peer. The perception of the dependency relationship appears to be the important factor increasing task motivation, presumably through arousing feelings of responsibility toward the dependent peer. Therefore, the researchers suggest individuals perceiving a peer as dependent upon them tend to work harder in order to help this person achieve their goals. Subsequent examinations have replicated these findings. (Berkowitz, et al., 1968; Daniels & Berkowitz, 1963). The present study explores the effects of dependency relations on helping behavior outside of group-task interactions.

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Isen (1970) performed three experiments concerned with how an individual's momentary internal affective state, as induced by success or failure on tasks, effected their willingness to help a stranger. Isen (1970, p. 295) stated, "Success-failure seems an especially interesting variable, in addition, because so much of life and so many human efforts are summed up in these terms, and the public and private consequences of this labeling appear far reaching." Isen (1970) is significant for the present research in that demonstrates that momentary affective states do effect helping behavior.

Utilizing adult subjects, Isen (1970) conducted three experiments which investigated the effects of the experience of success-failure on a task, and attention to social environment, upon non-task related generosity, and helpfulness. Isen hypothesized that subjects who succeeded on a task would subsequently behave more generously and helpfully toward a stranger than those who had not succeeded. Also, stemming from pilot data, it was hypothesized that those who failed would be less attentive to the social environment than those who had succeeded. Success-failure was manipulated through informing the subjects that they had scored either well above or well below the norm. The control group was given no feedback. In all conditions, after the independent variable manipulation was completed, the experimenter left the room and the confederate entered. In the first study, the dependent measure was the amount of money contributed to a collection can which the confederate left on the table. In the second and third studies the dependent variables were helpfulness

and attentiveness to the confederate. The results supported the predictions. The data seem to indicate that the relationship between success and prosocial behavior is rather strong.

Isen discusses these results in terms of a "warm glow of success" hypothesis. This hypothesis refers to basically two propositions: (1) individuals who have experienced success feel more positive toward others; (2) these successful people feel more competent, able to cope with the world and events that might occur, and less in need of clutching all of their resources to themselves. This "warm glow of success" hypothesis, according to Isen "does not really clear up the matter of why successful subjects are more helpful than other subjects. It represents a first step in which we imply that an important antecedent of doing good for others may be feeling good oneself, and that success seems to lead to the kind of 'feeling good' that is translated into helping others" (p. 300).

As the previous discussion of role relationship and social structure indicated, the methods by which the social structure coordinates the various roles and exchange amongst the roles equips the individual with an "appropriate" guidance system to function in the structure. This "appropriate" guidance system may be conceived of as norms, or a somewhat permanent and consistent internal framework of reference for behavior. To this extent a major question arises. If temporary internal affective states affect prosocial responses, what is the impact of more prominent ongoing variables that characterize everyday human existence, specifically role relations and social structure? This author agrees with Isen's interpretation in the

sense that it begins to speak to the impact of past social experiences on prosocial behavior. Isen's argument concerning success effecting competence and the way a person construes him or herself, which is a self-esteem proposition, begins also to link personal dispositions with social situations as they may have impact upon prosocial responses.

Bickman (1974) examined the effects of social roles--as perceived through a person's clothes - categorizing system--upon his/her degree of helping. The experiment took place in Grand Central Station and J.F.K. International Airport. The unsuspecting partici- pants were 206 people who happened to use the phone booths at these locations. The confederates were three male and three female students, whose apparent social status varied according to their clothes.

The results showed no relationship between the return of the dime and the sex, race, or age of the subject. Neither did the sex of the agent affect the proportion of people who returned the dime. What did matter was the apparent social status (i.e., mode of dress) of the person who lost the dime. Seventy-seven percent of the people returned the dime to the well-dressed person, but only thirty-eight percent returned it to the poorly dressed one. Bickman reports that it is not surprising that high-status people are treated differently. What was unexpected was that low-status people were treated more suspiciously in a situation involving money. At this point the source of these differences remain inadequately explained.

The final study to be reviewed here was conducted by Masor, Hornstein, and Tobin (1973), who established social situations of cooperative interdependence and competitive interdependence and

examined the effects of modeling and helping. Using teenagers and adults they performed three experiments that were stimulated by data which suggested that, under some conditions, exposure to an exploitative selfish model causes observers to engage in an equivalent amount of, or more prosocial behavior than exposure to a somewhat more neutral control model.

In the three experiments, the effects of observing helping and selfish-exploitative models were presented in three social contexts where normative expectations for helping were present in differing degrees. The three social contexts were: (1) Individualistic; (2) Competitive; and (3) Cooperative. In the first experiment, the researchers attempted to obtain data to support some of their basic theoretical contentions. The hypotheses were: (1) cooperatively interdependent group members are more likely to respond to each other's needs in a helpful fashion than are competitively interdependent groups; (2) under conditions of cooperative interdependence, exposure to an exploiting model should increase the tendency to behave helpfully as compared to a control condition, where no information about the model's behavior is provided. It was thought that subjects in the exploiting-model condition should exhibit behavior similar to that of subjects exposed to a helping model. The second experiment sought to examine more closely the assumptions underlying the predictions. The third experiment was a slightly modified version of the first experiment. The hypotheses were not supported; contrary to expectations, the relationship between the model's and the subject's choices was linear. Even in the cooperative condition when subjects

were confronted with a selfish-exploitative model whom they indicated signs of moral indignation towards (both him and his behavior), they nevertheless modeled him. They report that: (a) cooperatively linked people help more than competitively linked people (experiment one); (b) cooperatively linked people have stronger expectations concerning the rendering of help than competitively linked people; and (c) the cooperatives, when seeing prosocial norms violated condemned the act, had negative evaluations of the person doing so, and expressed a strong intent to counter-model (experiment two).

Masor, Hornstein, and Tobin (1973) discuss their results in a type of obligation-to-act framework. This view is somewhat consistent with normative expectation explanations of prosocial behavior. Masor et al., suggests that it is reasonable to suppose that cooperatively linked subjects felt obliged by others' expectations to respond altruistically to whomever became the victim of the aversive situation. As social structure has been described in this discussion, it appears that Masor, Hornstein, and Tobin, in essence may be referring to social structure. If not, the results of their study provide two important considerations for the hypotheses of this investigation. First, the Mason et al., "obligation effect" would appear to be more salient when viewed in terms of the obligatory component of shared role perception and role performance in social structure (this view was presented earlier in this chapter). In this light a person who possesses a role in a social structure that is oriented towards responding to others should exhibit a greater amount of helping behavior than a person who does not occupy that type of role.

Secondly, this effect should be consistent for social structure also; that is, that members of a social structure whose orientation promotes mutual responsibility among the members would be expected to generate more helping responses than a social structure without that orientation. These two points are the major conceptual components from which the present hypotheses were generated.

The two points presented above, the results of the Berkowitz studies on dependency and social responsibility, and the information presented on role relations and social structure provided the framework upon which the hypotheses of this study were generated. Before presenting these hypotheses the types of social structures used in this study shall be presented.

To identify theoretically social structure types, the present investigation generated situations that examined agreement to help as a function of two levels of power (equal or unequal) and whether or not the requester and his target previously had a role relationship.

Hypotheses

Hypothesis I. There will be a significant effect for social structure on helping behavior. Subjects who had worked on the task under an egalitarian social structure were expected to agree to help most often; subjects who had worked on the task in a subordinate role were expected to agree to help more often than subjects who had occupied the superordinate role.

Hypothesis II. The presence or absence of role relations between the subject and the requester will affect helping

behavior. Subjects were expected to help more if the requester had been their co-worker in the prior task.

Hypothesis III. The greatest impact (most significant moderator effect) of role relationship should occur in egalitarian social structures.

These hypotheses were generated from the results of those studies presented in the literature review, the previously presented conceptualization of role relations and social-structure and the effect these social environmental variables was presumed to have upon helping behavior. In particular, past research (e.g., Berkowitz and Daniels 1964) has shown that feelings of responsibility induce a greater amount of helping behavior within a role relationship. This study examined this result under equal and unequal role relations and predicted that the former (equal roles) would generate more help.

The components of social structure previously discussed and the particular way they were operationalized for this investigation may lead others to explain the predicted results (if supported) in alternative ways. These alternative explanations, which are in part a function of the experimental design, are presented briefly and discussed in the final section of this chapter.

Alternative Explanations

One alternative explanation of these predicted results, if supported, involves the effects of prior contact. Research has suggested that being in an extremely minimal interpersonal interaction produces a substantial effect upon intervention behavior. Hendricks et al., (1973) and Howard and Crano (1974) both indicate

that a very brief conversation with the soon-to-be victim elicits significantly greater levels of intervention than victims who had not had conversations. To exclude the applicability of the prior contact explanation, this investigation used proximity as a control variable. Proximity was varied by having the requester and his target previously being either near (face to face in the same room) or far (in different rooms). Therefore, this investigation also examined if close proximity (face to face contact) would affect agreement to help.

Another alternative explanation that may be advanced is that of interpersonal attraction, or liking. It is generally assumed that a person performs favors or assists someone they like. At times, assisting someone becomes a way by which people express their liking of that person. To assess the applicability of this explanation for the present research, a subjective perception measure assessing liking, sentiment, or positive feelings was administered after the first phase of this investigation. The results of this measure is reported in the Result Section.

As Isen (1970) demonstrated, success may increase prosocial responses. In the present investigation, care was taken to exclude success in a task as an outcome factor. No estimation nor information was relayed to the groups concerning their outcome upon the task.

Finally, the effects of the communication interaction might be suggested to have significance for responses made to the dependent measure. Examinations on communication networks typically utilize a common procedure. This procedure in laboratory settings usually involves creating four to five member, task-orientated groups and to

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establish certain patterns of permissible communication among them while they complete the task. The group task typically is an intellectual problem which requires that information initially distributed among the members, be collected into one place and "formed" into an answer to the problem. In many studies, after one answer is ascertained another problem is given and the group repeats this process several times.

These studies indicate consistently that the degree of centrality of a person's location in communication networks is related to the satisfaction he experiences from participating in the group. The greater the centrality, the greater the satisfaction. In addition the average satisfaction among group members is related to the average degree of centrality of the positions in the group's network.

Restrictions in communication have been found to affect performance and morale in groups, Bavelas (1951, 1968). In general, the differences are with respect to: (1) the location, in the pattern, of recognized leadership; (2) the probability of errors in performance; and (3) the general satisfaction of group members.

The vast amount of experimental evidence that supported and expanded these findings on communication and satisfaction lead this investigation to employ the following constraints: The communication network was structured to provide maximum autonomy on a conjunctive task. No information concerning success was presented, except the built in perception of task completion increasing probability of success. Finally, members of a dyad had equal centrality in terms of the necessity of their role for completing the task.

The following chapter is a detailed presentation of the method that was used to test the hypotheses (and alternative explanations). Before turning to this description, a few comments concerning the level of artificiality in this study seem appropriate.

This investigation utilized a considerable amount of artificiality to maintain experimental control. However, the treatments employed in this investigation forced the subject to tend to the demands of the research and respond in a natural, spontaneous manner. Therefore, this study possessed a high degree of experimental realism. Aronson and Carlsmith (1968) and Crano and Brewer (1973) indicate that a high degree of experimental realism is desirable for several reasons: (1) the subject takes the experiment seriously; (2) subjects behave in much less self-conscious fashions than one who is hypersensitive to the fact that they are being studied. Crano and Brewer (1973) report "A high degree of experimental realism lessens the degree of artificiality in subjects' responses, and thus promotes the generalizability of results" (p. 57). The proximity variable was also included in this experiment to increase the mundane realism. Emphasis should be placed upon the fact, as reported below that the increase in mundane realism in this manner did not alter the results of the experiment.

METHODOLOGY

Overview and Design

This chapter presents the methodology and design utilized

to test the hypotheses. A factorial design was used to determine the

influence of prior social structure, prior relationship of help

requester to the potential helper (i.e., co-worker; other), and the

prior physical proximity of the help requester to the potential

helper (i.e., near or far), on the agreement to help in a nontask

related independent event. The task used in the study was the

development of a written communique in support of increased fiscal

support of N.A.S.A. despite pressing social problems on earth. At

the end of one hour of work, attitudinal measures of liking, which

included a manipulation check, were collected. At this point a

personal, independent, request for help was made by an experimental

confederate.

Subjects

Two hundred and thirty-nine (239) white male introductory

psychology students at Michigan State University volunteered to parti-

cipate in this study. For their participation in psychological

research, these students are given extra credit in an introductory

psychology course. Students volunteered by signing an experimental

participant sign-up sheet. On this sheet experimental appointment

times were listed, and the student made the appointment by signing his name at a time that was convenient for him. All students were requested to list their telephone numbers on this sheet and were telephoned either the day before or the day of their selected experimental session. This was done to remind them of the time and place of the session. At this time, also, the students were informed that three other introductory psychology students would be participating in the session with him, and it was important for all of them to attend for the session to occur. One hundred sixteen (116) of these experimental participants were utilized in the pilot examination for the study. Information obtained from the pilot study is reported later in this chapter. The data from three non-white males were not included, therefore, the final sample size for the actual study consisted of 120 white male introductory psychology students. These 120 participants were randomly placed in one of 12 conditions, which reflected the factorial combination of the independent variables. In these 12 conditions the subjects were paired with confederates and worked on a task under one of three social structures.

Selection of Assistants

Eighteen (18) white male undergraduate assistants were selected from volunteers who were recruited from two social psychology courses. It was explained that a research project was to be undertaken that required male experimenters, and those chosen could receive course credits and an opportunity to gain firsthand research experience. All respondents were interviewed and selected based upon their apparent maturity, interest in gaining research experience,

reliability, and time commitments. Prior to pilot testing and formal data collection, all assistants were trained in the procedures necessary to conduct the experimental session. For each session, one experimenter and three confederates were utilized.

Social Structure and Roles

In the hierarchical social structure, the experimental participant (subject) always had a complementary role to two confederates. These two confederates always occupied the same role, the third confederate occupied the same role as the experimental participant, but in the other dyad.

In the egalitarian social structure, two confederates were paired as co-workers. The remaining confederate was always paired with the experimental participant. In the hierarchical social structure, the experimental participant always had a complementary role to his co-worker. Figure 1 illustrates the procedure setting that were used to produce the appropriate structures, roles, and physical arrangements.

C   = Confederate
Sup = Superordinate
Sub = Subordinate
S   = Subject
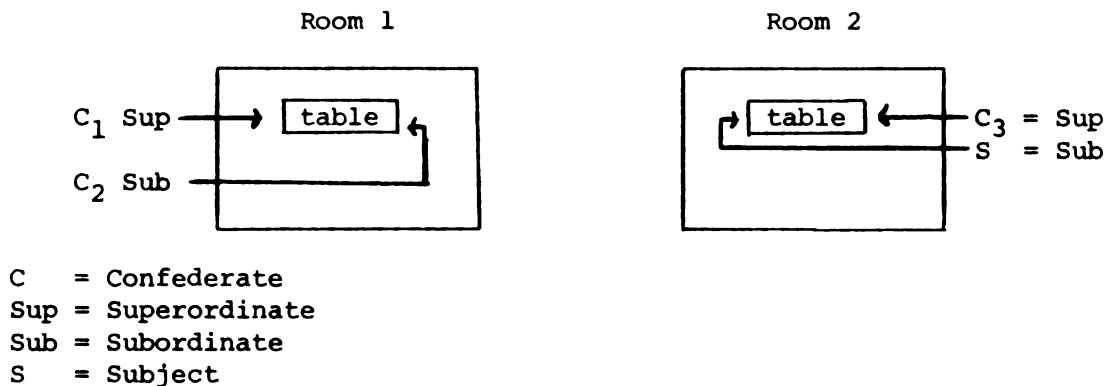
Figure 1.

As a result of which confederate was assigned the role of later requesting help, the remaining two confederates assumed one of two roles: (1) Negative Model; (2) Unresponsive Model. The specific script for these roles is presented further in the chapter.

The Experimental Task

The task selected for this research, subsequent to initial pilot examination, was a "communique development task" (factual argumentative bulletin). The task for each experimental session required each of two dyads of co-workers independently to develop a communique in support of increased fiscal support for N.A.S.A. (National Aeronautics Space Administration). In order to operation-alize the independent hierarchical social structure, no verbal communi-cation was permitted during any time of the task.

Each group was given one set of four articles in both the hierarchical and egalitarian social structures. In the hierarchical social structure the articles were always given to the superordinate member. In the egalitarian social structure, pretesting indicated the experimental participants did not always equally divide the articles (2 apiece). Therefore, in the actual study the articles were always given to the confederate co-worker of the experimental participant. He then subsequently equally divided the articles. In the egalitarian social structure where two confederates were paired, one member was simply given the articles. The four articles were: (1) "The Future of N.A.S.A.," (2) "Controversies," (3) "The Payoff," (4) "The Biggest Public Works on Earth."

In both hierarchical and egalitarian social structures, all members were given an additional packet of materials. These materials included the following items: (1) paper on which to write the communique; (2) paper on which to write messages to their co-workers; (3) a pencil; (4) an initial outline that represented points of concern that should at least be covered in the communique (for a copy of this outline see Appendix A).

Instructions.

For all sessions of the egalitarian social structure, the following instructions were read by the experimenter out loud, at once to all participants in the session (both the confederates and the experimental participant).

> You are part of a scientific investigating-reporting unit of
> NASA. Your task is to develop a communique (factual argumen-
> tative bulletin) on why the space program should receive
> increased fiscal support despite pressing social problems on
> earth. In this task, each of you will have equal power, and
> so you will have to reach a group consensus on how to complete
> the task. You will not be allowed to talk to each other during
> the task, so your communication to your co-worker will be done
> through written messages only. At no time will I either look
> at, distort, or tamper with the messages that you write to
> your co-worker. Your reporting unit has only one hour in which
> to complete its task, therefore, you should work as efficiently,
> and quickly as possible. You will have to do the following:
> Develop the direction and an outline for the task, reading and
> summarizing the materials for the task, producing sections and
> sub-sections of the task; the final editing which includes
> style, tone, wording, spelling, sentence structure and content.
> You have responsibility for the accuracy of the task and the
> relevance of the output toward the task purpose. Each of you
> should have equal input into the completion of this task.
> Finally, a $50.00 bonus will be given to the reporting unit
> which produces the best communique. Just tap lightly on the
> table, and I will transport your messages to your co-worker.

For all sessions of the hierarchical social structure the following

instructions were read by the experimenter out loud, at once to all

participants in the session.

> You are part of a scientific investigating-reporting unit of NASA.
> Your task is to develop a communique (factual argumentative
> bulletin) on why the space program should receive increased fiscal
> support despite pressing social problems on earth. In this task
> their will be a supervisor and a worker.

At this point the supervisor for each group was selected. The experi-

menter then continued on to read:

> In this task if you are the supervisor, you are responsible for
> developing the direction and an outline for the task, and for
> insuring that the task is completed within the available time
> span. The supervisor is responsible for the final editing which
> includes: style, tone, wording, spelling, sentence structure,
> and content. The supervisor has responsibility for the accuracy
> of the task and the relevancy of the output toward the task
> purpose, and finally the delineation of assignments to the
> workers with the responsibility for their outputs.

> In this task if you are the worker, (the experimenter then
> selected the two workers) you are responsible to the supervisor
> and those assignments that are delegated to you from him. This
> will probably--but not necessarily because final say so is up to
> the supervisor--involve the reading and summarizing of materials
> relevant to the task. The worker may also be delegated the
> responsibility of producing sections, or sub-sections of the
> task. You will not be allowed to talk to each other during the
> task, so your communication to your co-worker will be done
> through written messages that you write to your co-worker. Your
> reporting unit has only one hour to complete its task, therefore,
> you should work as efficiently and as quickly as possible.
> Finally, a $50.00 bonus will be given to the best communique.
> Just tap lightly on the table, and I will transport your message
> to your co-worker.

The instructions and the task were utilized to manipulate

and operationalize both hierarchical and egalitarian social structures.

Social structures are also implicit within their respective stratifi-

cation components. As it has been suggested, stratification implies

hierarchical, and non-stratification implies egalitarian social

structure. The near-far independent variables were included to

manipulate social structure further. This manipulation is discussed further in this chapter under the procedure section.

Dependent Measures

Two dependent measures were employed in this study to assess the effects of the three independent variables upon the propensity to help. These measures were: (1) An opinion questionnaire primarily designed to measure the experimental participant's perception of the social structure that he operated within (manipulation check). This questionnaire also measured the applicability of the liking/cohesiveness rationale as it may have had an impact upon the propensity to help. (2) A direct behavioral commitment measure of assistance-no assistance.

The first measure administered to the subjects at the end of the task was the 10 item opinion questionnaire. The questionnaire used a 7 point (ranging from strongly agree to strongly disagree) Likert-type response scale for each item (see Appendix A). The particular sub-scales of interest were seven items which are believed to focus upon the interest expressed above (i.e., social structure manipulation check, liking/cohesiveness explanation). Items 2, 5, 6, and 8 were employed as direct manipulation checks. Items three, four, and seven attempt to assess the liking/cohesiveness impact upon propensity to help. Item 3 refers to the liking (enjoyment) of the task. Items 4 and 7 refer to liking of your co-worker in general, and liking of your co-worker as it relates to the task. The final dependent measure was the experimental participant's behavioral commitment to assist or not.

Design

Subjects were tested in 120, four person groups composed of two separate dyads. Of these groups, 40 were ran in the hierarchical superordinate social structure, 40 were ran in the hierarchical subordinate social structure, and 40 were ran in the egalitarian social structure. Further application of social structures were acquired by the manipulation of one's co-worker either being in the same room or not in the same room with each other during the task. This procedure yielded an orthogonally randomized factorial design, whose dimensions were 3 (egalitarian, superordinate, subordinate role in social structure) X 2 (co-worker or another later requested help) X 2 (person who requested help previously worked in close proximity or not in close proximity to the subject).

Setting

The experimental sessions took place in an "experimental research work room." This was a large room which had eight cubicles of approximately 11' X 6'. One table was located in the center of each cubicle with two chairs located on opposite ends of the table. In the center area of the "experimental research work room" was a wide hall like area with a table at the end. This area was where the request for help was made. This arrangement looked like a Power-case "i" with the table around which the request for help was made being the dot on the "i."

Procedure

As the experimental participants arrived, (the confederates also arrived in the guise of naive experimental participants) the

experimenter welcomed them to the study "Communications On The Moon." All of the experimental participants then were read the appropriate instructions for the social structure that they would operate within. After the experimenter read the instructions, he asked if there were any questions. (If there were no questions, the experimenter then proceeded to assign the participants in the appropriate room and give them the appropriate materials. If there were questions, the experimenter tried to answer them by rephrasing the original instructions. If this was not possible, he then avoided answering the question.) Once the questions were answered the session was continued by the experimenter disseminating the appropriate materials (articles, paper, pencil), to the participants.

As previously indicated, the social structures were operationalized through the role assignment in the task (either superordinate, subordinate, or equal), and whether or not co-workers worked in the same room or different rooms.

Subsequent to the institution of the appropriate social structures, the task was started. The experimenter informed the groups of the amount of expired time in the task; after 30 minutes, 45 minutes, 55 minutes, and 59 minutes. When the time alloted for the task had expired, the experimenter requested that "everyone please stop now." He continued on by saying, "I have a short questionnaire for you to fill out. Leave all of your papers and materials face-down at the place you were seated at during the task. Please come to the front table out here and complete this

questionnaire." Confederates assumed their places around the table as Figure 2 demonstrates.

```
              _____
              Table              M = Negative Model
        S       X      M^H       X = Unresponsive Model
                                 H = Requester of help
                                 S = Subject
```

Figure 2.

The experimenter at this point said to everyone, "I have to go to the lounge to check on the guys for the next session. Finish the questionnaire and place it face-down where you are sitting, and I will be back shortly." The experimenter then left the room and the session continued by the participants completing the questionnaire.

When the questionnaire was completed, confederates prepared themselves for the behavioral commitment dependent measure (the response to the help request). Figure 3 indicates the configuration that this dependent measure occurred within.

```
              _____
              Table              M = Negative Model
               X                 X = Unresponsive Model
        S       H      M         H = Requester of help
                                 S = Subject
```

Figure 3.

The help requester loudly said: "Hey fellas, excuse me, but for my 161 psychology class we have a group project due within two weeks. You could really help me by filling out this Verb-Classification-Reactance Form. The instructions tell you what to do, so you just have to fill it out. It has a self-addressed envelope and you

just put it in campus mail free of charge." While saying this, the help requester maintained scanning eye contact with everyone in the room. The model then said "What?" in a somewhat confused tone of voice. The help requester repeated part of his previous statement by saying directly to the model, but so that all could hear: "for my 161 psychology class we have a group project due within two weeks, you could really help me by filling out this Verb Classification-Reactance Form. The instructions tell you what to do, so you just have to fill it out. It has a self-addressed envelope and you just put it in campus mail free of charge." While saying this he only maintained eye contact with the model. After hearing the repeated request, the model then responded by shaking his head and saying "No." The unresponsive bystander throughout this interaction said nothing. The experimental participant could either respond or not respond in a positive (help) or negative (no help) manner. After this entire interchange, the experimenter would then enter the room and say: "If you have completed the questonnaire, I'll sign your credit card, and thank you very much for your participation."

It is important to note that in this procedure the negative model was never the experimental participant's co-worker. Similarily, in hierarchical conditions, the negative model was never the experimental participant's co-worker, nor the confederate who occupied the same role as did the experimental participant. Therefore, the experimental participant's co-worker always played the role of the person in need of help, or the unresponsive bystander.

Debriefing

Experimental participants were not debriefed immediately, instead they were read the following statement by the experimenter before they were dismissed from the session. "You have been involved in an experiment concerned with the exploration of group organization toward the completion of a multiple but unitary task. All of the data have not been collected yet, so we cannot inform you of any results of the study. To obtain information about the study, feel free to call (a name and a telephone number was provided) sometime after the middle of next semester.

RESULTS

The Dependent Measures

The analyses presented below focus on examining the effects that the three independent variables--social structure, role relationships with the person who asked for help, and whether or not that person worked in the same room as the subject--had upon the dependent variable, whether or not a subject agreed to help. Additional analyses examined other, more secondary dependent measures, which essentially were either indices of attitudes towards various aspects of the situation or manipulation checks. These measures were obtained from the "Opinion Questionnaire" that subjects completed just prior to their being exposed to the request for help.

Appendix A presents a copy of the Opinion Questionnaire that was used in this study. The questionnaire contained two subscales that were relevant to the hypotheses. One subscale (cohesiveness/ liking) consisted of three items that attempted to assess a participant's evaluations of his particular co-worker and their relationship. The second subscale, consisting of four items, measured the subject's perception and evaluation of his role in the study. These items served as manipulation checks to examine the extent to which the manipulation of the social structures were successful.

<u>Analyses</u>

The data were subjected to three different types of analyses. Two types of analyses were utilized to assess the effects of the three independent variables on the major dependent variable (i.e., agreement to help). Chi-square analysis (Winer, 1971, pp. 854-858) was used to examine overall effects. Table 1, in Appendix B, presents a summary of this analysis. Further, Fischer Exact tests (Finney, Latscha, Bennett, & Hsu, 1963) were used to examine results from the specific conditions that were most relevant to the hypotheses. Scores derived from the opinion questionnaire were subjected to a multifactor analyses of variance (Winer, 1971, pp. 456-462). Tables 5-11, in Appendix B, present the summaries of these analyses.

<u>Manipulation Checks</u>. A 3 (social structure) X 2 (proximity of co-worker) analyses of variance of the data obtained from the four items that examined the extent to which the manipulation of social structure was successful indicated that, indeed, subjects were aware of the role relationships under which they worked (see Tables 5-8, Appendix B). Table 2 presents the cell means and F-ratios that are relevant to this issue. As Table 2 indicates, the main effect for social structure was highly significant for three of the four items, and cell means were in the predicted directions.

Further analyses of these data using the Newman-Keuls procedure provided more detailed evidence which indicated that the manipulation was successful. These analyses indicated that, when compared to subjects who occupied subordinate or egalitarian roles (who did not differ significantly from each other), subjects who occupied the

Table 2.--Means and F-Ratios Reflecting Subjects' Awareness of Social Structure.

Opinion Questionnaire Item	Role of Subject			F^a
	Subordinate	Equal	Superordinate	
2	3.02	3.32	5.20	23.16*
5	5.12	5.20	4.77	1.25
6	4.15	4.80	5.52	7.39*
8	4.10	5.15	5.55	8.38*

$^a\underline{df} = 2/114$

*$\underline{p} < .01$

superordinate role: (a) perceived that they had more influence on the solution to the task and, (b) expressed a greater reluctance to change roles. Also, subjects who occupied either the superordinate or egalitarian roles liked their relationships with their co-worker significantly more than did subjects who had the subordinate role. Finally, subjects who were superordinate expressed a greater liking for the task than did subordinate subjects.

Tests of the Hypotheses

Table 3 presents the number of subjects (out of ten) who agreed to help the requester in each of the experimental conditions. The analyses of these data are discussed below in terms of the hypotheses.

Hypothesis I. Hypothesis I predicted that, overall, there would be a significant main effect for social structure. The chi-square analysis supported this prediction, X^2 (2) = 27.96, p < .001. Moreover, inspection of Table 3 and further analyses via Fischer Exact tests indicated that the difference in the frequencies of agreement to help as a function of social structure were as predicted: more subjects who had occupied an egalitarian role agreed to help than did either superordinate subjects (p < .01) or subordinate subjects (p < .06); also more subjects who had occupied the subordinate role agreed to help than did subjects who occupied the superordinate role (p < .01).

Hypothesis II. Hypothesis II predicted that, overall, there would be a significant main effect for role relationships. The chi-square analysis also supported this prediction, X^2 (1) = 5.65, p < .05. Inspection of Table 3 indicates that, as predicted,

Table 3.--Number of Subjects Who Helped in Each Condition.

Role Relationship With Requester	Prior Proximity	Subject's Role in Dyad		
		Subordinate	Equal	Superordinate
Co-Worker	In room	8	10	3
	Not in room	5	9	3
None	In room	6	7	1
	Not in room	5	5	1

Note: There were 10 subjects in each condition of the design.

subjects were more likely to agree to help if they had established a prior conjunctive role relationship with the person who requested help--i.e., he was the subjects' co-worker.

Hypothesis III. Hypothesis III predicted that role relationship would have the greatest impact when subjects worked within an egalitarian social structure. Strong support for this prediction would have occurred if the chi-square analysis had yielded a significant social structure X role relationship interaction; this effect, though, was not significant, x^2 (2) = 1.18, p > .05. However, Winer (1971, p. 384) suggests that specific individual comparisons should be performed, irrespective of the significance of the overall effect, when predictions were directional. This procedure seems especially appropriate in this instance, since the different conditions of social structure were expected to affect the magnitude, not the direction, of the effect of role relationship.

Individual comparisons via Fischer Exact tests did provide some support for Hypothesis III. Although, as Table 3 indicates, differences in the frequency of agreement to help as a function of role relationship were in the same direction for all three conditions of social structures, as predicted, this effect was significant (p < .01) only for subjects in the egalitarian condition.

Tests of Alternative Explanations

Potential effects of proximity. As discussed in some detail in the introductory chapter, the possibility existed that the manipulation of social structure and role relationships would not affect agreement to help, given that reasons of experimental control

necessitated examining these variables via somewhat "artificial" and somewhat simplistic operationalizations. An attempt was made to increase mundane realism somewhat, and to study the potential effects of this increase, by manipulating whether or not the subject and his co-worker (who, in some conditions, was also the requester of help) were in the same room while they worked on the task. Also, the manipulation, of prior proximity of requester to the subject permitted a test of the extent to which spending some time with another person per se affected agreement to help.

Results (see Table 3) indicated, however, that proximity had little systematic overall effect and that, as presented above, the manipulations of social structure and role relationship affected agreement to help as predicted, irrespective of the condition of proximity. Chi-square values for effects involving this variable never were statistically significant; they ranged from .03 to 1.64.

Potential effects of satisfaction and liking. Also as outlined in the introduction, it was possible that social structure and role relationship were not related to agreement to help in a direct way, but that they merely produced different levels of feelings of satisfaction and liking. As variables that past research has shown to affect helping behavior, the validity of these alternative explanations were examined via three items on the Opinion Questionnaire: "(3) I enjoyed participating in this study"; "(4) I enjoyed working on this study with my co-worker"; "(7) I did not like my co-worker."

Responses to these items also were subjected to a 3 (social structure) X 2 (proximity of co-worker) analyses of variance

(see Tables 9-11, Appendix B). These analyses revealed that only the main effect of social structure produced any significant findings for these three measures. Table 4 presents the cell means and F-ratios that are relevant to this effect.

As Table 4 indicates, the pattern of means as a function of social structure was the same for all three measures, but differences were significant only for Item 4 and marginally significant for Item 3. Thus, subjects appeared to like working with their co-worker and the study in general when they occupied the superordinate role and least when they occupied the subordinate role. While interesting per se, it is also important to note that these findings tend to refute the satisfaction explanation, since the pattern of means for the attitude measures did not match differences in agreement to help. For example, subjects who occupied the superordinate role tended to report feeling the most positive, yet, they were the least likely to comply with the request. Thus, it appears that social structure had a more direct effect on helping behavior than this explanation assumed.

Table 4.—Means and F-Ratios Relevant to the Effects of Social Structure on Attitudes Toward the Study and the Co-worker.

Opinion Questionnaire Item Number	Roles of Subject			F^a
	Subordinate	Equal	Superordinate	
3	4.20	4.55	4.98	2.63*
4	4.72	5.20	5.45	3.82**
7	5.62	5.72	6.12	2.15

Note: Responses were scored so that higher numbers indicate more positive attitudes.

$a_{df} = 2/114$

* $p < .1$

** $p < .05$

DISCUSSION

The objective of this investigation was to determine the impact

of social structure and varying role-relationships in social structures

upon agreement to help. This chapter presents a general discussion of

the results of the investigation of this topic. The chapter is organ-

ized into four sections: (1) Direct Implications of the Results;

(2) Implications of the Results Upon Previous Research; (3) Inter-

ventionists' Strategies; (4) Concluding Remarks.

Direct Implications of the Results

The results reported in the previous chapter suggest that

social structure type and one's position within social structure has

a highly significant impact upon prosocial behavior. What is this

impact? The data demonstrates that people operating in different

social structures--differing social environments with various roles

in those environments--make utilization of frameworks to cope with

that environment. These frameworks might best be conceptualized as

ways of attempting to emit subjectively perceived appropriate social

responses to interactive role relationships within respective social

structures. Social scientists, in particular sociologists, emphasize

that there is little freedom of choice for the individual in most

matters, once a general commitment to a particular social system has

been established. The best opportunities for social mobility,

individual enhancement, and probably the best chances for survival,
lie in cooperating with the system. The system requires certain kinds
of behavior from nations, business, groups, and individuals if they
are to survive.

This interpretation implies that individuals form perceptions
of how to cope with familiar aspects in differing environments. One
way that individuals acquire these perceptions is through their
expectations of role performance or their knowledge of role
requirements.

Many social scientists argue that the role of policeman,
doctor, teacher, and many others, each specifically require a per-
ception of the world, a framework, a style of life, a way of relating
to people so sharply defined and differentiated that the person
progressively takes on the characteristics of the role. This type of
view stresses that the individual is highly shaped by his roles. It
underscores the significance of the influences of early life and per-
sonality with exception as to how they may lead a person into certain
specific roles rather than others. Although the present investigation
placed emphasis upon the concept of role, there are many limitations
to its usefulness. To this extent this investigation emphasized the
importance of social structure as both the vehicle by which roles
become necessary and how the parameters of role behavior are achieved.
This author believes it important also to examine the impact of
individual variables especially as they may relate to the significance
of role relations and social structure upon prosocial behavior.

Goffman (1961) captures particularly well the view of this author with regard to the significance of role upon identity. He writes:

> For this paper, it is important to note that in performing a role the individual must see to it that the impressions of him that are conveyed in the situation are compatible with role-appropriate personal qualities effectively imputed to him: a judge is supposed to be deliberate and sober; a pilot, in a cockpit, to be cool; a bookkeeper to be accurate and neat in doing his work. These personal qualities, effectively imputed and effectively claimed, combine with a position's title, when there is one, to provide a basis of SELF-IMAGE for the incumbent and a basis for the image that his role others will have of him. A self, then, virtually awaits the individual entering a position; he need only conform to the pressures on him and he will find a ME ready-made for him. In the language of Kenneth Burke, doing is being (p.62).

In some social situations the appropriate social response is more clearly delineated than in others. In these more clearly perceived types of social encounters, it is highly probably that non-individual role response sets may occur. These types of response sets could conceivably interact in other decision making situations independent of the original source of the response. In differing situations, if individuals hold similar types of roles as they commonly do, then some response sets are likely to overlap and become generalized by the individual. In these "real" situations it is also likely that through conscious and/or subconscious processes these response sets may affect individual's self-definitions. These comments are congruent with a Social Learning Theory perspective of human behavior and development and may be utilized to understand the present results of prosocial responses.

Subordinate members (dependent social structure) were operating in a submissive state, that is, an orientation towards succumbing to the wishes of others. This orientation towards others was evidenced

in the rate of prosocial responses to a request for help independent of the experimental context, and subsequent to the group formation phase of the investigation. Members in this role emitted the second highest overall frequency of prosocial responses.

Superordinate members (independent social structure) were operating in a dominate state, that is, an orientation where they guided and directed activity while others complied with their wishes. This orientation of being responsible for others, of approving or disapproving of activity, this typical "in charge" affiliation appears to have also affected prosocial responses. In a request for help independent of the experimental context and subsequent to the group formation phase of the investigation, members of this social structure emitted the lowest rate of prosocial responses.

The descriptions of the frameworks for both superordinate and subordinate members of hierarchical social structures are in accordance with the responses made to the Subjective Perception Test. In these social structures what appears to have occurred is an acquiesce to role-response set. Social psychologists have long agreed that people have a major need to achieve some sort of integration and consistency about themselves and events in their lives. This has been discussed by social psychologists in terms of consistency theory and social comparison. Existential psychologists refer to this notion of humans seeking and needing to know who and what they are to know themselves as "ontological security." To achieve this "ontological security" people typically adopt or move towards one position, and organize their feelings and perceptions from that central position. From

this perspective, one would expect that people in social structures operating in a subordinate role might be more responsive to the concerns of others than a person who occupies a superordinate role. As previously noted, the results of this study support this view. Likewise, individuals who operate in a egalitarian social structure (equal roles) are orientated towards mutual responsiveness. The members of this social structure would be expected to be more responsive than members of other social structures. With regard to the social structures examined in this study, the present results also support this view.

Members of egalitarian social structures (interdependent social structure), operated in an equality based orientation. This mutuality or interdependent orientation affected also the subsequent responses of requests for help. Members of this social structure had mutual orientations towards resolving expressed concerns. In this social structure, the expressed concerns of one was the concern of the other. This may be evidenced in the high rate (almost 100%) of prosocial responses in this social structure. In addition, the predicted significant main effect for role relationship is further viewed as support for this interpretation. The reader should recall that in the Introductory chapter, role relationship was presented as a form of interdependence or mutuality that should moderate agreement to help. In all social structures role-relationships yielded a higher agreement to help. This effect however was found to be significant only in egalitarian social structures when subjected to further analyses. This is plausible in that structural role differences are absent in

egalitarian social structures but levels of interdependence vary
according to the presence or absence of role relations.

One of the basic hypotheses of this research was that the
greater the interdependence the higher the propensity of agreement to
help. In egalitarian social structures, where there was an absence
of role relations, the agreement to help was about equivalent to the
highest response rate of the hierarchical social structures. This
indicates that making power equivalent in social structures is
extremely important in increasing prosocial responses, yet this effect
is magnified when mutual interaction and involvement exists (inter-
dependency). The overall tendency of individuals assisting their
co-workers more than assisting others, indicates that even minor levels
of interdependence affect prosocial behavior. Members of egalitarian
social structures as well as members of the dependent social structure
(subordinates in the hierarchical social structure), both operate in
an environmental orientation "towards others" as opposed to "toward
self" (the independent social structure). The differential helping
responses in the egalitarian social structures are further evidence
of this proposition in that those less interdependently associated
with each other (i.e., absence of role relations) helped less than
those more interdependently associated (i.e., presence of role rela-
tions), even though the former individuals helped more than those in
the other social structures.

Implications of the Results for Previous Research

In the first chapter, mention was made of previous experi-
mental investigations which explored several variables hypothesized to

account for the rendering or not of prosocial responses. It may be argued that some of these examinations explore specific aspects of prosocial behavior, rather than a more general account as does this study. It was argued in the introductory chapter that part of the ambiguity of results in prosocial literature may be due to the lack of a general theoretical account of conditions that affect prosocial behavior before more specific studies were conducted. Given the state of the literature, at this point it may be plausible to attempt simply to discuss the impact of more general accounts upon these more specific explanations. This study was not intended to be as general an account of prosocial behavior as is desired. However, it is more general in its explanation than most. In this section of this chapter a brief attempt is made to discuss the relevance of previous explanations of prosocial behavior as they may relate to the present results. The explanations to be discussed are: (a) normative responses; (b) empathic arousal; (c) modeling and compliance; (d) psychological reactance; (e) the effects of prior help.

Normative Explanations of Prosocial Behavior

In response to the question of "why people help others in needy situations," three types of normative explanations have been advanced. These are: (1) The Norm of Reciprocity; (2) The Social Responsibility Norm; (3) Personal Norm Activation.

The Norm of Reciprocity. Gouldner (1960) suggested that people respond to a shared principle or norm of reciprocity. This norm suggests that people are cognizant of the debts and credits that are at work in their lives, and that furthermore, they anticipate that

the mutual exchange of debts and credits will be equal (balanced).
Gouldner proposed that the norm of reciprocity has two interrelated
minimal demands:

1. "People should help those who have helped them," and

2. "People should not injure those who have helped them" (p. 171).

   Gouldner suggested that several conditions determine the
value of the benefit and thereby the debt to be repaid. These condi-
tions are: (a) the degree of the need when the benefit was acquired;
(b) the resources of the donor; (c) the motivational orientation
attributed to the donor; and (d) was the donor acting under his own
free will. To determine if the requisite conditions for reciprocity
are in accord, the value of the benefit and thereby the debt to be
repaid must be determined. In the present study the outcomes of the
task were not received exclusively by one partner and so this level
of requisite condition was not met. However, the norm further states
that the strong <u>should</u> feel obligated to return benefits received from
the weak. In this study the Subjective Perception Measurement demon-
strated the applicability of the power differential: superordinates
were, and perceived themselves as, "strong"; while subordinates were,
and perceived themselves as, relatively "weak." Viewed in this light,
the inequitable distribution of inputs clearly constitutes a benefit
received from the weak to the strong. To this extent the "norm of
reciprocity" appears to not occur in hierarchical social structures,
or if so, it was in reverse application. In egalitarian social
structures--where individuals were more oriented towards each

other--if the norm of reciprocity is a viable norm it appears to be more salient and operative in this social structure.

The Social Responsibility Norm

Berkowitz and Daniels (1963a) found evidence to suggest that when people feel a peer is dependent upon them they tend to work hard to help him/her achieve their goals. This finding remained consistent even when no return payment was anticipated, and when the person offering assistance was unaware of the person in need of assistance for a considerable period of time.

This finding also demonstrated, in a supervisor-worker paradigm, that the greater the supervisors' need for help (i.e., dependency upon workers to gain reward) the more help received. This finding remained consistent even when the subject was told that the experimenter would remain unaware of his behavior (Berkowitz, Klanderman, & Harris, 1964). The researchers attributed this altruistic behavior to what they label as a "social responsibility norm."

The social responsibility norm is a cultural norm in our society that, according to the writers, "prescribes that the individual should help those who are dependent upon him" (Berkowitz & Daniels, 1964, p. 275). This norm suggests further that this assistance is given without expectation of return payment. Many researchers have explored the social responsibility norm. For more detailed accounts the reader should examine: Horowitz, 1968; Staub, 1972; Krebs, 1970; Schopler and Bateson, 1965.

The social responsibility norm states that people should help those dependent upon them. This investigation presents some

interesting findings with regard to the salience of this norm. The subordinate members of the hierarchical social structure hold dependent social positions. The norm of social responsibility suggests that these people should receive assistance. The results of this study clearly indicate that the people who had been the most dependent upon another received the least amount of help. On the other hand, those people in the dependent social structure helped those independent social structure members--who were only situationally dependent--twice as much as they were helped by them. The latter point is consistent with the Berkowitz et al., results, yet as the first chapter stated this dependency is only temporary, and is situationally laden. These results go beyond this cursory supposition. It states that structurally dependent individuals--those individuals whom the norm should be most applicable towards--are the least assisted. It further indicates that those individuals whom the norm suggests should be responsible for assisting, simply did not assist. This mirrors the feelings of those most deprived in society, that being that those at the top of the social structure are insensitive, unconcerned, and uncaring about the needs of those at the bottom of the system. These results then unequivocally question the conceptualization and application of the social responsibility norm in hierarchical social structures. In egalitarian social structures where people are oriented towards each other, once again if the norm of social responsibility is a viable norm, it is much more operative in egalitarian social structures.

Personalized Norm Activation

Schwartz suggests that early (child) socialization processes,
personal and situational variables, provide individuals with frames of
reference which indicate what he or she "ought to do" in given
situations. The individual, from these frames of references, develops
attitudes concerning behavioral intentions in these situations and
reacts to these dispositions. If the conditions of a situation are
such where a person feels he should act, the activation of a personal
norm or a personal "ought-to-ness" has occurred. In this situation
the person is assumed to act frequently upon his or her disposition.
If the individual's norms have been activated, yet he fails to
respond in the subjectively defined appropriate manner, he or she is
expected to feel various degrees of guilt. If the properties of the
situation are such that the personalized norms do not become acti-
vated, typically no behavioral response is forthcoming.

With regards to prosocial behavior, Schwartz's basic idea is
that in situations governed by widely accepted helping norms, factors
conducive to awareness of interpersonal consequences promote acti-
vation of these norms and thereby foster helping behavior through
normative pressure. For specific accounts of "personal norms" the
reader should review the following: Schwartz 1968, 1967, 1970, 1971,
1973; and Schwartz and Clausen, 1970.

The impact of this investigation is less clear with regard
to "personal norm activation." Personal norms are a less generalized
account of normative saliency in that it is an individual variation
approach. In the discussion of social structures it was suggested

that in social situations the social structure has distinct and impor-
tant implications for the development and salience of norms. This
indicates that normative development and normative orientation are
somewhat inherent in social structure. Those social structures where
emphasis is placed upon the "collective unit" (managed visible hand
systems) results in significantly more prosocial responses than those
social structures where emphasis is placed upon various uncoordinated
unitary parts (unmanaged invisible hand systems).

To a great degree, this examination implies that social
structure is an important source of the creation, development, and
activation of norms relating to prosocial behavior. If this position
is accurate then research should be more directed towards social
structure as opposed to normative explanations. More research is
needed examining the relevancy of social structure to norms. Addi-
tionally, more research is needed on the normative explantions re-
viewed here satisfying the specific requirements for the salience of
the norms upon their relative activation in various social structures.
Although normative explanations can neither be proven nor disproven,
this examination clearly indicates that if normative explanations are
salient, they appear more active in egalitarian social structures
than in others.

Empathic Arousal

Empathic arousal postulates that the perception of another in
need tends to arouse empathy or emotional alarm in the observer. Once
this empathy with another's plight has occurred, the "empathizer" is
expected to assist the person in need in some capacity. Examinations

of empathic arousal have primarily measured empathy as a dependent

variable. The general findings tend to demonstrate that adult

observers react sympathetically to objective cues of another's pain.

For specific insight upon empathic arousal the following examination

should be reviewed: Aronfreed 1968; Bryan and Test, 1967; Rosenhan

and White, 1967; Macaulay, 1970; Aronfreed, 1970; Aderman and

Berkowitz, 1970.

Empathic arousal as reported in this study has been viewed

as a source of motivation to account for prosocial responses. This

study clearly demonstrates that empathic arousal occurs more in

egalitarian and/or managed-visible hand systems than in others. This

suggests that the orientation towards others implicit within this

social structural framework--which results in more prosocial

responses--may in part be explained by the level or amount of empathy

activated in this social structure as compared to others (i.e.,

hierarchical).

Modeling

The notion of modeling, is closely related to Social Learning

Theory. Modeling offers to explain variables of prosocial behavior

under the notion that people offer assistance to others in need

because they have either witnesses or received prior prosocial

behavior. The inverse proposition is that if prior receipt, or

witnessing of prosocial behavior has not occurred, then prosocial

behavior is not as likely to occur. In summary, the examinations

of modeling upon prosocial behavior have indicated that the obser-

vation of a "helping model" increases prosocial responses. It is

believed that this increase occurs because a model's behavior presents

clarifying information concerning what the appropriate mode of behavior

should be. Modeling effects upon prosocial behavior has been exten-

sively investigated. For more detailed accounts see: Bryan and Test,

1966; Hornstein, Fisch, and Holmes, 1968; Harris, 1968; Bryan, 1971;

Masor, Hornstein, and Tobin, 1973. Closely related to, yet distinct

from the notion of modeling in prosocial behavior, is the investigation

of the effects of prior help on subsequent prosocial behavior.

Compliance, and the Effects of Prior Help

A question significant in most phases of social life and social

organization, is how to induce someone to act in a manner that he or

she would prefer not. One answer explored by psychologists has been

the exertion of pressure to force one to comply. Research on social

influence, power, conformity, imitation, persuasive communication,

obedience, and attitude change have explored this important variable.

One general effect of this pressure motif has indicated that the more

pressure applied, the most likely compliance will result. Obviously,

there are many situations where the utilization of external pressure

is not the optimal method. What are other factors besides external

pressure that induce a needed amount of compliance?

Freedman and Fraser (1966, p. 195) state that "one assumption

about compliance that has often been made either explicitly or impli-

citly is that once a person has been induced to comply with a small

request he is more likely to comply with a larger demand. This is the

principle that is commonly referred to as the foot-in-the-door, or

gradation technique and is reflected in the saying that if you give

them an inch, they'll take a mile." Further examinations of the effects of prior help were conducted by (Greenglass, 1969; Wilke and Lanzetta, 1970; Lanzetta and Wilke, 1971; Harris, 1972; Moss and Page, 1972, and Cox, 1974).

The brief review of the effects of modeling and the effects of prior help on subsequent help indicate that at least these processes make behavioral alternatives salient. They induce perception to specific modes of orientation, and have been demonstrated to increase the salience of social norms. They increase, and at times create, the salience of social norms through the exemplification of their properties: These properties are (1) the indication of information about an action; (2) indication of information concerning the appropriateness of specific actions in various situations through setting an example; (3) through this exemplification process (i.e., setting an example) the creation, in part, of a normative standard; (4) indication of at least a partial definition of the situation; and (5) information concerning the consequences of the performed modes of action. What is apparent is that modeling and the effects of prior help do not give information concerning their effects. They, at best, describe a pattern or sequence of activity, and not why it occurs.

The impact of this study upon modeling behavior, compliance, and the effects of prior help, is less clear than previous integrations offered. This study utilized two negative models; one a decisive negative model, the other a indecisive model or unresponsive bystander. The potential helper then had to overcome the effects of his prior knowledge of the models' responses. They very clearly

offered him (in terms of psychological comfort) a way out of helping. If he decided to help, he possessed a motivational orientation to do so. The results of this investigation then suggest that motivation to overcome negative modeling and exhibit prosocial behavior (in effect noncompliant behavior) is much greater in egalitarian and/or managed-visible hand systems than others. On the other hand, compliance with negative modeling of non-prosocial behavior was much greater in the independent hierarchical social structure. One conceivable explanation for this behavior in general may be the effects of "psychological reactance."

Psychological reactance is an emotional arousal of noncompliance to an influence attempt by another. Research of this variable on prosocial behavior has suggested that it may account for nonprosocial behavior. In this study, superordinate members of hierarchical social structures (independent social structure) may have indeed felt that the request for assistance was a threat to their freedom. A problem with this conceptualization is that the negative models offered the potential helper an alternative to this influence attempt. The impact of psychological reactance upon the other social structures is not apparent. If this variable is a plausible explanation for members of hierarchical social structures lack of prosocial responses, this investigation does not indicate such. Further investigation of this variable upon prosocial behavior is clearly warranted.

The extensive work upon "bystander apathy," primarily due to the interests of Latané and Darley, has consistently indicated a modeling/social influence effect. Bystanders consistently model the

inaction of other bystanders. In the present study, the inaction of
the bystanders was only consistently modeled by superordinate members
of hierarchical social structures. The difference in the "modeling
effect" in these studies may be that people are accustomed to re-
ceiving help requests of a nonemergency variety and to this extent
they may examine internal cues. On the other hand, emergency events
are rare and as research has indicated bystanders do look to others
(external cues) to acquire information about the circumstances of the
present situation.

Solomon Asch in the 1940s performed a classic study indicating
how the influence of group norms produces an increase of conformity
within the group. Research findings of this type typically have been
discussed in terms of a need for social support. This need for social
support refers to not only social compassion, but also to the con-
struction of social reality. This notion later became known as social
comparison. With regard to prosocial behavior, social comparison has
largely become associated with Latané and Darley's explanation of by-
stander apathy. The basic properties of constructing apathy in exper-
imental situations is to provide models who negate the reality or
salience of a social situation. Bystander intervention research as
well as the present study have utilized this paradigm. A social
support explanation for the present research would suggest that when
in a group situation and no social support (and therefore no social
reality) is offered to provide legitimacy of a help request (which
means recognizing its importance by helping), relatively little help
is expected to occur. When help does occur, someone has obviously

emerged to offer some social support for the legitimacy of the request. The central question becomes why does this person emerge? Wilson (1977) suggests that this person is most likely to possess high self-esteem, while the present research suggests that this person has a role in a social structure that is orientated towards the needs or concerns of others.

Intervention Strategies

One of the socially significant and personally appealing factors of the investigation of prosocial behavior is that its inquiries are intended to be corrective. As with all other topical areas in psychology, researchers explore methods and variables that are intended to increase the understanding of the phenomena. In prosocial behavior these attempts belong to a conceptual orientation which seeks to find strategies to increase prosocial responses. The intent of this section of this chapter is to present corrective strategies to increase prosocial behavior based upon the results of this investigation. To do this two approaches will be used: (1) direct suggestions based upon the results of this study; (2) suggestions based upon an analyses of the internal spectrum of the social structures in this study as they relate to real social systems.

Members of egalitarian social structures and subordinate (dependent) members of hierarchical social structures agreed to help significantly more than members of other social structures. Subordinate members and members of egalitarian social structures both operated in a structural framework which promoted high consciousness

and orientation towards the other members of their social structures.
To increase prosocial activity these results imply that: (a) power-
differentials between roles should be corrected with power being
either highly centralized or more equally dispersed; and (b) the
definition of groups, or what constitutes a group and its boundaries,
should be extended. This suggests that more people should belong to
more groups physically and psychologically, and that these extended
groups should operate on an overall social structure where power is
somewhat equally dispersed or highly centralized.

In examining the internal spectrum of the social structures
it appears that the type of unmanaged organization or society is anti-
thetical to prosocial behavior. The unmanaged organization or society
is characterized by autonomous structured exchange and autonomous
structured power and authority. As hierarchical social structures
have been operationalized in this investigation, they emulate somewhat
the "market form of exchange/unmanaged society" approach to the model
construction of social structures. In particular exchange was struc-
tured in an autonomous fashion and power and authority are also auto-
nomously laden. In addition to these components, several other
components of this approach lead to the predictions concerning hier-
archical social structures. These components are: (1) exchange
occurs out of desire or reduction of alternatives which in effect
induces parties to comply in exchange; (2) there is an inherent
conflict of interests in this form of relationship in that power is
spread among various parts of the social system whose units are
autonomous with respect to authority; (3) this form of control

structure does not seek to control or coordinate the various parts of the social system in relation to one another, for the power differential is important for order and self-maximization; (4) norms and role definitions are designed only to curtail the development of conflict to the extent of inhibiting exchange. These factors, in addition to the fact that power and roles (authority) are clearly differentiated, account for the lack of prosocial responses in this social structure. It is only when members in this social structure are not autonomous to authority is there some tendency toward prosocial responses.

In all the social structures investigated, those conditions where autonomy was comparatively stronger than mutuality or interdependence demonstrated the least amount of prosocial behavior. Interdependency (mutuality) and the lack of differential power and authority (autonomy) of the so-called managed visible hand society results in significantly more prosocial responses. To increase prosocial behavior this view of society and the results of the study suggest that human organization should be governed in a type of planned management framework. This view assumes that prosocial behavior is a desired behavioral orientation of the members of society. To this extent, management resources should be dispensed to promote it.

As egalitarian social structures have been operationalized in this investigation, they very closely emulate the "commissary form of exchange/managed society" approach to the model construction of social structures. Several components of this approach lead to the predictions concerning egalitarian social structures. These

components are: (1) parties involved in the exchange are thought of as sharing a common interest in which all parties involved benefit in some fashion; (2) norm and role definitions that direct behavior are structurally orientated towards producing cooperation; (3) parties involved in this form of exchange are involved in a reciprocal role relationship. These factors, along with the fact that power among the various units is equal, lead to the predictions concerning egalitarian social structures in this study.

Bates believes, and this author agrees, that there are factors operating at present (over-population, energy, environment, food shortages, and so on) which, barring a sudden and complete devastating global disaster, will move all societies closer to the managed form of society. If this is so, then the most important moral issue of the future is not if the managed form is morally correct, feasible or infeasible, but: (1) who shall manage; (2) how shall they be selected; (3) how will they exercise management; and (4) toward what goals will management be directed?

This investigation does make one factor overwhelmingly clear with regard to factors that increase prosocial behavior, that is, that a "collectivistic orientation" which is concerned with social responsibility, interdependence, and mutuality will promote pro-social orientations and behavior. On the other hand, an "individualistic culture or person" which emphasizes personel concerns of self-fulfillment will inhibit prosocial orientations and behavior. This study clearly demonstrates that these inhibitive and facilitative tendencies are from <u>internal</u> <u>causal</u> <u>factors</u> of the respective social

structures. Many social problems such as crime, delinquency, human
disorganization, and so on may be more effectively combated and con-
trolled through the utilization of prosocial behavior as a management
function and source of group orientation. This is contingent also
upon the extension of group membership and boundaries, and attempts
toward power equalization. Before making some concluding remarks,
some further notes on areas of future research are presented.

More detailed explorations of the relevance and impact of
social structure upon the broader class of variables reported in this
chapter should be conducted. In particular the effects of modeling
in egalitarian social structures as a source of increasing the pro-
pensity of prosocial behavior should be explored. Psychological
reactance as an inhibitive process affecting the lack of prosocial
responses of superordinates in hierarchical social structures is
another area where more research is needed. In addition the rela-
tionships of social structure upon empathic arousal and normative
responses as precursors to prosocial behavior should be examined in
more detail. Also, it appears that personal disposition variables
and social structure may affect each other in a reciprocating
fashion. Further research upon these relationships and prosocial
behavior should help clarify both inhibitive and facilitative dimen-
sions of these variables upon prosocial behavior. Finally, in addi-
tion to this person by situation approach, a type of structure by
situation approach should provide valuable information concerning
the more specific affects of social structure on prosocial behavior.
A structure by situation approach examines the differential impact

that the social structure of various social encounters people engage in has. Of particular relevance to this approach is the impact upon prosocial responses of the various social structures of the few crucial human social encounters (i.e., work, school, society, subcultures, and mainstream cultures).

Concluding Remarks

This study clearly demonstrates that social structures and position in social structure has substantial impact on prosocial behavior. This impact has been theoretically discussed to affect groups, small and large organizations, and finally small and large, complex societies.

Recently, social scientific research has begun to examine in more detail the relationship between the superordinate or super-state systems and the subordinate systems, in world body politics. Of this growing body of literature on domination, exploitation, and dependence, the emphasis has largely focused on the economic sphere and those political maneuvers devised to maintain this system. This investigation sought to begin to examine these relationships implicit within, and as mechanisms of social structure with regard to how they might impact upon prosocial behavior. An initial effort to identify some critical areas of theory construction through empirical research was advanced. Linkage theory explanations were postulated to explain the relations between national systems as social structure types--cultural systems and political arrangements in social structure types--and their overriding relationships to everyday group and organizational activity and structure. In this light, cultural

systems should be conceived in terms of three subsystems as Leslie
White suggests. These subsystems are: (1) technology, (2) social
structure, and (3) ideology.

A very natural and exceedingly important role for psychologists
is that of a social planner, a social engineer, a futurist. Today, as
in all days, we must believe in man, and believe in love. With these
as cornerstones to our beliefs, we become imbued with the necessity to
understand the various imperfections of man, and why man has not loved
man. The words of Whitehead, McFadden, and Carstarphen (1975) illu-
strate this point. The lyrics of their music read as follows:

> Wake up everybody, no more sleeping in bed;
> No more backward thinking, time for thinking ahead.
> The world has changed so very much from what it used to be.
> There is so much hatred, war, and poverty.
>
> Wake up all the teachers, time to teach a new way;
> Maybe then they'll listen to what you have to say.
> Cause they're the ones who're coming up and the world is in
>   their hands.
> When you teach the children, teach them the very best you can.
>
> Wake up all the doctors, make the old people well;
> Cause they're the ones who suffer and catch all the hell.
> But they don't have so very long before their judgement day.
> So won't you make them happy before they pass away?
>
> Wake up all the builders, time to build a new land.
> I know we can do it if we all lend a hand.
> The only thing we have to do is put it in our minds;
> And surely things will work out, they do it every time.
>
> The world won't get no better, if we just let it be.
> We've got to change the world, just you and me.
> It don't matter what race, creed, or color-
> Everybody, we need each other.
> Wake up everybody.

This research has sought to address itself to an increasingly
dismal area in human behavior, which is the lack of positive forms of
social behavior. Some comments on "corrective strategies," based upon

the results of the data from this research, were presented to <u>outline</u>

courses of alternatives. International dilemmas, and probably viable

solutions offered to cope with them, coincide with the crux of the

results and their interpretations reported herein. These international

dilemmas operating at present (i.e., overpopulation, world trade

alliances, food shortages, and the inequitable utilization of energy

and natural resources, and so on) clearly emphasize the increasing

interdependence of the people of the world upon each other. This in-

creasing international interdependence affects and magnifies the levels

of interdependence upon national, state, local, and family dimensions.

It was suggested that current major human problems shall lead

human organizations towards a more managed type of orientation. Under

management, the role of prosocial behavior in the eradication of these

major human problems cannot be underestimated. In local communities,

the effects that prosocial orientations may have upon the reduction of

crime or public advancement is unknown. Surely prosocial orientation

can only help. One factor is however perfectly clear: under current

world conditions the only alternative for human survival and develop-

ment is through positive mutual interaction, work, assistance, and

prosocial orientations (reflecting both attitudes and behaviors). As

one crucial factor in examining approaches whereby this basic view of

interdependence may be actualized, this examination has focused upon

prosocial behavior as an outcome produce and upon interdependency as a

contributing source to achieve this outcome.

In addressing the role of prosocial behavior in future human

interaction,it was suggested that prosocial orientations as a societal

management function may be a conceivable intervention schema. In this light, an extremely important concern is under what conditions, if any, of heightened prosocial orientations of behavior and/or attitudes will people begin to associate or view themselves as being a part of one another? These are questions of identification, compassion, and cohesion. These concerns, along with the behavior and spirit associated with a positive worldwide community, refer to the ultimate configuration of prosocial behavior. Theoretically this investigation adds credibility to the author's belief that prosocial behavior is our desired product, and yet it may be the tool by which we carve and create our product. In conclusion, the following poem "On Life Anew" seems relevant.

> Sometimes I sit in space and time,
> seeking to feel the soul of the world in mine.
> The love for me for the love of you,
> why can't we share this love and do-
> Do the things to help each other,
> fight the battle to make us all sister and brother.
>
> My heart's enriched from above,
> feeling the array of the Creator's love.
> What can I do, what can I say,
> to make you feel this way today?
>
> A heart's a flower yet no blossom will it bring
> till it seeks its union among all human beings.
> Devotion and trust, despair and disillusion,
> bits of faces, full of confusion.
> See them all wherever you look, all so different-
> yet all the same-
> fitting like pages in a never ending book.
>
> Among you all, I feel peace . . .
> yet you can't see my heart in me.
> Off balance in nature, in spirit and force,
> not in touch with our essence, steered completely from our course.

It's harmony I seek between us all,
compassion and caring, one and all.
Take my heart and take my mind,
use them as tools to help you find . . .,
find your essence in me and mine in you-
for in love's grace we are one, though reality says two-
yet who shapes reality but the me's and the you's.

And so we are as the Creator if we seek to find,
unity in spirit, love and peace of mind.
How can I find you and give you all of me,
and make you understand that this is the way that it must be.

(James Weathers, 1977)

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APPENDICES

APPENDIX A

APPENDIX A

Communique (Initial Outline)

The following represents points of concern that the background
materials cover, and that should at least be covered in the communique.

1. The economic issues behind the moon race.

   a. Does it stimulate the economy and create more public work jobs?
   b. What type of jobs, and to what sector of the labor market are
      they a part of?

2. What are NASA's new projects, why is it important that they
   receive funding?

3. If NASA wasn't funded would its money go towards public works,
   decreasing the national deficit, or where?

4. In terms of worldwide cooperation, what are the international
   implications of the space program?

OPINION QUESTIONNAIRE

Instructions: Please respond to this questionnaire <u>with your actual feelings</u> by circling (or marking an X) on each scale which best expresses your attitude on that particular item. All information will be kept confidential.

1. The problem with most people is that they don't know how to communicate.

Strongly Agree	Agree	Slightly Agree	No Opinion	Slightly Disagree	Disagree	Strongly Disagree

2. In this study, I had more influence on our solution to the task than my co-worker did.

Strongly Agree	Agree	Slightly Agree	No Opinion	Slightly Disagree	Disagree	Strongly Disagree

3. I enjoyed participating in this study.

Strongly Agree	Agree	Slightly Agree	No Opinion	Slightly Disagree	Disagree	Strongly Disagree

4. I enjoyed working on this study with my co-worker.

Strongly Agree	Agree	Slightly Agree	No Opinion	Slightly Disagree	Disagree	Strongly Disagree

5. This experiment would have been more pleasant if I had another co-worker.

Strongly Agree	Agree	Slightly Agree	No Opinion	Slightly Disagree	Disagree	Strongly Disagree

6. I would have preferred to have the position that my co-worker had in this experiment.

Strongly Agree	Agree	Slightly Agree	No Opinion	Slightly Disagree	Disagree	Strongly Disagree

7. I did not like my co-worker.

Strongly Agree	Agree	Slightly Agree	No Opinion	Slightly Disagree	Disagree	Strongly Disagree

8. I did not like my relationship with my co-worker in this experiment.

Strongly Agree	Agree	Slightly Agree	No Opinion	Slightly Disagree	Disagree	Strongly Disagree

9. My co-worker and I took our task assignment very seriously.

Strongly Agree	Agree	Slightly Agree	No Opinion	Slightly Disagree	Disagree	Strongly Disagree
o	o	o	o	o	o	o

10. This was a great study.

Strongly Agree	Agree	Slightly Agree	No Opinion	Slightly Disagree	Disagree	Strongly Disagree
o	o	o	o	o	o	o

VERB CLASSIFICATION-REACTANCE FORM

INSTRUCTIONS: Following are 10 psychological measurement scales which consist of 100 verb stems. These 100 verb stems will be repeated in each of the 10 scales. What you should do is: (1) For each scale read the general description of what a high score and low score represent, (2) Evaluate and classify the verb stems (read each stem, react to it, and place it in the appropriate numerical component on the low-high scale. This scale goes from 1 (very low) to 7 (very high). If you complete all 100 verb-stems on each of the 10 scales, you would be of great assistance to us, but you should feel free to complete as many scales as you wish (one, two, three, four . . . ten). The major request that we make is that if you start a scale, you should complete your verbal response-classification of all 100 verb-stems on that scale.

DOMINANCE SCALE: A high score tends to be seen as an object or a person who is aggressive, confident, persistent, self-reliant and independent. Also as having leadership potential and initiative. A low score tends to be seen as an object or person who is indifferent and unassuming, slow in thought and action, and lacking in self confidence.

Verb-Stem	Low Dominance 1	2	3	Neutral 4	5	High Dominance 6	7
to example				X			
to abandon							
to accept							
to admire							
to agree with							
to annoy							
to antagonize							
to apologize for							
to appease							
to approve of							
to argue with							
to associate with							
to avoid							
to benefit							
to challenge							
to comfort							
to command							
to compete with							
to comply with							
to concede to							
to condemn							
to confide in							
to conquer							
to be conquered by							
to have contempt for							

Verb-Stem	Low Dominance			Neutral		High Dominance	
	1	2	3	4	5	6	7
to control							
to be controlled by							
to criticize							
to deceive							
to defend							
to despise							
to disagree with							
to disappoint							
to disapprove of							
to discourage							
to dislike							
to dislike talking to							
to disobey							
to disregard							
to dominate							
to be dominated by							
to embarrass							
to enjoy talking to							
to evade							
to exalt							
to exclude							
to exploit							
to be exploited by							
to fear							
to follow							
to forgive							
to frustrate							
to guide							
to harrass							
to harm							
to be harmed by							
to hate							
to help							
to be helped by							
to humiliate							
to be humiliated by							
to imitate							
to impress							
to influence							
to be influenced by							
to inspire							
to insult							
to lead							
to learn from							
to like							
to love							
to manipulate							
to be manipulated by							

Verb-Stem	Low Dominance			Neutral		High Dominance	
	1	2	3	4	5	6	7
to obey							
to oppress							
to outwit							
to pay attention to							
to pay no attention to							
to persuade							
to please							
to praise							
to protect							
to be protected by							
to punish							
to question							
to reassure							
to reject							
to resist							
to respect							
to ridicule							
to serve							
to share with							
to supervise							
to surrender to							
to sympathize with							
to take							
to teach							
to threaten							
to be threatened by							
to tolerate							
to trust							

Sc Scale

A high score tends to be seen as a person or object that is slow,
inhibited, practical, self-denying, deliberate; as being strict and
thorough in their own work and in their expectations for others. A
low score tends to be seen as a person or object that is impulsive,
shrewd, irritable, self-centered, uninhibited, aggressive, and
assertive.

Verb-Stem	Low Self-Control			Neutral		High Self-Control	
	1	2	3	4	5	6	7
to abandon							
to accept							
to admire							
to agree with							
to annoy							
to antagonize							
to apologize for							
to appease							
to approve of							
to argue with							
to associate with							
to avoid							
to benefit							
to challenge							
to comfort							
to command							
to compete with							
to comply with							
to concede to							
to condemn							
to confide in							
to conquer							
to be conquered by							
to control							
to be controlled by							
to criticize							
to deceive							
to defend							
to despise							
to disagree with							
to disappoint							
to disapprove of							
to discourage							
to dislike							
to dislike talking to							
to disobey							
to disregard							
to dominate							
to be dominated by							

Verb-Stem	Low Self-Control			Neutral		High Self-Control	
	1	2	3	4	5	6	7
to embarrass							
to enjoy talking to							
to evade							
to exalt							
to exclude							
to exploit							
to be exploited by							
to fear							
to follow							
to forgive							
to frustrate							
to guide							
to harrass							
to harm							
to be harmed by							
to hate							
to help							
to be helped by							
to humiliate							
to be humiliated by							
to imitate							
to impress							
to influence							
to be influenced by							
to inspire							
to insult							
to lead							
to learn from							
to like							
to love							
to manipulate							
to be manipulated by							
to obey							
to oppress							
to outwit							
to pay attention to							
to pay no attention to							
to persuade							
to please							
to praise							
to protect							
to be protected by							
to punish							
to question							
to reassure							
to reject							
to resist							
to respect							

Verb-Stem	Low Self-Control			Neutral		High Self-Control	
	1	2	3	4	5	6	7
to ridicule							
to serve							
to share with							
to supervise							
to surrender							
to sympathize with							
to take							
to teach							
to threaten							
to be threatened by							
to tolerate							
to trust							

Ac Scale

A high score tends to be seen as a person or object that is efficient, organized, co-operative, sincere, capable, persistent, industrious; and as valuing intellectual activity and intellectual achievement. A low score tends to be seen as a person or object that is coarse, awkward, insecure, stubborn; also as easily disorganized under stress or pressures to conform.

Verb-Stem	Low Achievement via Conformance			Neutral		High Achievement via Conformance	
	1	2	3	4	5	6	7
to abandon							
to accept							
to admire							
to agree with							
to annoy							
to antagonize							
to apologize for							
to appease							
to approve of							
to argue with							
to associate with							
to avoid							
to benefit							
to challenge							
to comfort							
to command							
to compete with							
to comply with							
to concede to							

Verb-Stem	Low Achievement via Conformance			Neutral		High Achievement via Conformance	
	1	2	3	4	5	6	7
to condemn							
to confide in							
to conquer							
to be conquered by							
to have contempt for							
to control							
to be controlled by							
to criticize							
to deceive							
to defend							
to despise							
to disagree with							
to disappoint							
to disapprove of							
to discourage							
to dislike							
to dislike talking to							
to disobey							
to disregard							
to dominate							
to be dominated by							
to embarrass							
to enjoy talking to							
to evade							
to exalt							
to exclude							
to exploit							
to be exploited by							
to fear							
to follow							
to forgive							
to frustrate							
to guide							
to harrass							
to harm							
to be harmed by							
to hate							
to help							
to be helped by							
to humiliate							
to be humiliated by							
to imitate							
to impress							
to influence							
to be influenced by							
to inspire							
to insult							
to lead							

Verb-Stem	Low Achievement via Conformance			Neutral		High Achievement via Conformance	
	1	2	3	4	5	6	7
to learn from							
to like							
to love							
to manipulate							
to be manipulated by							
to obey							
to oppress							
to outwit							
to pay attention to							
to pay no attention to							
to persuade							
to please							
to praise							
to protect							
to be protected by							
to punish							
to question							
to reassure							
to reject							
to resist							
to respect							
to ridicule							
to serve							
to share with							
to supervise							
to surrender to							
to sympathize with							
to take							
to teach							
to threaten							
to be threatened by							
to tolerate							
to trust							

Ai Scale

A high score tends to be seen as a person or object that is forceful, strong, dominant, demanding, independent, and self-reliant. A low score tends to be seen as a person or object that is inhibited, cautious, anxious, submissive and compliant before authority; and as lacking in self-insight and self-understanding.

Verb-Stem	Low Achievement via Independence			Neutral		High Achievement via Independence	
	1	2	3	4	5	6	7
to abandon							
to accept							
to admire							
to agree with							
to annoy							
to antagonize							
to apologize for							
to appease							
to approve of							
to argue with							
to associate with							
to avoid							
to benefit							
to challenge							
to comfort							
to command							
to compete with							
to comply with							
to concede to							
to condemn							
to confide in							
to conquer							
to be conquered by							
to have contempt for							
to control							
to be controlled by							
to criticize							
to deceive							
to defend							
to despise							
to disagree with							
to disappoint							
to disapprove of							
to discourage							
to dislike							
to dislike talking to							
to disobey							
to disregard							
to dominate							
to be dominated by							

Verb-Stem	Low Achievement via Independence			Neutral		High Achievement via Independence	
	1	2	3	4	5	6	7
to embarrass							
to enjoy talking to							
to evade							
to exalt							
to exclude							
to exploit							
to be exploited by							
to fear							
to follow							
to forgive							
to frustrate							
to guide							
to harrass							
to harm							
to be harmed by							
to hate							
to help							
to be helped by							
to humiliate							
to be humiliated by							
to imitate							
to impress							
to influence							
to be influenced by							
to inspire							
to insult							
to lead							
to learn from							
to like							
to love							
to manipulate							
to be manipulated by							
to obey							
to oppress							
to outwit							
to pay attention to							
to pay no attention to							
to persuade							
to please							
to praise							
to protect							
to be protected by							
to punish							
to question							
to reassure							
to reject							
to resist							
to respect							

Verb-Stem	Low Achievement via Independence			Neutral		High Achievement via Independence	
	1	2	3	4	5	6	7
to ridicule							
to serve							
to share with							
to supervise							
to surrender to							
to sympathize with							
to take							
to teach							
to threaten							
to be threatened by							
to tolerate							
to trust							

Py Scale

A high score tends to be seen as a person or object that is change-able, resourceful, perceptive, talkative, quick; and rebellious towards rules, restrictions, and constraints. A low score tends to be seen as a person or object that is apathetic, serious, cautious and unassuming. Also as being slow and deliberate in tempo, overly conforming and conventional.

Verb-Stem	Low Psychological Mindedness			Neutral		High Psychological Mindedness	
	1	2	3	4	5	6	7
to abandon							
to accept							
to admire							
to agree with							
to annoy							
to antagonize							
to apologize for							
to appease							
to approve of							
to argue with							
to associate with							
to avoid							
to benefit							
to challenge							
to comfort							
to command							
to compete with							
to comply with							
to concede to							
to condemn							

Verb-Stem	Low Psychological Mindedness			Neutral		High Psychological Mindedness	
	1	2	3	4	5	6	7
to confide in							
to conquer							
to be conquered by							
to have contempt for							
to control							
to be controlled by							
to criticize							
to deceive							
to defend							
to despise							
to disagree with							
to disappoint							
to disapprove of							
to discourage							
to dislike							
to dislike talking to							
to disobey							
to disregard							
to dominate							
to be dominated by							
to embarrass							
to enjoy talking to							
to evade							
to exalt							
to exclude							
to exploit							
to be exploited by							
to fear							
to follow							
to forgive							
to frustrate							
to guide							
to harrass							
to harm							
to be harmed by							
to hate							
to help							
to be helped by							
to humiliate							
to be humiliated by							
to imitate							
to impress							
to influence							
to be influenced by							
to inspire							
to insult							
to lead							
to learn from							

Verb-Stem	Low Psychological Mindedness				Neutral	High Psychological Mindedness	
	1	2	3	4	5	6	7
to like							
to love							
to manipulate							
to be manipulated by							
to obey							
to oppress							
to outwit							
to pay attention to							
to pay no attention to							
to persuade							
to please							
to praise							
to protect							
to be protected by							
to punish							
to question							
to reassure							
to reject							
to resist							
to respect							
to ridicule							
to serve							
to share with							
to supervise							
to surrender to							
to sympathize with							
to take							
to teach							
to threaten							
to be threatened by							
to tolerate							
to trust							

Cs Scale

A high score tends to be seen as an object or person who is ambitious, active, forceful, insightful, and versatile; also as being ascendent and self-seeking; effective in communication; and as having personal scope and breadth of interests. A low score tends to be seen as a person or object who is apathetic, shy, dull, shy, restricted in outlook and interests; and as being uneasy and awkward in new or unfamiliar social situations.

Verb-Stems	Low Capacity for Status			Neutral		High Capacity for Status	
	1	2	3	4	5	6	7
to abandon							
to accept							
to admire							
to agree with							
to annoy							
to antagonize							
to apologize for							
to appease							
to approve of							
to argue with							
to associate with							
to avoid							
to benefit							
to challenge							
to comfort							
to command							
to compete with							
to comply with							
to concede to							
to condemn							
to confide in							
to conquer							
to be conquered by							
to have contempt for							
to control							
to be controlled by							
to criticize							
to deceive							
to defend							
to despise							
to disagree with							
to disappoint							
to disapprove of							
to discourage							
to dislike							
to dislike talking to							
to disobey							
to disregard							

Verb-Stems	Low Capacity for Status			Neutral		High Capacity for Status	
	1	2	3	4	5	6	7
to dominate							
to be dominated by							
to embarrass							
to enjoy talking to							
to evade							
to exalt							
to exclude							
to exploit							
to be exploited by							
to fear							
to follow							
to forgive							
to frustrate							
to guide							
to harrass							
to harm							
to be harmed by							
to hate							
to help							
to be helped by							
to humiliate							
to be humiliated by							
to imitate							
to impress							
to influence							
to be influenced by							
to inspire							
to insult							
to lead							
to learn from							
to like							
to love							
to manipulate							
to be manipulated by							
to obey							
to oppress							
to outwit							
to pay attention to							
to pay no attention to							
to persuade							
to please							
to praise							
to protect							
to be protected by							
to punish							
to question							
to reassure							
to reject							

Verb-Stems	Low Capacity for Status			Neutral		High Capacity for Status	
	1	2	3	4	5	6	7
to resist							
to respect							
to ridicule							
to serve							
to share with							
to supervise							
to surrender to							
to sympathize with							
to take							
to teach							
to threaten							
to be threatened by							
to tolerate							
to trust							

Sa Scale

A high score tends to be seen as a person or object that is outspoken, sharp-witted, demanding, aggressive, and self-centered; as being persuasive, possessing self-confidence and self-assurance. A low score tends to be seen as a person or object that is conservative, dependable, easy going and quiet. Also as given to feelings of guilt and self-blame, as being passive in action and narrow in interests.

Verb-Stems	Low Self-Acceptance			Neutral		High Self-Acceptance	
	1	2	3	4	5	6	7
to abandon							
to accept							
to admire							
to agree with							
to annoy							
to antagonize							
to apologize for							
to appease							
to approve of							
to argue with							
to associate with							
to avoid							
to benefit							
to challenge							
to comfort							
to command							
to compete with							

Verb-Stems	Low Self-Acceptance			Neutral		High Self-Acceptance	
	1	2	3	4	5	6	7
to comply with							
to concede to							
to condemn							
to confide in							
to conquer							
to be conquered by							
to have contempt for							
to control							
to be controlled by							
to criticize							
to deceive							
to defend							
to despise							
to disagree with							
to disappoint							
to disapprove of							
to discourage							
to dislike							
to dislike talking to							
to disobey							
to disregard							
to dominate							
to be dominated by							
to embarrass							
to enjoy talking to							
to evade							
to exalt							
to exclude							
to exploit							
to be exploited by							
to fear							
to follow							
to forgive							
to frustrate							
to guide							
to harrass							
to harm							
to be harmed							
to hate							
to help							
to be helped							
to humiliate							
to be humiliated by							
to imitate							
to impress							
to influence							
to be influenced							
to inspire							

Verb-Stems	Low Self-Acceptance			Neutral		High Self-Acceptance	
	1	2	3	4	5	6	7
to insult							
to lead							
to learn from							
to like							
to love							
to manipulate							
to be manipulated by							
to obey							
to oppress							
to outwit							
to pay attention to							
to pay no attention to							
to persuade							
to please							
to praise							
to protect							
to be protected by							
to punish							
to question							
to reassure							
to reject							
to resist							
to respect							
to ridicule							
to serve							
to share with							
to supervise							
to surrender to							
to sympathize with							
to take							
to teach							
to threaten							
to be threatened by							
to tolerate							
to trust							

APPENDIX B

ANALYSIS OF VARIANCE SUMMARY TABLES

APPENDIX B

Table 1

Summary of Chi Square Analysis for Hypotheses Generated
from Independent Variables

Source		df	x^2
Social Structure	(A)	2	27.96**
Relationship to Requester	(B)	1	5.65*
Proximity to Requester	(C)	1	- 1.64
A X B		2	1.18
A X C		2	.78
B X C		1	- .03
A X B X C		2	- .56
Total			

* p < .05

**p < .001

Table 5

Analysis of Variance Relevant to Manipulation
Check of Influence Upon Task (Item 2)

Source		df	MS	F
Social Structure	(A)	2	55.6	23.16*
Proximity	(B)	1	.8	.33
A X B		2	.55	.23
Within Cell		114	2.4	

Table 6

Analysis of Variance Relevant to Liking/Cohesiveness
Explanation of Results (Enjoyment, Item 3)

Source		df	MS	F
Social Structure	(A)	2	6	2.63**
Proximity	(B)	1	.01	
A X B		2	4.9	2.14
Within Cell		114	2.28	

*$p < .01$ **$p < .1$

Table 7

Analysis of Variance Relevant to Liking/Cohesiveness
Explanation of Results (Enjoyment, Item 4)

Source		df	MS	F
Social Structure	(A)	2	5.43	3.82*
Proximity	(B)	1	1.88	1.32
A X B		2	.97	.68
Within Cell		114	1.42	

*P < .01

Table 8

Analysis of Variance Relevant to Manipulation
Check of Co-Worker Effects (Item 5)

Source		df	MS	F
Social Structure	(A)	2	2.06	1.26
Proximity	(B)	1	3.33	2.03
A X B		2	.31	.19
Within Cell		114	1.64	

Table 9

Analysis of Variance Relevant to Manipulation
Check of Position Preference (Item 6)

Source		df	MS	F
Social Structure	(A)	2	18.92	7.39*
Proximity	(B)	1	.41	.16
A X B		2	4.56	1.78
Within Cell		114	2.56	

*p < .05

Table 10

Analysis of Variance Relevant to Liking/Cohesiveness
Explanation of Results (Item 7)

Source		df	MS	F
Social Structure	(A)	2	2.8	2.15
Proximity	(B)	1	.21	.16
A X B		2	.24	.18
Within Cell		114	1.30	

Table 11

Analysis of Variance Relevant to Manipulation
Check of Liking of Relationship with Co-Worker (Item 8)

Source		df	MS	F
Social Structure	(A)	2	22.4	8.38*
Proximity	(B)	1	.03	.01
A X B		2	2.2	.82
Within Cell		114	2.67	

*p < .01