



1980

Empathy, Assertiveness, Socialization and Values: And Their Relationship to Altruism in College Students

Ornum William Edward Van
Loyola University Chicago

Follow this and additional works at: https://ecommons.luc.edu/luc_diss



Part of the [Psychology Commons](#)

Recommended Citation

Van, Ornum William Edward, "Empathy, Assertiveness, Socialization and Values: And Their Relationship to Altruism in College Students" (1980). *Dissertations*. 2090.

https://ecommons.luc.edu/luc_diss/2090

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License](#).
Copyright © 1980 Ornum William Edward Van

EMPATHY, ASSERTIVENESS, SOCIALIZATION
AND VALUES; AND THEIR RELATIONSHIP TO
ALTRUISM IN COLLEGE STUDENTS

by

William Edward Van Ornum

A Dissertation Submitted to the Faculty of the
Graduate School of Loyola University of Chicago
in Partial Fulfillment of the Requirements
for the Degree of
Doctor of Philosophy
May 1980

ACKNOWLEDGEMENTS

Thanks and appreciation are expressed toward Dr. Jeanne Foley, Director; Dr. Alan DeWolfe, and Dr. Eugene Kennedy, members of the dissertation committee, for their support on this dissertation as well as for their contributions throughout graduate training. Special gratitude is expressed to Dr. Foley for countless meetings devoted to developing the proposal and for practical advice concerning how the study was carried out.

The help of Mr. Philip R. Burns of Northwestern University was instrumental in designing and executing all aspects of the results section. Phil's expertise in the Multivariate Analysis of Variance was greatly appreciated.

All of the students and faculty of Loyola University who contributed to the study are thanked. Special thanks to: Ms. Gail Carlson, Ms. Sylvia Garcia, Ms. Aida Marchlewski, Mr. Terence Najder, Mr. Steve Potts, and Dr. Boris Spiroff.

Appreciation is offered to my family and friends for their support throughout this project. The friendship and understanding of my wife, Mary, was significant throughout the project.

A special thank you is expressed to my mother, Mrs. Shirley Van Ornum, for spending a great deal of time typing

the reader's copy and the final copy. Her contributions were most helpful.

DEDICATION

To my wife, Mary.

VITA

The author, William Edward Van Ornum, is the son of Wesley Van Ornum and Shirley (Phillips) Van Ornum. He was born May 18, 1953, in Evanston, Illinois.

His elementary education was obtained at Thomas A. Edison Grade School, Chicago, Illinois. He graduated from William H. Taft High School in Chicago in 1970.

In September, 1970, he entered DePaul University and in 1975 received the degree of Bachelor of Science, Honors Program, with a major in psychology.

He worked as an Associate Applications Analyst for the Burroughs Corporation, Chicago, Illinois from December, 1974 to September, 1975.

He began graduate study at Loyola University of Chicago in the Clinical Psychology Program in September, 1975. He received a United States Public Health Fellowship, 1975-1976. From June, 1976 to September, 1976, he did a clerkship at Illinois Masonic Medical Center, Chicago, Illinois. He received departmental graduate assistantships at Loyola 1976-1977, 1977-1978, and 1979-1980. His internship was at The Astor Home for Children, Rhinebeck, New York, and The Astor

Child Guidance Clinic, Poughkeepsie, New York, from September 1978 to August 1979. In August, 1979, he married Mary Julia Wicker.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
VITA	v
LIST OF TABLES	ix
CONTENTS FOR APPENDICES	xi
Chapter	
I. INTRODUCTION	1
II. REVIEW OF RELATED LITERATURE	3
Research on Altruism	3
Empathy and Altruism	15
Assertiveness and Altruism	18
Values	23
Hogan's Model and Its Relationship to Empathy, Assertiveness, Socialization, and Values	26
Summary and Hypotheses	34
III. METHOD	38
Subjects	38
Materials	39
Procedure	45
IV. RESULTS	47
The Use of Multivariate Procedures in the Study	50
V. DISCUSSION	75
REFERENCES	83
APPENDIX A	96

TABLE OF CONTENTS

	Page
APPENDIX B.....	99
APPENDIX C.....	101
APPENDIX D.....	105
APPENDIX E.....	107
APPENDIX F.....	109
APPENDIX G.....	112
APPENDIX H.....	115

LIST OF TABLES

Table	Page
1. Synopsis of Laboratory-Based Studies of Altruism in College Students.....	6
2. Synopsis of Situationally-Based, "One-Shot" Studies of Altruism in College Students.....	9
3. Suggested Characterological Implications of the Interaction Between Socialization and Empathy.....	31
4. An Extension of Hogan's Model: Suggested Characterological Implications of the Interaction Between Assertiveness and Empathy.....	33
5. Reliabilities of 20-Item Peer Ratings of Helping Scale.....	43
6. Means and Standard Deviations for Empathy, Assertiveness, Socialization, and Peer Ratings of Helping.....	48
7. Correlational Matrix for Personality Measures, Grade Point Average, and Peer Ratings of Helping....	49
8. Crosstabulations for Demographic Variables by Group (Biology Group vs. Volunteer Group).....	51
9. Univariate <u>F</u> Tests for Empathy, Assertiveness, and Socialization with (1,58) <u>df</u>	57
10. Standardized Discriminant Function Coefficients.....	59
11. Roy-Bargman Stepdown <u>F</u> Tests for Empathy, Assertiveness, and Socialization.....	60
12. Test of Homogeneity of Regression on Peer Ratings of Helping.....	63
13. Regression of Empathy x Assertiveness x Socialization on Peer Ratings of Helping.....	65

LIST OF TABLES

Table	Page
14. Regression Coefficients of Empathy, Assertiveness, and Socialization on Peer Ratings of Helping.....	66
15. Analysis of Variance for Peer Ratings of Helping by Group Membership and Sex of Subject.....	68
16. Analysis of Variance for Peer Ratings of Helping by Demographic Variables.....	70
17. Analysis of Variance for Empathy, Assertiveness, and Socialization by Selected Demographic Variables.....	71
18. <u>t</u> Tests for Differences in Values.....	73

CONTENTS FOR APPENDICES

	Page
APPENDIX A Demographic Data.....	96
APPENDIX B Mehrabian Empathy Questionnaire.....	99
APPENDIX C College Self Expression Scale.....	101
APPENDIX D Socialization Scale, California Personality Inventory.....	105
APPENDIX E Rokeach Values Survey.....	107
APPENDIX F Peer Ratings of Helping.....	109
APPENDIX G Manual for Raters for Peer Ratings of Helping.....	112
APPENDIX H Questionnaire for Demographic Data.....	115

CHAPTER I

INTRODUCTION

Real-life altruism is a fact. This important quality of helping others who are in distress is described many ways: as prosocial behavior, commitment to values, serving others, and helping out, among others. Community groups, businesses, universities, and families, all of these are enhanced by people who are willing to "go the extra mile" in response to the needs of others.

In its outstanding forms, altruism becomes a courageous and admirable quality. Less spectacular is the helping out which occurs in the day-to-day lives, social encounters, and interpersonal relationships of many people. Two examples of such "altruisms" include: a person showing consideration and attentiveness when a friend is perceived to be "in the dumps" or needy; and, a worker taking extra time and giving extra effort to make sure that a new employee fully understands his task and will feel at home. Many other examples could be given.

Many psychologists have studied altruism. A great deal of developmental research (Bryan, 1972; Bryan & London, 1970; Krebs, 1970; Rushton, 1976) has been done, much of it with hopes of practical application. Some search for effective

ways to teach moral development in the schools (Selman, 1976; Lickona, 1976), others try to enhance the prosocial content of television programs (Kaplan & Singer, 1976). One researcher has applied insights gained from research in order "to rear a prosocial child" (Staub, 1975). In social psychology, numerous studies have been devoted to examining prosocial behavior (Tedeschi & Lindskold, 1976). There are a number of studies devoted to variables related to volunteering (Keeley, 1979). Colleges and universities today seem especially sensitive toward developing graduates who are socially aware and able to make commitments to the needs of others (cf. Loyola-Baumgarth Symposium on Values and Ethics, 1980).

A major purpose of the present study was to contribute an investigation of real-life altruism by studying people who behave in an altruistic manner in real and meaningful ways. Two groups were utilized in the study. The first, the Biology Group, was a self-interest group composed of members of a biology honor fraternity. The second, the Volunteer Group, was a helping group made up of students belonging to a volunteer organization on the campus. The relationship of a number of variables, namely empathy, assertiveness, socialization, and values, was investigated in relationship to altruism.

CHAPTER II

REVIEW OF RELATED LITERATURE

Research on Altruism

Altruism is "defined generally as behavior carried out for the benefit of another" (Rushton, 1976, p. 898). There are three types of research which seem to be relevant to this study: (a) theoretical works on moral development; (b) empirical studies on altruism, carried out mostly by social psychologists in laboratory settings; and (c) studies on volunteering.

One major way of approaching altruism and moral development is through a theoretical approach. Three theorists who have written extensively on moral development are Hoffman (1975a, 1975b, 1976); Hogan (1973, 1975); and Kohlberg (1964, 1968, 1969, 1976). For the most part, the insights from these theorists have not been used by social psychologists in designing their studies.

A second way of approaching helping behavior is through the empirical studies which are often used by social psychologists. There have been a great number of studies on altruism done by these psychologists in the past 15 years. Upon examining these studies, two major (although not exclusive) categories emerge: (a) a laboratory situation is created in

which an altruistic response is possible; and (b) a real-life scenario is the setting for observing whether or not a subject will make an altruistic response.

Several examples of the former type of study, the "laboratory" approach, include the following: In the Berkowitz (1968) experiment, the measure of altruism was how many "paper moons" the subject would cut out for a "supervisor." In Goodstadt's (1971) study, the measure of helping behavior was whether or not the subject would help a confederate finish a "Hidden Figures Test." Another example of the laboratory approach to altruism was Gruver and Cook's (1971) study, in which subjects arrived in a room where no experimenter was present, and found a note asking them to collate and staple copies of an 18-page questionnaire. In studies such as the above, an attempt is made to observe the effects of manipulated variables on whether or not and/or how much help the subjects gave. These variables have included: the nature and degree of the dependency condition (Schopler & Matthews, 1965); the perceived costs of helping (Wagner & Wheeler, 1969); and the moods and feelings of the benefactor (Berkowitz, 1972).

One weakness of these laboratory studies is that these situational variables have been related to altruism in complex ways. For example, greater dependency may or may not lead to increased helping, depending on factors such as the locus of responsibility, the cost of helping, the moods and feelings of the benefactor, and the sex of the benefactor and

the recipient. Another and perhaps more serious criticism of studies such as the above is that they seem to be deficient in external validity. The truism of David Hume, "that induction or generalization is never fully justified logically" (Campbell & Stanley, 1963, p. 17) can be applied to many of the laboratory studies on altruism. Since real-life altruism is not equivalent to "pasting paper moons on a paper sky" (Berkowitz, 1968) or "picking up pencils" (Dovidio & Morris, 1975), it is difficult to apply the results of these studies to complex forms of helping behavior. A survey of other laboratory-based studies of helping behavior is presented in Table 1.

Real-life scenarios of altruism have been investigated in the second major variety of the studies by social psychologists. These studies are often conducted in a field setting, such as a shopping center or hospital, and generally they assess whether or not bystanders will come to the aid of a person who seems to be in need. An example of this type of study was Darley and Batson's (1973), during which the subjects come across a "victim" who was slumped in the doorway of an alley. The dependent variable, on a 1-4 scale, was how much the subject offered to help the victim. Another example of a real-life study of altruism was Rushton and Campbell's (1977) investigation in which people were asked if they would like to become blood donors. Other studies of this nature are illustrated in Table 2.

Two common themes that can be discerned in studies

Table 1
Synopsis of Laboratory-Based Studies of
Altruism in College Students

Study	Description
Aderman (1972)	The experimenter asked subjects to number (from 1 to 25) each of 4 pages in preparation for an inventory that they were to fill out later.
Berkowitz and Connor (1966)	The measure of helping was how many paper envelopes a "worker" constructed in 10 minutes for a "supervisor."
Berkowitz and Daniels (1963)	The "worker", under the direction of a "supervisor", constructed paper boxes.
Berkowitz and Daniels (1964)	A "worker" made paper boxes for a "supervisor."
Berkowitz and Friedman (1967)	A "worker" was given 10 minutes to construct geometric designs for a "supervisor."
Darley and Latane (1968)	During a "discussion", one of the "subjects" (in reality, a tape recording) underwent what appeared to be a very serious nervous seizure similar to epilepsy. The dependent variable was the speed with which the subjects reported the "emergency" to the experimenter.
Darley and Teger (1973)	Subjects heard a crash in an adjoining room. They heard the voice of a "workman" who indicated that he had injured his leg. The subjects' reaction time from the moment of the crash until the occurrence of some overt helping response was measured.

Table 1 (continued)

Study	Description
Dovidio and Morris (1975)	Pencils were knocked to the floor, and the number of pencils picked up by the subject was measured.
Gergan, Ellsworth, Maslach, and Seipel (1975)	Subjects participated in a procedure ostensibly designed to explore decision making in cooperative and competitive conditions.
Goranson and Berkowitz (1966)	The measure of helping was how many paper boxes a "worker" constructed in 20 minutes for a "supervisor."
Greenglass (1969)	The making of paper cups was the task. The measure of helping was the number of points that a subject added to another's "productivity score."
Gruder and Cook (1971)	Subjects arrived in a room where no experimenter was present, and found a note asking them to collate and staple copies of an 18-page questionnaire.
Horowitz (1968)	Subjects heard a tape of a graduate student who needed their help (i.e. their participation in an experiment on sensory deprivation). There were 9 categories which assessed their desire to be a volunteer.
Kelley and Byrne (1976)	Subjects performed an altruistic response which terminated "shock" delivery to a victim on a series of 14 trials.
Kidd and Berkowitz (1976)	A female confederate dropped 500 computer cards and made no explicit request for help. Measures of volunteering, number of cards gathered, latency for helping, and amount of time worked for the other were taken.

Table 1 (continued)

Study	Description
Pruitt (1968)	This study used an "expanded decomposed Prisoner's Dilemma game." The subject could reward the other person at a cost to himself.
Schopler and Bateson (1965)	Two experiments were reported: (a) a request in writing for a "Ph.D. candidate" asking for subjects, and (b) a "decision making task" where subjects were told they could win money for themselves or could yield the money to their partner.
Simmons and Lerner (1968)	The procedure was similar to Berkowitz and Connor (1966).
Smith, Smythe, and Lien (1972)	A female experimenter staggered into an adjoining room, bumped into a filing cabinet, and collapsed into a chair. Several classes of response were taken.
Staub (1971)	Subjects heard a crash and sounds of distress from an adjoining room. Several classes of response were taken.
Weiner (1976)	A 6-point scaled helping measure assessed how much help the subject gave to a "victim" who tripped, fell on the floor, dropped a book, intermittently moaned and clutched her right ankle.
Wilke and Lanzetta (1970)	In a simulation as "heads of each of two shipping departments in the same company", subjects could "give" "transportation equipment" to the other subject.

Table 2
Synopsis of Situationally-Based, "One-Shot"
Studies of Altruism in College Students

Study	Description
Bickman (1971)	Subjects overheard a "victim" cry out that a bookcase had fallen on her. The time it took the subject to leave the cubicle to report the "emergency" was measured.
Bickman (1972)	Similar to Bickman (1971).
Clark and Word (1972)	Undergraduates heard a maintenance man fall and cry out in agony. Several dependent measures of helping him were taken.
Darley and Batson (1973)	The subjects came across a "victim" slumped in the doorway of an alley; the "victim's" eyes were closed and not moving. The dependent variable, on a 1-4 scale, was how much the subject offered to help the "victim."
Fink, Rey, Johnson, Spenner, Morton, and Flores (1975)	In this field study, subjects were approached on campus and asked to give blood at a blood drive which was being held on campus.
Goldman and Olczak (1975)	An instructor told the class that students who were willing to volunteer for a research project should remain seated for the remainder of the time (1 hr.), while those who were unwilling to volunteer were free to leave.
Kraut (1973)	In this field study, subjects were asked to contribute to a charity on two different occasions.

Table 2 (continued)

Study	Description
L'Armand and Pepitone (1975)	Subjects were told they were participating in a "decision model" to find out how people make money decisions that affect themselves and others. The subject could reward the other, himself, or himself and the other.
Regan (1971)	The measure of helping was the subject's contribution to a "charitable fund", described as being for graduate students who were trying to raise money for a special summer project on the formation of political opinions and in voting behavior.
Rodin and Slochower (1974)	The subject was asked how many (out of a possible 100) "political attitude surveys" he would distribute.
Rosenbaum and Blake (1955)	Subjects were approached in the library and asked if they would volunteer for a psychology experiment.
Rushton and Campbell (1977)	The task was blood donating.
Schopler and Thompson (1968)	The experimenter told subjects that a marketing test was being done on a blouse, and that people were needed to hand-laundry the blouse and then send the blouse to the company. The dependent variable was the number of washings that the subjects (all female) agreed to do.
Schwartz (1970)	The dependent variable was a 4-point scale that measured commitment to serving as a bone marrow donor.
Schwartz (1973)	On a 1-4 scale, subjects indicated on a questionnaire that had been mailed out to them their interest in becoming a bone marrow donor.

Table 2 (continued)

Study	Description
Schwartz and Clausen (1970)	Replicated and extended Darley and Latane (1968) by adding a competent bystander.
Sherrod and Downs (1974)	A confederate asked a favor of the subject, namely, to help in an experiment that he was doing. The confederate handed the subject a stack of 200 3x5 cards with a different problem printed on each side. There was a 20-minute limit on completing the cards.
Simon (1971)	A group of experimenters randomly called phone numbers and asked if the subject would call a service station to report a broken-down car.
Tipton and Browning (1972)	This naturalistic study, run at a shopping center, included these dependent variables: (a) helping a woman to pick up groceries, and (b) helping a woman who was in a wheelchair get onto the curb.
Van Ornum, Foley, and Brady (1978)	College students were shown television shows about mentally retarded children. The college students were asked to make phone calls as part of a fund-raising project at a home for children who are retarded.
Wickrama Sekera (1971)	The dependent variable was the number of hours elapsed since subjects heard a request and later called the experimenter at home to request that their payment check be mailed to them.

such as the above are: (a) the "helper" rescues the "helpee" from some type of misfortune; or (b) the "helper" makes a donation of some type of tangible goods to the "helpee." However, despite the real-life nature of studies such as the above, there appears to be one very real and significant impediment in each toward external validity. This impediment is the fact that studies of this nature usually measure "one-shot" altruism, the response of a subject to a situation that has been prefabricated by the experimenter. In addition, the variables that are manipulated tend to be situational variables that do not involve the personal characteristics of the subject.

A third way of approaching the topic of helping behavior is through empirical studies on volunteering. Many of these studies have focussed on persons who are characterized by a history of helping, who are engaged in helping behavior and have thus demonstrated a continuing commitment toward the welfare of others. These persons are contrasted with others who do not display a history of helping others.

An early study on volunteering was by Greenblatt and Kantor (1962). They studied undergraduate students who worked under the supervision of a psychiatrist at a Mental Health Center and at a State Hospital. Each student participated in the program for the entire academic year. In effect, the students acted as quasi-recreational therapists and occupational therapists, participating with and leading the patients in games, gardening, shopping trips, etc. The

effects of these volunteers on the patients was tested by comparing the ward in which they worked to a ward that did not receive volunteers, and showed that the helpers had a beneficial effect on the patients. In an anecdotal way, these researchers evaluated the effects of volunteering on the student volunteers:

Thus, the University administration has given its stamp of approval to the volunteer program and has recognized its significance in the moral and intellectual development of the undergraduate. In the seven years of its existence, volunteering has proved to have had a singularly impressive effect on the participants. Not a few students have said that it was more important than any course at Harvard, and some have even claimed that it was altogether their most important experience during undergraduate years. (p. 811)

Despite this glowing evaluation, these researchers did not measure the substantial effects that were said to have occurred in the volunteers as a result of helping others.

Two later studies assessed the personality characteristics of students in a helping group versus a comparison group or groups. Hersch, Kulik, and Scheibe (1969) compared male and female college students who volunteered for summer work in mental hospitals with a control group of students. They administered a wide variety of personality tests to their subjects, including the California Psychological Inventory (Gough, 1969); the Adjective Check List (Gough & Heilbrun, 1965); the Rotter (1966) Introversiion-Extroversiion Scale; the Marlowe-Crowne (1964) Social Desirability Scale; and the Strong Vocational Interest Blank (Strong, 1960).

These researchers found that the "volunteer" group was different from the control group in these personal qualities: maturity and control; drive for independent achievement; and sensitivity to people and to human problems. In addition, the achievement interest of the volunteers was consistent with these interests.

Gruver (1971) reviewed a number of studies which evaluated companion programs, that is, those in which college students spent a certain amount of time each week as companions to patients in mental hospitals (Beck, Kantor, & Gelineau, 1963; Greenblatt & Kantor, 1962; Holzberg, Gewirtz, & Ebner, 1964; Kantor, 1959; Spoerl, 1968). In these studies, results showed positive personality changes, such as the following among volunteers: increased self-concept, greater self-understanding, increased self-confidence, and enhanced identity formation. Gruver reviewed these studies and concluded:

There is significant evidence to conclude that the therapeutic relationship has a definite, positive effect upon the college student therapist...for instance, more than 60% of the former studies utilized control groups of students who did not participate in mental health programs. Further, over 90% of the studies describing the effects upon student therapists as a result of working in mental health settings used pre- and post-tests which were relatively objective. (p.123)

Gruver concluded his review by stressing the need for a firmer empirical basis for studies on volunteering in college students. One way that this could be done in future studies would be to plan the research with specific hypotheses in mind, since most of the studies did not specify explicit

hypotheses at the beginning of the research.

The present study was designed to extend the above-mentioned three categories of research. Specifically, an attempt was made to combine the strengths of the theoretical work on moral development, the empirical studies on altruism done from a social psychology point of view, and research on volunteering by: (a) relating the variables under consideration to a theoretical framework; (b) making predictions based on chosen variables; and (c) selecting an example of real-life altruism which involves persons who have a history of helping behavior, who are currently engaged in it, and who show a continuing commitment to the welfare of others.

Empathy and Altruism

Feshbach (1978) has cited the significant place of empathy in psychological research:

The phenomenon of empathy occupies an unusual place in contemporary psychological writings. It is considered to be a critical determinant of social transactions, ranging from the behavioral interchange between mother and infant to the intimacy and effectiveness of communication in the dyadic relationship between therapist and client (Hoffman, 1970; Sullivan, 1953). Both historically and currently, empathy has been afforded a key role in the development of social understanding and positive social behaviors...Yet, despite its acknowledged importance as a major interpersonal dimension, empirical research on empathy does not parallel its theoretical salience. (p. 2)

Many early definitions of empathy stressed the affective nature of the concept. Both McDougall (1908) and Sullivan (1953) viewed empathy as an undifferentiated, fairly automatic, and essentially unlearned emotional reaction. Empathy was an important concept of many psychological writers;

Fenichel (1954), for example, viewed empathy as an affective consequence of the mechanism of identification, where the person identified with the other and through this awareness came to share the feelings of the other person.

One limitation of the early work on empathy, however, was that few if any empirical studies were done which examined the role of empathy in various behaviors.

A number of more contemporary researchers have continued to stress the affective nature of the empathic process. Berger (1962), for example, defined empathy as a match between the affective response of the subject and the affective state of the stimulus person. In a series of studies, Stotland used a similar definition of empathy (Stotland, 1969; Stotland & Dunn, 1963; Stotland & Walsh, 1963).

A number of other researchers have investigated or discussed the emotional aspects of empathy (Aderman, Archer, & Harris, 1975; Aderman & Berkowitz, 1970; Aleksic & Savitsky, 1976; Aronfreed, 1968; Chandler, 1977; Hoffman, 1974; Krebs, 1975; Mehrabian & Epstein, 1972; Pilavin & Pilavin, 1973; Van Ornum, 1978). Typically, a hypothesis in a study of this kind is that affective empathy is a prerequisite for helping behavior, or that empathy on the part of the helper leads to increased helping behavior toward the helpee. Finally, Feshbach stressed the importance of the affective point of view regarding empathy: "To reiterate, while the cognitive dimension of empathy is important, it is the affective component that gives the empathy construct its unique property" (1978, p. 41).

Another approach toward empathy has viewed it as a cognitive process. Much of this research is based upon Piaget's (1950) theory of decentering. This theory states that a young child (age 6 and under) is unable to decenter, or shift his attention (or perspective) from one aspect of a situation to another, and that it is not until 7-12 years of age that the child is able to consider the viewpoints of others. In support of this observation, a number of studies have shown that altruism in children increases up to a point and then levels off (Bryan & London, 1970; Elliot & Vasta, 1970; Handlon & Ross, 1959; Rubin & Schneider, 1973; Wright, 1942). A number of studies, particularly with children, have investigated the relationship between cognitive empathy and helping behavior (Emler & Rushton, 1974; Green, 1975; Iannotti, 1978; Krebs & Stirrup, 1974; Leckie, 1975; Olejnik, 1975; Rushton & Weiner, 1975).

However, a review of the literature does not suggest that the cognitive approach to empathy would be particularly useful in an investigation of adult helping behavior. For example, two measures of cognitive empathy with adults, the Feffer Role Taking Task (Feffer & Gourevitch, 1960) and Selman's Social-Moral Dilemma (Selman, 1976) received serious negative comments when reviewed by researchers in the field (Kurdek, 1978). Since most perspective taking devices are designed for use with children and "ceiling out" when used with older persons, they are not appropriate for use with college students. There is a real lack of measures besides

Feffer's and Selman's (Iannotti, note 1; Selman, note 2).

The present study focussed on the relationship between affective empathy and helping behavior. However, instead of viewing affective empathy as the primary cause of helping behavior, a component model was utilized which stressed that empathy, in concert with other personality variables, resulted in helping behavior. These other variables, as well as an integrative theoretical framework, were as follows.

Assertiveness and Altruism

A small number of studies have suggested that an individual's ability to perform and carry out social interaction is an important determinant of whether or not that individual will behave in an altruistic manner. These studies are discussed below.

Developmental research is relevant to this discussion. Early observers of child behavior found that autonomous and independent children often assumed responsibility for the well-being of others (Murphy, 1937; Peterson, 1938). Sears, Roe, and Alpert (1965) reported a positive correlation between frequency of aggression and frequency of prosocial behaviors. Later studies have suggested that a child's ability to go beyond himself, to be assertive and aggressive, is related to help-giving (Friedrich & Stein, 1973; Hartup & Keller, 1960).

Barrett and Yarrow (1977) pointed out that: "Although somewhat ill-defined as a variable, such an action dimension would appear to be relevant to differences in children's ability to mobilize themselves to intervene on another's behalf" (p. 476).

To sharpen the focus of studies such as the above, Barrett and Yarrow examined social inferential ability and assertiveness as predictors of prosocial behavior in children. They hypothesized that differences in assertiveness in children with high social inferential ability would predict the prosocial behavior of these children. Further, they proposed that assertiveness would not be a relevant predictor of prosocial behavior in children low in social inferential ability. Their experimental design was especially noteworthy because they based their measures of "assertions" and "prosocial behaviors" upon a comprehensive naturalistic observation program at a summer camp, where each 5-8 year-old subject was observed for 2 hours in eight 15-minute samples of free play, spread evenly over 6 weeks. Social inferential ability was measured by showing each child videotapes of social interaction. From the manner in which the children responded to these tapes, they were assigned to either a high or low inferential ability group. The results of the study showed that the prosocial behavior of children of high social inferential ability was significantly accounted for by differences in assertiveness.

Another study which investigated social skills in grade school boys and provided evidence toward this same conclusion was conducted by Reardon, Herson, Bellack, and Foley (1979). One of the findings was that assertive boys made more offers of spontaneous positive behavior in positive contexts than did nonassertive boys. In addition, the teacher's ratings

of sensitivity to others and prosocial behavior correlated significantly with overall ratings of assertiveness. These authors also found an interesting relationship between role-taking ability and assertiveness. The role-taking scores, as measured by the Feffer Role-taking Task, accounted for somewhat more of the variance of positive than of negative assertiveness ratings. These researcher's wrote:

Thus the ability to take another's point of view would seem to be a more important component of positive than negative assertiveness. This is not surprising, given the stimuli for the two types of assertion. Empathic skill enables one to understand if another is sad and needs an encouraging word, if he feels lonely, or if he wants congratulations. That is, the understanding of others' points of view helps us provide appropriate positive social reinforcement. On the other hand, negative assertive responses are attempts to satisfy our own needs and express our own feelings and depend less on our perception of the needs of others. (p. 103)

Since the study was limited to boys in grades 3-8, future studies with different age groups need to be done to make the findings more generalizable.

Building upon the work of Barrett and Yarrow, O'Connor, Dollinger, Kennedy, and Pelletier-Smetko (1979) tested a number of factors in conjunction with prosocial behavior and psychopathology. Their study was limited, however, to a clinic population of emotionally disturbed boys. O'Connor et al. cited the previous research and went on to predict "... that symptom type/prosocial behavior relationships would be more clearly defined by taking into account and controlling statistically the child's level of assertion" (p. 302). However, in contrast to Barrett and Yarrow's findings, assertion

was not a mediating factor in prosocial behavior. Rather, their results indicated that anxious/inhibited boys were more likely to engage in prosocial behavior than were boys who were less inhibited. They hypothesized that the greater amount of prosocial behavior may have been due to greater empathy, to an effort at ingratiation, or was an overreaction to social distress. The authors' concluded that prosocial behavior may reflect or compound the interpersonal difficulties of anxious/inhibited boys. (This is in contrast to the literature on normal children, where prosocial behavior is generally viewed in a positive way.) O'Connor, et al.'s findings may be due to their choice of emotionally disturbed children who were being seen at a clinic, and thus do not provide evidence against an assertiveness-altruism relationship in normal children.

In adults, the relationship between assertiveness and either empathy or altruism has not been studied to any great extent. One study providing data on this issue was conducted by Eisler, Hersen, Miller, and Blanchard (1975), who investigated "situational determinants of assertive behavior." The situational contexts in their study included positive versus negative; male versus female; and unfamiliar versus familiar. They found that, in positive situations, highly assertive subjects spontaneously offered to do a favor for an interpersonal partner more frequently than did less assertive subjects.

In a study different from the above but also very much

related to those under consideration, Kazdin and Bryan (1971) investigated the relationship between competence and volunteering. They hypothesized that subjects who believed themselves to be competent would be more likely than control subjects to render aid to unknown others. "Competence" in this experiment may be viewed as similar to the "assertiveness" construct in other studies--both involve a belief about the goodness of one's self and imply a capacity to take risks in unknown or unstructured situations. In their experiment, Kazdin and Bryan manipulated competence by giving subjects false feedback on either a "physical fitness" or a "creative ability" task. Subjects were told that they were "very creative" or "about average" in creativity. The altruism task was donating blood in a blood drive. It was found that the main effect of competence was important--the subjects in whom competence was induced gave more blood.

At this point, research into assertiveness per se merits consideration. "Assertiveness" as a psychological concept has engaged the interest of researchers and clinicians as well as the general public. There are many studies that evaluate the effectiveness of behavioral strategies for increasing assertiveness in: unassertive college students, date-anxious college students, a general psychiatric population, and others (Reardon, et al. 1979). Books such as Your Perfect Right: A Guide to Assertive Behavior show the popular appeal of learning how to become an assertive person. One problem in researching assertiveness is that each researcher

seems to have his own definition. However, Rich and Schroeder (1976), in their review article attempted to find the "common denominator" of the various approaches and proposed the following definition:

Assertive behavior is the skill to seek, maintain, or enhance reinforcement in an interpersonal situation through the expression of feeling or wants when such expression risks loss of reinforcement or even punishment. (p. 78)

A number of paper-and-pencil tests of assertiveness have been devised, including: Friedman's (1968) Action-Situation Inventory; Lawrence's (1970) Lawrence Assertive Inventory; and Bates and Zimmerman's (1971) Constriction Scale. A measure which has been cited a number of times since its publication is Rathus's (1973) Assertiveness Scale. Another measure of assertiveness, which seems well-suited for use with college students, is Galassi, DeLo, Galassi, and Bastien's (1974) College Self-Expression Scale.

In sum, assertiveness seems to be a somewhat overlooked and possibly important variable in studies of adult helping behavior, since there is evidence that assertiveness contributes toward predicting helping behavior.

Values

Rokeach (1973) wrote:

A value is an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence. (p. 5)

Rokeach has devised a value survey which shows the manner in which an individual ranks 36 different values. He has provided descriptive data for many different sociocultural groups in

America. He has done extensive work in assessing the relationship between values, attitudes, and behavior. Some of the areas in which Rokeach studied values included: international affairs, personality, religion, politics, honest and dishonest behavior, and interpersonal conflict. Rokeach has also studied the process of long-term value and attitude change.

A considerable amount of Rokeach's work has been done with college students. The following research is relevant to the aims of the present investigation.

Rokeach (1973) reported a study that compared students who joined a civil rights organization with those who did not. About 400 freshmen in two residential colleges in Michigan were solicited by letter at two different times. There was a year's time between solicitations. Forty-eight of the students decided to join the civil rights organization. After administration of the Value Survey, Rokeach found that 10 values differentiated between those who joined the civil rights group and those who did not. Those who joined the civil rights group cared significantly more about these values than the other group: a world at peace, a world of beauty, being honest, and being helpful. Contrastingly, the "nonjoiners" cared significantly more (or nearly so) for a comfortable life, national security, pleasure, being ambitious, and being self-controlled.

In another study, Rokeach (1973) studied the values of students who had participated in civil rights demonstrations

and found that these students placed a greater emphasis on a world of beauty, mature love, being broadminded, forgiving, helpful, and loving and relatively lesser emphasis on a comfortable life, national security, and being capable, clean, polite, and responsible.

In concluding upon the relationship between values and behavior, Rokeach wrote:

Finally, there is no reason to expect that any one value or attitude should predict behavior perfectly...Thus, the evidence that has been presented in this chapter merely demonstrates that different subsets of 36 values are predictive of various kinds of gross behaviors. More precise predictions will, however, require more precise specifications of the actions to be predicted, and the value and attitude that are activated by the object and situation.
(p. 162)

Thus, a logical extension of Rokeach's work is to assess the relationship between values and helping behavior. One possibility is that helpers might display values similar to those of the activist students described above.

Rokeach's work provides useful data for the researcher in that he presented normative data for the values of many different groups of persons in contemporary society. He presents values which are descriptive of different income, religious, and age groups. Thus, the administration of the Rokeach Value Survey would be one way to compare the groups used in any studies on helping behavior with other comparison groups. In addition, the relationship between values and other variables can be assessed.

Hogan's Model and Its Relationship to Empathy, Assertiveness, Socialization and Values

Robert Hogan (1973) has proposed a comprehensive model of moral conduct and moral character that is relevant to the variables under consideration in this study. Placing his model in an historical perspective, he pointed that the problem of moral conduct has preoccupied social thinkers since Plato. Recent social scientists who have made contributions in this area have included Durkheim, Weber, Freud, Piaget, William James, George Herbert Mead, and Kohlberg. Hogan assumed "that morality is a natural phenomenon, an adaptive response to evolutionary pressures, and that an understanding of moral behavior is relative to our knowledge of man's biological and psychological nature" (p. 218). Combining theoretical viewpoints and empirical studies, he argued that moral behavior can be explained in terms of five concepts or dimensions, specifically: Moral knowledge, socialization, empathy, moral judgment, and autonomy. These will now be described in more detail.

"Moral development means knowledge of moral rules, and a proper test of moral knowledge assesses the number and kinds of rules a person can state, or the variety of rules that he can correctly use" (Hogan, 1973, p. 220). For the growing child, moral knowledge serves as a foundation for developing self-control. However much face validity this concept has, empirical research has produced what Hogan described as "essentially negligible" results.

The second part of Hogan's paradigm is socialization.

Hogan stated that "a person may be considered socialized to the degree that he regards the rules, values, and prohibitions of his society as personally mandatory" (Hogan, 1973, p. 221). In discussing the development of socialization, Hogan took issue with those social scientists who assume that the desires of the child and the needs of society are by nature antagonistic. In contrast to thinkers such as Freud, who view socialization as a process which occurs after the child has repressed his or her anarchistic tendencies, Hogan suggests that children are social by nature, that they enter the world "programmed" to be obedient, and that warmth and nurturance are the necessary parental qualities needed to elicit the child's social qualities. Research has supported this, with the qualification that parents who are consistently restrictive and authoritarian as well as warm and nurturant produce the most socialized children (cf. Bandura & Walters, 1959; Baumrind, 1971; Becker, 1964; Bronfenbrenner, 1970).

The Socialization Scale of the California Personality Inventory (Gough, 1969; Gough & Peterson, 1952) has been used in assessing the level of socialization of individuals. This measure was empirically keyed by comparing the responses of a large number of delinquents and nondelinquents, and assesses the degree to which a person has internalized the rules, values, and conventions of his society. Hogan has stressed that socialization, when combined with empathy, is an important variable in predicting the type of moral behavior which a person displays.

The third aspect of Hogan's model is empathy. Hogan

pointed out that there has been a tradition in philosophy, at least 300 years old, which assumes that man has an innate social sensitivity which plays an important role in moral development. Philosophers such as J. S. Mill suggested that a sense of duty depends on the development of social feelings. The role of empathy in a variety of helping behaviors as well as in moral conduct has been stressed by theorists, researchers, and clinicians alike. Hoffman (1975) defined empathy as:

The involuntary, sometimes forceful experience of another person's emotional state. It is elicited by expressive cues that actually reflect the other's feelings or by kinds of cues that convey the affective import of external events on him. (p. 137)

Schafer (1959) proposed a similar definition stating that "empathy can be defined as the inner experience of sharing and comprehending the momentary psychological state of another person" (p. 343). Hogan (1969) developed an empirically-keyed empathy scale which he used in his research on empathy and moral development.

In his discussion of moral judgment, Hogan refers to a branch of moral philosophy which analyzes and evaluates arguments used to justify social and legal institutions. He distinguished between the "ethics of conscience" and the "ethics of responsibility." Those who follow the first viewpoint argue that there are higher laws, unrelated to human legislation, which may be discovered by intuition and reason. Those who follow the second outlook deny the existence of "higher laws" and instead choose to follow laws which tend to

promote human happiness and welfare. Thus, the "ethics of responsibility" can be considered a pragmatic and utilitarian framework for making moral judgments.

Hogan used the above two concepts in discriminating between different types of moral behavior in his Survey of Ethical Attitudes (1970). He found that this measure differentiated between persons whose vocational choice reflected a belief in law and order, such as policemen and ROTC seniors, and persons who believed that civil disobedience was an effective way of promoting social change. Hogan also predicted that the most mature people should tend to cluster in the center of this dimension. As with the other aspects of moral development, Hogan stressed that the role of moral judgment must be assessed in relationship to other factors.

The fifth and final concept is autonomy, a component which adds to the power of the model in describing moral behavior. For example, a person may be socialized, empathic, know the rules, and adhere to the ethics of responsibility. However, a social institution may be misguided or immoral. In such a case, "the development of an autonomous set of moral standards serves to insulate one from the potential immorality of the community" (1973, p. 226). Conversely, an autonomous individual who is neither empathic nor socialized may be a rogue, scoundrel, or perhaps even a criminal. As a scale of autonomy, Hogan used a measure of independence of judgment developed by Barron (1953). However, he reported that the resulting scores from this scale had only marginal

reliability. Hogan's conclusion, when reviewing work done relating autonomy to moral development, was that "although social psychologists have spent a great deal of time studying suggestibility and conformity, not much is known about autonomy" (p. 226).

A summary of the most salient themes of this proposal would seem to be in order at this point. The first theme is that more "real-life" measures of altruism need to be incorporated within studies. The second is that more empirical studies need to be done to show the relationship of empathy to helping behavior. The third theme is that assertiveness seems to be an overlooked variable in studies of altruism, especially with adults.

The fourth theme is the relevance of Hogan's model to the preceding research. Unlike frameworks such as Kohlberg's, Hogan's model has potential for integrating various studies that have been done in moral behavior. Altruism and helping behavior can be considered as part of the larger domain of moral behavior. The five parts of Hogan's model can be viewed as a way to link empirical studies together in a meaningful way since Hogan did not view the five parts of his model to be viewed in isolation, but rather as elements that could be viewed in relationship to each other to predict a person's moral behavior. For example, Hogan proposed that empathy interacted with socialization to result in differences in character structure and moral conduct. He proposed four groups (see Table 3): (a) High Empathy, Low Socialization, which includes

Table 3
 Suggested Characterological Implications of the
 Interaction Between Socialization and Empathy

Empathy	Socialization	
	Low	High
High	"Le Chic type"	Morally mature
Low	Delinquent	"Moral realist"

(Hogan, 1973, p. 223)

the "Le Chic type" of person, who is mildly "emancipated" and displays behavior such as parking double in parking lots and not returning library books; (b) High Empathy and High Socialization, which includes "morally mature" people who are sensitive and sympathetic to others; (c) Low Empathy and Low Socialization, which includes delinquents; and (d) Low Empathy and High Socialization, which includes "moral realists," those who tend to be rigid rule followers.

Some logical, interesting, and perhaps fruitful extensions of Hogan's model, especially in view of the empirical studies cited earlier in this paper, can be proposed.

First, Hogan's model suggests combining empathy and assertiveness in a single study. Hogan's concept of autonomy is quite similar to the definition of assertiveness presented previously. The autonomous person, in Hogan's view, "is strong, forceful, and self-ascendent; he manages his own affairs very carefully, and is little affected by others in choosing or achieving his goals" (p. 227). A study which combined empathy and assertiveness together might result in a prediction such as that shown in Table 4. It is proposed that the combination of factors shown in Table 4 be tested in this study.

Secondly, although Hogan combined empathy and socialization in his model, he did not combine these two variables with autonomy. Another interesting extension of Hogan's model would be to find the best combination of empathy, assertiveness, and socialization in predicting helping behavior.

Table 4
 An Extension of Hogan's Model:
 Suggested Characterological Implications of
 the Interaction Between Assertiveness and
 Empathy

Empathy	Assertiveness	
	Low	High
High	afraid to be involved	altruist
Low	apathetic	person who is exclusively committed to pursuing his or her self-interest



It would seem likely that socialization would add to the predictive power of empathy and assertiveness regarding helping behavior.

Third, the fourth part of Hogan's model, that dealing with moral judgment, is relevant to Rokeach's work on values. Hogan used his Survey of Ethical Attitudes to assess moral judgment. This measure need not be considered the only way of measuring the concept. Another way of approaching moral judgment would be to describe it by an assessment of a person's values. The difference in values between helpers and nonhelpers could be investigated; perhaps values such as "a world at peace," "a world of beauty," "being helpful," and "loving" would differentiate the two groups.

In conclusion, Hogan's model provides a theoretical framework for organizing some of the research on helping behavior, and for making predictions regarding specific variables.

Summary and Hypotheses

Real-life altruism is an important area to the psychologist, and has been described and investigated through theories of moral development, social psychology experiments, and research on volunteering. Each of the methodologies, in one way or another, has its limitations. The most outstanding deficit of all previous research is the overall lack of external validity in the empirical studies on altruism. A major purpose of the present study was to investigate college students who display a continuing commitment to helping others in real and meaningful ways.

A review of the literature suggests that empathy, assertiveness, and values are pertinent to an assessment of helping behavior in college students. These variables can be incorporated into Hogan's model of moral development to generate hypotheses and goals. Hogan's model also suggests the role of socialization as a variable related to helpfulness.

Two groups, a "helping group" and a "self-interest group," were chosen from existing student groups at Loyola University. The former, the Volunteer Group, were students who belonged to a volunteer organization on the campus. The latter, the Biology Group, were members of a biology honor fraternity. The rationale behind this was to provide the study with more external validity than has been the case in the past. Selected measures administered to the subjects were used to test the following hypotheses:

Hypotheses relating to group membership.

(H1) The Volunteer Group has significantly higher empathy scores than the Biology Group.

(H2) There are no significant differences in assertiveness between the groups.

(H3) Empathy, assertiveness, and socialization considered together contribute to differences between the two groups. Given that this occurs, the contribution of each variable will be assessed. Previous research suggests a univariate empathy effect with assertiveness and socialization contributing in being able to differentiate the groups.

Hypotheses relating to Peer Ratings of Helping.

(H4) Peer Ratings of Helping are significantly higher in the Volunteer Group than in the Biology Group.

(H5) High scores on empathy are associated with high scores on the Peer Ratings of Helping.

(H6) Assertiveness does not predict Peer Ratings of Helping.

(H7) Assertiveness and socialization contribute to the power in empathy in predicting Peer Ratings of Helping. More specifically, it is predicted that high scores on both empathy and assertiveness will be associated with high Peer Ratings of Helping; further, the direction of the contribution of socialization will be determined.

Hypothesis relating to values.

(H8) There is a significant difference between the Volunteer Group and the Biology Group in the means for the following values: a comfortable life; a world at peace; a world of beauty; mature love; national security; pleasure; ambitious; broadminded; capable; clean; forgiving; helpful; honest; loving; polite; responsible; and self-controlled.

Other goals of the study were:

(G1) To investigate the comparability of the two groups on a number of demographic variables.

(G2) To determine the independence of the personality measures, grade point average, and Peer Ratings of Helping.

(G3) To see if there are significant differences in socialization between the groups.

(G4) To find out if socialization scores predict Peer Ratings of Helping.

(G5) To investigate the effect of sex differences on variables in this study.

(G6) To assess the relationship of selected demographic variables to empathy, assertiveness, socialization, and Peer Ratings of Helping.

CHAPTER III

METHOD

Subjects

Students were drawn from two groups at Loyola University of Chicago. The Volunteer Action Program, noted for its frequent service projects that benefit needy people outside of the University community, was chosen to be the helping group. Tri-Beta, the Biology honor fraternity, was suggested as a comparison group. Members of this organization were considered to be a self-interest group since many of the activities of Tri-Beta are oriented toward a subsequent career in the biological sciences. Twenty-five students participated in the study from the Volunteer Group (7 males and 18 females); mean year in school was 2.36, mean age was 20.16, and mean Grade Point Average was 3.07. Thirty-seven students from the Biology Group were involved in the study (20 males and 17 females); mean year in school was 2.62, mean age was 20.19, and mean Grade Point Average was 3.55 (for full demographic data, see Appendix A). Each student was paid \$3.00 for participating in the study. As a further incentive for students to participate, a \$50.00 "Grand Prize" was given to one of the participants whose name had been selected in a drawing. Each student signed a consent form

(see Appendix A), data were reported to the investigator under a code name, and subjects were guaranteed that data would be confidential. The Departmental Review Board of the Department of Psychology approved all instruments and procedures of the study.

Materials

Each student completed the following:

Mehrabian Empathy Questionnaire. This questionnaire is presented in Appendix B. After Stotland (1969), Mehrabian and Epstein (1972) defined empathy as a vicarious emotional response to the needs of others. The Empathy Questionnaire is a measure of affective empathy which includes these subscales: "appreciation of the feelings of unfamiliar and distant others"; "sympathetic tendency"; "willingness to be in contact with others who have problems"; and "tendency to be moved by others' positive emotional experiences"; among others. The items for this scale were selected on the basis of (a) insignificant correlations with the Crowne and Marlowe (1960) Social Desirability Scale; (b) significant .01 level correlations with the total score on the scale; and (c) content validity. The overall Mehrabian scale has also been organized so that items fall into one of three categories: (a) negative; (b) positive; and (c) unspecified emotional experience (Aderman, Archer, & Harris, 1975).

The Empathy Questionnaire was scored in the following manner. First, each student's original response to each question, which was on a 1-9 continuum, was recorded so that

each item was transformed into a +4 (very strong agreement) to -4 (very strong disagreement) scale. Seventeen of the items were scored in the opposite direction; for each of these, the algebraic sign of the subject's response was changed. Finally, the values for each of the 33 items were added to obtain the total score. In the infrequent cases where a student did not answer an item, the algebraic mean for the student's remaining items was assigned to that item.

The College Self Expression Scale. This questionnaire is presented in Appendix C. This instrument was developed by Galassi, DeLo, Galassi, and Bastien (1974). The 50-item scale measures three aspects of assertiveness: positive, negative, and self-denial. Positive assertiveness consists of expressing feelings, such as love, admiration, etc. Negative assertions include feelings such as justified expressions of anger. Self-denial includes overapologizing and exaggerated concern for the feelings of others. Galassi et al. reported a reliability coefficient of nearly .90 for the measure, as well as concurrent validity data. Galassi and Galassi (1979) further extended the standardization data by providing factor analytic information for the measure.

The College Self Expression Scale used a 5 point Likert format (0-4) with 21 positively worded and 29 negatively worded items. On negatively worded items, the value of the item was reversed. A total score was obtained for the sum of the 50 items. In the event of a missing item, the algebraic mean for that student was assigned.

Socialization Scale, California Personality Inventory.

This scale, developed by Gough (1969), is presented in Appendix D. This instrument is an empirically keyed measure which originally was developed by comparing the responses of a large number of delinquents and nondelinquents. The Socialization scale measures the degree to which a person has internalized the rules, values, and conventions of society. The scale seems to work at many different levels of social adjustment, ranging, for example, from samples of juvenile delinquents to samples of National Merit Scholars (Hogan, 1973).

The 54-item scale was scored in this way: a student received 1 point when his response "matched" one of the 31 "False" items or one of the 23 "True" items. The sum of these points was the socialization score.

Rokeach (1973) Values Survey. This survey is presented in Appendix E. On this measure, the student was presented with two lists of 18 values which are listed in alphabetical order, including: a comfortable life, a world of beauty, mature love, and social recognition. The student was instructed to rank the values "in order of their importance to you as guiding principles in your life." Thus, the value most important to each student received a ranking of 1; the value least important received a ranking of 18.

Peer Ratings of Helping. These ratings are presented in Appendix F. A list of 20 items related to helping behavior was compiled by the investigator with the assistance of an officer of the Volunteer Action Program. In order to avoid

errors of central tendency (Brown, 1976), a 6-point Likert type rating scale was chosen for each of the questions. Items on the peer ratings scale included the following: How genuine is this person's interest in helping others?; Does helping others appear to be a major source of satisfaction in this person's life?; and Do you feel this person participates in helping behavior for ulterior motives, i.e., "It looks good on a resume."

A manual (presented in Appendix G) was developed for the raters to assist them in their task of rating student subjects. This included sample questions and clarifications of items that might be interpreted in different ways.

The 20-item Peer Ratings of Helping scale was internally consistent for each of the four raters; however, interrater reliability within each group of raters was not significant (see Table 5). By using selected items of the scale, attempts were made to obtain significant interrater reliability while still retaining homogeneity of the items. Despite factor-analysis data which indicated that the scale was unidimensional, when attempts were made to delete items, the internal consistency of the modified scales decreased as the interrater agreement increased. Thus it seemed that the raters were consistent within their own set of ratings, but were rating the various dimensions of helping differently from each other. A revised scale of peer ratings which maximized internal consistency and interrater agreement included the following items:

Table 5
 Reliabilities of 20-Item Peer Ratings
 of Helping Scale

	Biology		Volunteers	
	<u>N</u>	<u>r</u>	<u>N</u>	<u>r</u>
<u>Standardized Item Alpha</u>				
Rater A	15	.95	21	.96
Rater B	17	.97	10	.93
<u>Interrater Pearson Correlation Coefficient</u>	12	.44 p = .08	9	.24 p = .27

Reliabilities of Revised Peer Ratings
 of Helping Scale (6-Item Scale)

	Biology		Volunteers	
	<u>N</u>	<u>r</u>	<u>N</u>	<u>r</u>
<u>Standardized Item Alpha</u>				
Rater A	15	.92	22	.94
Rater B	17	.96	10	.95
<u>Interrater Pearson Correlation Coefficient</u>	12	.36 p = .12	9	.44 p = .12

2. How involved, with other people of his or her age whom you know, is this person in helping others?
4. Does this person seem to put the needs of others above himself or herself?
9. Do this person's mannerisms contribute to making the person who they are helping feel relaxed and comfortable?
18. Do you get the impression that this person would go out of his or her way to help a needy stranger he or she might meet during the course of a day's activities?
19. How would you rate this person's personality in terms of providing service?
20. If you were in need would you like a person such as this to be of service to you?

However, as can be seen from Table 5, although this scale is homogeneous, interrater reliabilities were still not significantly correlated. Since all subjects were not rated by two raters, it was not possible to combine the ratings of rater A and rater B for each group into an average rating. Therefore, for the following statistical procedures, the rating of rater A was used if it was the only rating or if there were two ratings; the rating of rater B was used if there was no other rating for the subject.

Demographic data. This questionnaire is presented in Appendix H. Each subject answered a number of questions pertaining to academic major, ethnic background, religious affiliation, participation in religious activities, etc.

Academic achievement. Permission was obtained from each subject to obtain his or her grade-point average from the Dean's Office.

Procedure

The experimenter gave a short talk on the purpose of the study at a group meeting of each student organization. Each student who was interested in participating received a packet which included: questionnaire with each of the personality measures, permission slip for obtaining grades, stamped envelope for returning the questionnaires and permission forms. To ensure confidentiality, all data that were returned to the investigator were identified by each student's mother's maiden name and birthday. Each student mailed a postcard to the president of their organization which included their full name as well as code name. All peer ratings made by the officers were submitted to the investigator under a code name. In this way, the confidentiality of each student was maintained.

There was a very poor response to the initial request in terms of completed questionnaires. Out of nearly 80 questionnaires distributed, only about 20 were returned. To provide a greater incentive for returning data, \$3.00 was offered as payment for each student who completed a questionnaire. Each student who had originally participated received payment also. In addition, a \$50.00 "grand prize" was offered. The winner was chosen from all respondents who had returned a postcard. These financial incentives appeared to motivate the subjects and in the ensuing weeks nearly 40 more questionnaires were returned to the investigator.

On the Peer Ratings of Helping, two officers in each student group rated all of the members with whom they were familiar.

CHAPTER IV

RESULTS

Mean values for the Empathy Questionnaire, the College Self Expression Scale, the Socialization Scale of the California Personality Inventory, and the Peer Ratings of Helping, for each group are shown in Table 6. The scores obtained for each of the first three instruments in this study are similar to published scores of college students in other studies.

To test the independence of empathy, assertiveness, socialization, peer ratings, and grade point average, a Pearson Product Correlation matrix was calculated (Table 7). All correlations were nonsignificant, except: (a) grade point average showed a significant positive correlation with socialization; and (b) grade point average showed a significant negative correlation with Peer Ratings of Helping.

Prior to testing the hypotheses regarding the differences between the groups on empathy, assertiveness, socialization, peer ratings, and the interactions, it appeared important to ascertain whether the groups were comparable in other respects. To evaluate this, a number of crosstabulations were computed for relevant categorical variables, such as year in school, and religious affiliation and participation.

Table 6
Means and Standard Deviations for Empathy,
Assertiveness, Socialization, and
Peer Ratings of Helping

	Biology			Volunteer		
	<u>N</u>	<u>M</u>	<u>SD</u>	<u>N</u>	<u>M</u>	<u>SD</u>
Empathy						
Males	20	24.55	20.40	7	43.36	18.20
Females	17	43.77	27.08	18	47.27	18.28
Overall	37	33.38	25.29	25	46.18	17.97
Assertiveness						
Males	20	132.17	19.17	7	131.26	21.50
Females	17	134.27	17.83	18	128.10	32.24
Overall	37	133.14	18.34	25	128.97	22.36
Socialization						
Males	20	37.75	5.66	7	33.00	4.58
Females	17	39.12	6.74	18	35.72	6.02
Overall	37	38.38	6.13	25	34.96	5.70
Peer Ratings of Helping						
Males	10	25.20	4.98	6	32.56	4.94
Females	13	29.38	4.39	17	31.83	8.40
Overall	23	27.56	5.02	23	32.82	3.36

Table 7
 Correlational Matrix for Personality Measures,
 Grade Point Average, and Peer Ratings
 of Helping

	Empathy	Socialization	Assertiveness	Peer Ratings
Socialization	.12			
Assertiveness	-.12	.11		
Peer Ratings	.17	.12	.06	
GPA	-.10	.30*	.08	-.38**

* $p < .05$

** $p < .01$

All comparisons made with the crosstabulations were non-significant, except academic major and first-to-settle (Were your parents or grandparents the first to settle in this country?). The former finding was expected by the way the groups were defined; the latter finding did not appear to be of major importance (Table 8). One-way analysis of variance was used to test two demographic variables that were interally-scaled, namely number of hours worked and grade point average. There was a significant difference in grade point average between the two groups, $F(1,51) = 19.04$, $p < .001$. Examination of the group means showed that students in the Biology Group had significantly higher scores than students in the Volunteer Group. Regarding hours-worked, there were no significant differences between the two groups, $F(1,56) = 2.04$, $p > .05$.

The Use of Multivariate Procedures in the Study

Multivariate procedures were chosen to test a number of the hypotheses in this study. The following present a basic overview of multivariate procedures.

McCall (1970), in Carmichael's Manual of Child Psychology, listed the following criteria as guides as to whether or not multivariate procedures could profitably be used in a given design:

Is there any relationship at all between this class of variables and another class? Can certain groups be distinguished in any way by this group of measures rather than by a single variate examined in isolation? (p. 1375)

The present research fit into the above framework.

Table 8
 Crosstabulations for Demographic Variables
 by Group (Biology Group vs. Volunteer Group)

Table	Chi-Square	<u>df</u>	Significance
Year School	6.26	4	NS
Age	5.99	5	NS
Major	40.70	12	.01
Do You Work	.07	1	NS
Groups Belonged to At School	4.54	5	NS
Groups Belonged to Outside of School	3.89	4	NS
Mother's Ethnic Background	5.08	6	NS
Father's Ethnic Background	6.05	6	NS
First-to-settle	6.74	1	.01
English Native Language	3.67	1	NS
Religious Affiliation	5.54	4	NS
Active Participant in Religion	2.27	1	NS

Empathy, assertiveness, and socialization have been hypothesized to be a class of variables that are a part of the more general concept of moral development. Each, as proposed by Hogan's model, is a facet of moral development. Further, it is proposed in this study that there are two groups which differ in the interaction of empathy x assertiveness x socialization.

McCall listed three advantages of multivariate methods over univariate analysis of variance. These are applicable to the current investigation and are listed below:

(a) A first advantage is that multivariate methods address general questions of relationship and discrimination. If the researcher wishes to know if a relationship exists between two multifaceted concepts or whether or not several groups differ in any way on a set of dependent measures, then multivariate procedures may be appropriate.

(b) If several variables possessing some psychological cohesiveness are measured, multivariate procedures are preferred over a proliferation of univariate tests in much the same manner as the analysis of variance is preferred over several t tests.

(c) Most responses should be viewed not in isolation but as a conjunctive display. (1972, p. 1376)

McCall listed three implications of his third point. One implication was that the power of analysis is often increased by using multivariate methods. Another was that the pattern of relationships of interactions among the dependent variables constitutes important psychological information. A final point was that the knowledge gained by examining the pattern of several variables adds to the construct validity and interpretation of the dependent measures themselves.

The above assets of multivariate procedures can be applied to the current investigation in the following ways:

- (a) Do two groups--a helping group and a self-interest group--differ on a set of dependent measures; namely, empathy (E), assertiveness (A), and socialization (S)?;
- (b) Multivariate procedures consider the E x A x S interaction as possessing "psychological cohesiveness." This is congruent with Hogan's assertion that moral development is a concept which is composed of several factors; and
- (c) multivariate procedures are more sensitive to detecting interactions than would be a univariate ANOVA which used median-splits to categorize independent variables. This point was especially pertinent to hypotheses regarding Peer Ratings of Helping.

With the above advantages of multivariate procedures in mind, the specific varieties of multivariate statistics which were used in the present investigation are as follows:

- (a) a multivariate analysis of variance (MANOVA) was used to test the differences between the groups in empathy, assertiveness, and socialization. The MANOVA "is simply the analysis of variance using several rather than just one dependent variable in which these variates are weighted to provide the maximum possible effects" (McCall, 1972, p. 1373). Two associated multivariate techniques, discriminant analysis and the Roy-Bargman stepdown F tests (an analysis of covariance) were also used. These procedures tested hypotheses 1 through 5.
- (b) a form of the analysis of covariance was

used to test the hypotheses relating empathy, assertiveness, and socialization to peer ratings of helping (H6 to H11). In addition, multiple regression and a simple 2 x 2 analysis of variance were utilized.

All statistical procedures were computed with Statistical Package for the Social Sciences (SPSS) for CDC Systems Version 8.0. The multivariate Analysis of Variance program that was used included separate routines for regular analysis of variance with unequal n as well as for discriminant analysis and the analysis of covariance (Burns, 1980).

The manner in which the variables in this study were partitioned into multivariate procedures, including the appropriate linear models were as follows:

Hypotheses regarding group membership (H1 to H3). To test the three hypotheses regarding group membership, a multivariate analysis of variance was performed, with empathy, assertiveness, and socialization as dependent measures, and group membership and sex of subject as independent categorical variables. It was hypothesized that the Volunteer Group has significantly higher empathy scores than the Biology Group (H1); that there are no significant differences in assertiveness between the groups (H2), and that empathy, assertiveness, and socialization considered together contribute to differences between the two groups (H3).

The use of the multivariate approach illuminated the relationship among empathy, assertiveness, and socialization in simultaneously predicting group membership as well as the

predictive power of each separately. In other words, MANOVA assessed the joint contribution of empathy, assertiveness, and socialization toward differentiating the groups. Effects not significant in themselves but which may interact in a significant manner can be detected by MANOVA. In addition, since the MANOVA analysis gave a discriminant analysis as well, the relative strength of each dependent measure was assessed accounting for the effects present in either of the other two.

Specifically, a multivariate linear model of the following form was assumed:

$$Y \left[\text{Empathy, Assertiveness, Socialization} \right]_{ijk} = \mu + \text{group}_i + \text{sex}_j + (\text{group} \times \text{sex})_{ij} + E_{ijk}$$

The preliminary step consisted of checking the assumptions of homogeneity of dispersions (variances and covariances) and normality of the dependent measures. The standard test for this, Box's M (Cooley & Lohnes, 1971) resulted in a value of 21.22. The associated F value, $F(18, 2754) = 1.03$, was not significant, indicating that the dispersions were homogeneous and normal.

The next stage of analysis examined the multivariate F test for the interaction of group and sex. The associated F value, $F(3, 56) = < 1.00$, was not significant, indicating no significant interaction of group and sex on the three dependent variables.

The next analyses were the tests of main effects.

The multivariate F value was also not significant for sex, $F(3,56) = 2.04$. However, the multivariate test for group was significant, $F(3,56) = 4.01$, $p < .05$, indicating that the three dependent variables (empathy, assertiveness, and socialization) considered together, were significantly different for groups. This result supported the hypothesis that empathy, assertiveness, and socialization considered together, are different in the two groups.

The preceding analyses tested for differences on the construct of empathy, assertiveness, and socialization for the interaction and each of the main effects in the linear model. The next step of analysis examined the univariate F tests of each dependent variable separately within the interaction and each main effect (Table 9). First, in the Group x Sex interaction, empathy was not significant, assertiveness was not significant, and socialization was not significant. Second, there was a significant difference in empathy (although not in assertiveness and socialization) between males and females, with females scoring significantly higher in empathy than males. Third, the univariate analyses examined the solitary effects of empathy, assertiveness, and socialization between the groups. These tests indicated that both empathy and socialization differed significantly between the two groups. Examination of the means showed that empathy scores were significantly higher in the helping group than in the self-interest group; socialization scores were significantly higher in the Biology Group than in the

Table 9

Univariate F Tests for Empathy, Assertiveness,
and Socialization with (1,58) df

Variable	Hypothesized <u>MS</u>	Error <u>MS</u>	<u>F</u>	Significance
<u>Effect: Group x Sex</u>				
Empathy	762.26	470.88	1.62	NS
Assertiveness	90.02	414.21	<1.00	NS
Socialization	5.97	35.85	.17	NS
<u>Effect: Sex</u>				
Empathy	2708.25	470.88	5.75	.05
Assertiveness	.84	414.21	<1.00	NS
Socialization	48.56	35.85	1.35	NS
<u>Effect: Group</u>				
Empathy	2443.50	470.88	5.19	.05
Assertiveness	256.84	414.21	<1.00	NS
Socialization	174.33	35.85	4.86	.05

Volunteer Group. These results supported the hypothesis regarding empathy (H1) and showed the relationship for socialization. Assertiveness scores did not differ significantly between the two groups, supporting the hypothesis regarding assertiveness (H2).

The associated discriminant analysis supported these findings regarding empathy, assertiveness, and socialization between the groups (Table 10). The standardized discriminant function coefficient for assertiveness was much smaller than the coefficients for either empathy or socialization. The latter two coefficients were of approximately the same magnitude, indicating a nearly equal importance, but their signs were different. This indicated opposite effects of socialization and empathy in predicting group membership.

As a final check on the relative merits of empathy, assertiveness, and socialization in predicting group membership, the Roy-Bargmann stepdown F tests were used (cf. Bock, 1975, p. 411). These can be considered as an analysis of covariance which is a subset of stepwise regression, with the order of the steps set in a fixed fashion. This analysis showed that empathy eliminated any effects of assertiveness as significant, as did socialization eliminate any effects of empathy and assertiveness combined (Table 11). H4, that assertiveness adds to the power of empathy in predicting group membership was not supported. However, this finding as well as the discriminant analysis described above, supported H5, that socialization adds to empathy and assertiveness in predicting group membership.

Table 10

Standardized Discriminant Function Coefficients

Variable	Standardized Discriminant Function Coefficients
Assertiveness	.069
Empathy	-.783
Socialization	.767

Table 11

Roy-Bargman Stepdown F tests for Empathy,
Assertiveness, and Socialization

<u>Variable</u>	Hypothesized <u>MS</u>	Error <u>MS</u>	Stepdown <u>F</u>	Hypothesized <u>df</u>	Error <u>df</u>	Significance
Assertiveness	256.84	414.21	.62	1	58	NS
Empathy	2233.95	473.12	4.72	1	57	.05
Socialization	217.90	35.35	6.16	1	56	.05

Hypotheses related to peer ratings of helping (H4 through H7). The next set of analyses dealt with the effects of group membership and sex of subject on peer ratings of helping. The solitary effects of group membership on peer ratings was examined by testing Hypothesis 4, that Peer Ratings of Helping are significantly higher in the Volunteer Group than in the Biology Group. The effect of sex on Peer Ratings of Helping was examined. The possible associated explanatory power of empathy, assertiveness, and socialization was examined by testing the following: hypothesis 5, that high scores on empathy are associated with high scores on the Peer Ratings of Helping; hypothesis 6, that assertiveness does not predict Peer Ratings of Helping, and Hypothesis 7, that assertiveness and socialization contribute to empathy in predicting Peer Ratings of Helping. In addition, the possible predictive power of socialization on the Peer Ratings of Helping was examined. Also, the procedures utilized permitted checking whether empathy, assertiveness, and socialization provided any added predictive power of peer ratings above that contributed by group membership. The standard method of assessing such relationships is the analysis of covariance which combines a pooled regression on the covariates (empathy, assertiveness, and socialization) with an analysis of variance on the categorical predictors (group and sex).

Unfortunately, one of the assumptions required by the analysis of covariance is that the within-cell regressions be homogeneous. Because of the significant group

difference of empathy, assertiveness, and socialization in concert as revealed earlier, the assumption of homogeneity was probably not warranted. A formal test of the hypothesis of homogeneous within-cell regressions was made using the following linear model:

$$\begin{aligned}
 Y \text{ [peer ratings]}_{ijk} = & \mu + \text{empathy} + \text{assertiveness} \\
 & + \text{socialization} + \text{group}_i + \text{sex}_j + (\text{group} \times \text{sex})_{ij} + \\
 & (\text{empathy, assertiveness, socialization}) \times \text{sex}_j \\
 & + (\text{empathy, assertiveness, socialization}) \times \text{group}_i \\
 & + (\text{empathy, assertiveness, socialization}) \times \\
 & (\text{group} \times \text{sex})_{ij} \\
 & + E_{ijk}
 \end{aligned}$$

Pooling the sums-of-squares for the last three terms in this model provided the hypothesized sums-of-squares for the test of homogeneity of regressions. The F test was significant at better than the .01 level, confirming the heterogeneity of the regressions and indicating that ordinary analysis of covariance was inapplicable in this case (Table 12).

In addition, this analysis also indicated that empathy, assertiveness, and socialization did not predict Peer Ratings of Helping. This was made clearer by using a simpler multiple regression model as follows:

$$\begin{aligned}
 Y \text{ [peer ratings]} = & \mu + b_1 \times \text{empathy} + b_2 \times \\
 & \text{assertiveness} + b_3 \times \\
 & \text{socialization} + E
 \end{aligned}$$

The above model summarizes a multiple regression of empathy,

Table 12
 Test of Homogeneity of Regression
 on Peer Ratings of Helping

Source of Variation	<u>df</u>	<u>MS</u>	<u>F</u>	Significance
Empathy	1	38.30	2.47	NS
Assertiveness	1	3.67	.24	NS
Socialization	1	8.77	.57	NS
Group	1	316.48	20.47	.001
Sex	1	50.04	3.24	NS
Group x Sex	1	27.25	1.76	NS
Group x (E.A.S.) + Sex x (E.A.S.) + Group x Sex x (E.A.S.)	9	52.26	3.38	.05
Within + residual	30	15.46		

assertiveness, and socialization as independent variables with Peer Ratings of Helping as the dependent variable. The F test for the regression of the interaction of E x A x S was not significant, indicating that assertiveness, socialization, and empathy in concert and in pair-wise combination did not predict Peer Ratings of Helping (Table 13). In addition, none of the separate regression coefficients attained significance (Table 14). In sum, although assertiveness did not predict Peer Ratings of Helping, supporting H6, the other hypothesized relationships were not supported by the data. Contrary to expectation, (H5 and H7), high empathy scores were not associated with high Peer Ratings of Helping; assertiveness did not contribute to empathy in predicting Peer Ratings of Helping; and socialization did not contribute to empathy and assertiveness in predicting Peer Ratings of Helping. Thus, it was necessary to eliminate any further consideration of empathy, assertiveness, socialization, (empathy + assertiveness), and (empathy + assertiveness + socialization) as predictors of Peer Ratings of Helping.

It is perhaps informative to note that had the regression analysis of empathy, assertiveness, and socialization been significant, the analysis then would have proceeded to a model similar to that involved in the analysis of covariance. However, unlike the analysis of covariance, the model would have incorporated separate regressions for each cell instead of the pooled regression assumed by the analysis of covariance.

Table 13
 Regression of Empathy x Assertiveness x
 Socialization on Peer Ratings
 of Helping

Source of variation	<u>df</u>	<u>MS</u>	<u>F</u>	Significance
Within + residual	42	23.52		
(Empathy, Assertiveness, Socialization)	3	16.91	.72	NS

Table 14
 Regression Coefficients of Empathy,
 Assertiveness, and Socialization
 on Peer Ratings of Helping

Variable	Regression Coefficient	Standard Error	T Value	Significance
Empathy	.03	.04	.98	NS
Assertiveness	-.02	.04	-.44	NS
Socialization	.07	.12	.61	NS

With empathy, assertiveness, and socialization ignored as predictors of Peer Ratings of Helping, the next procedure concentrated on looking for group and sex differences on the Ratings of Helping. These ratings were the dependent variable in a model including group, sex, and Group x Sex as categorical independent variables, i.e., a simple 2 x 2 analysis of variance. The following linear model was used for this analysis:

$$Y [\text{peer ratings}]_{ijk} = \mu + \text{group}_i + \text{sex}_j + (\text{group} \times \text{sex})_{ij} + E_{ijk}$$

Analysis of the data with this model indicated that no significant Group x Sex interaction existed, but that the main effects of group and sex were significant at better than the .05 level (Table 15). Examination of the means (Table 6) showed that peer ratings were significantly higher in the helping group than in the self-interest group, supporting H6. In addition, Peer Ratings of Helping were significantly higher for females than for males.

The relationship of selected demographic variables to personality variables and Peer Ratings of Helping. A number of univariate analyses of variance were performed relating empathy, assertiveness, and socialization to selected categorical (Yes/No) demographic variables. In addition, differences in peer ratings between categories of each demographic variable were examined by the analysis of variance. These results were as follows:

1. Empathy, assertiveness, socialization, and peer ratings were not significantly different for (a) students

Table 15

Analysis of Variance for Peer Ratings of Helping by
Group Membership and Sex of Subject

Source of Variation	<u>df</u>	<u>MS</u>	<u>F</u>	Significance
Sex of Subject	1	138.70	5.90	.05
Group Membership	1	226.76	9.64	.01
Sex x Group	1	25.36	1.08	NS
Within Cells	42	23.52		

whose parents/grandparents were the first to settle in this country vs. (b) students whose parents/grandparents were not the first to settle in this country (Tables 16 and 17).

2. Empathy, assertiveness, socialization, and peer ratings were not significantly different for (a) students who held part-time jobs during the school year vs. (b) students who did not hold part-time jobs during the school year (Tables 16 and 17).

3. Empathy, assertiveness, and peer ratings were not significantly different for (a) students who considered themselves to be active participants in religious activities vs. (b) students who did not consider themselves to be active participants in religious activities (Tables 16 and 17).

4. There was a significant difference in socialization scores between (a) those who considered themselves to be active participants in religious activities vs. (b) those who did not consider themselves to be active participants in religious activities. Students who considered themselves to be active participants in religious activities scored significantly higher on socialization than did students who did not consider themselves as active religious activities participants (Table 17).

An examination of differences in values between the groups. A number of analyses were calculated on differences on selected values between the helping group and the self-

Table 16

Analysis of Variance for Peer Ratings of Helping
by Demographic Variables

Source of variation	<u>df</u>	<u>MS</u>	<u>F</u>	Significance
First-to-Settle				
Within cells	44	31.15	--	--
First-to-Settle	1	7.97	<1.00	NS
Does Subject Work?				
Within cells	44	30.59	--	--
Does Subject Work?	1	32.87	1.07	NS
Religious Participation				
Within cells	44	31.33		
Religious Participation	1	.17	<1.00	NS

Table 17

Analysis of Variance for Empathy, Assertiveness, and
Socialization by Selected Demographic Variables

Univariate F tests with (1,60) d.f.

Variable	Hypothesized <u>MS</u>	Error <u>MS</u>	<u>F</u>	Significance
By First-to-Settle				
Empathy	465.46	545.99	.85	NS
Assertiveness	439.77	398.87	1.10	NS
Socialization	86.87	37.01	2.35	NS
By Does Subject Work?				
Empathy	64.69	552.67	.12	NS
Assertiveness	91.56	404.67	.23	NS
Socialization	58.06	37.50	1.55	NS
By Religious Participation				
Empathy	281.94	549.05	.51	NS
Assertiveness	61.25	405.17	.15	NS
Socialization	254.82	34.22	7.45	.01

interest group. Out of the total set of 36 values, a subset of 17 was chosen for analysis. The basis of selection for this subset was based on Rokeach's (1973) study with college students who were active participants in the civil rights movement; the 17 values were stressed as descriptive of these students. In the current investigation, it was felt that the helping group students shared a number of the characteristics of the students studied by Rokeach, such as a concern for the needy and underprivileged, a desire to be involved with projects extending beyond the academic curriculum, and an interest in social justice.

The statistical procedure chosen for testing the differences in each of the 17 values between the two groups was the t test. Since the rankings on the Rokeach Values Inventory range from 1-18, it was decided that this continuum approximates an interval scale, and that the t test would be an appropriate procedure.

Unfortunately, none of the separate t tests performed reached significance (Table 18). Therefore, there were no significant differences in values between the helping group and the self-interest group.

Table 18

t Tests for Differences in Values

Variable	<u>M</u>	<u>SD</u>	<u>t</u>	Level of Significance
A Comfortable Life				
Biology	11.43	4.72	.96	NS
Volunteer	12.60	4.61		
A World at Peace				
Biology	10.57	5.14	1.42	NS
Volunteer	8.64	5.39		
A World of Beauty				
Biology	14.14	3.90	1.71	NS
Volunteer	12.44	3.72		
Mature Love				
Biology	7.10	3.64	1.04	NS
Volunteer	8.20	4.63		
National Security				
Biology	14.70	3.66	.15	NS
Volunteer	14.84	3.57		
Pleasure				
Biology	12.97	4.16	.29	NS
Volunteer	12.64	4.65		
Ambitious				
Biology	8.25	4.56	.70	NS
Volunteer	9.12	5.08		
Broadminded				
Biology	9.36	4.50	.03	NS
Volunteer	9.40	4.85		

Table 18 (continued)

Variable	<u>M</u>	<u>SD</u>	<u>t</u>	Level of Significance
Capable				
Biology	9.58	4.43	.75	NS
Volunteer	8.72	4.48		
Clean				
Biology	15.53	3.38	.88	NS
Volunteer	14.64	4.54		
Forgiving				
Biology	7.44	3.75	.20	NS
Volunteer	7.65	4.06		
Helpful				
Biology	6.80	3.90	.20	NS
Volunteer	6.60	3.90		
Honest				
Biology	4.72	3.46	1.02	NS
Volunteer	3.84	3.09		
Loving				
Biology	4.44	4.38	.79	NS
Volunteer	5.28	3.62		
Polite				
Biology	11.39	4.72	1.91	NS
Volunteer	13.52	3.58		
Responsible				
Biology	6.61	3.64	1.28	NS
Volunteer	5.48	2.97		
Self-controlled				
Biology	11.63	4.21	.93	NS
Volunteer	10.60	4.38		

CHAPTER V

DISCUSSION

This study provided some interesting and perhaps unique findings to the literature on helping behavior. Most importantly, it was possible to distinguish a helping (Volunteer) group from a self-interest (Biology) group in a number of ways. One important finding was that students in the Volunteer Group scored significantly higher on a questionnaire of affective empathy than did members of the Biology Group. This finding supported a central theme of Hogan's model of moral development and provided evidence for other theorists who see empathy as a precondition or as a correlate of helping behavior. Further, this study appeared to make a real contribution to the literature on empathy. Clark (1980) wrote:

In short, the available literature does neglect a clear definition and a comprehensive theoretical approach to this important phenomenon (empathy). It remains evident, therefore, that while there have been an increasing number of articles on empathy, empathy remains an important neglected topic in social psychology and social science. (p. 187)

The statistical procedures used in this study showed that multivariate techniques were applicable to research in moral development where several components often need to be examined simultaneously. The multivariate analysis of variance demonstrated that empathy, assertiveness, and socialization

considered together differentiated the groups. Further analysis indicated that this multivariate difference was due to the separate significant effects of empathy and socialization. Students in the Volunteer Group scored high on empathy and low on socialization; those in the Biology Group scored low on empathy and high on socialization. These scores of students in the Biology Group supported Hogan's model regarding moral realists (Table 3). Persons such as these, as can be recalled, are very concerned with following rules and with meeting the expectations that others have of them.

Despite the positive findings for empathy and assertiveness, further analysis of the multivariate data showed that assertiveness did not contribute to the effects of empathy in predicting group membership.

In view of the substantial theoretical and empirical support for the interaction of empathy and assertiveness, this lack of predictability merits some speculation. Toward this end, some observations can be made about the role of assertiveness as a variable in this study. First, examination of the Galassi, DeLo, Galassi, and Bastien (1974) standardization data showed that the present two groups of students scored higher than most of the standardization groups of students. Perhaps there was a ceiling effect for assertiveness in the present study which precluded assertiveness from contributing to differentiating the groups or contributing to the other variables in predicting Peer Ratings of Helping.

Second, assertiveness has become almost a virtue to some in contemporary society, to the extent that many people feel ashamed or even guilty when they do not perceive themselves as being assertive. This may have been especially true on the college campus where this study was conducted, where on many bulletin boards one can read announcements for various types of assertiveness workshops. It is possible that assertiveness has become such a socially desirable quality that college students may have answered many of the assertiveness scale items in a socially desirable manner. If this were the case, the value of assertiveness as a worthwhile variable would be greatly diminished. Future research could determine whether or not this is what occurred by measuring the correlation of the College Self Expression Scale with the Marlowe-Crowne Social Desirability Scale. Finally, it may be that the College Self Expression Scale was not a good match to Hogan's concept of autonomy. Perhaps using another scale of assertiveness or a measure of autonomy would have yielded positive findings.

A disappointing feature of this study was that the analyses utilizing the Peer Ratings of Helping did not confirm the results detected between the groups on empathy and socialization, or support the hypothesis regarding the interaction of empathy and assertiveness. This lack of support can perhaps be due to the fact that the raters failed to attain high interrater reliability. In general, when this occurs, the chances of a Type II error (not detecting

differences that might be present) increases in a study.

Some comments are pertinent toward understanding the lower interrater reliability and to future research which might use a revised form of Peer Ratings of Helping. First, the possible lack of comparable familiarity of the raters toward the students being rated may have contributed to interrater differences. Second, raters may have each had their own anchoring point when rating students within their group. A suggestion for overcoming these possible sources of error would be to provide raters with a training period during which they would evaluate persons who they knew in common. In addition, a more highly developed training manual could be provided which would describe in greater depth and detail what each question measured and how specific people would be rated. Finally, another likely source of error on the present Peer Ratings of Helping would be that the scale which was used in this study provided too much margin for interpretation by each rater (i. e., Does this person seem satisfied with himself or herself?). Brown (1976) suggested that behaviorally referenced questions contribute the most to interrater reliability in surveys such as the present survey. Brown's criterion is relevant to future rating scales of helping behavior.

Two interesting sex differences emerged in the analysis of the data. First, females scored significantly higher on empathy than did males. These data were consistent with the results of Mehrabian and Epstein's (1972) standardization

sample. Second, females scored significantly higher on the Peer Ratings of Helping than did males. These results would seem to support cultural stereotypes which view females as being more caring, supportive, and sensitive to the needs of others than are males. Future research could determine if this pattern was unique to the present sample or if it occurs among other groups as well.

The significant differences in grade point average between the groups, with students in the Biology Group scoring significantly higher than students in the Volunteer Group, merits discussion. This difference was probably due to the selection of the groups, since students in the Biology Group needed a high grade point average in order to be elected to membership.

Some speculation might be made on the lack of significant differences between the two groups on values. Perhaps each group, being comprised of predominantly Catholic college students who shared common goals and aspirations, was homogeneous in the sense of having shared values.

In a practical and applied sense, the findings of this study are noteworthy in that they are pertinent to discussions which occurred during the Loyola-Baumgarth Symposium on Values and Ethics (1980). One of the student panelists, pointed out that the task of educating students as leaders belongs to the university; that a major goal of education at Loyola University is "an invitation to exist in service to others" (Coley, 1980). He went on to show how this ideal is reflected

in a catalog statement:

Our prime educational objectives are to form: "persons-for-others"; persons who are fashioned in the new humanism, the first principle of which is the responsibility to our brothers and to history, cognizant of the present situation of human society, and actively concerned for the future of the human race.

An implication may be drawn from the findings of this study to the ideals expressed above: since empathy is associated with commitment to helping others, any educational practices which further the development of empathy could be encouraged. Such practices might range from increased student exposure to all of the liberal arts to a wider range of service programs with which students would become involved.

Overall, the present study demonstrated that persons who display a continuing commitment to the welfare of others can be differentiated on empathy and socialization from persons who do not display such a commitment. In doing so, this study investigated a different dimension of helping behavior than did many previous studies which were limited to laboratory situations or "one-shot" scenarios (Tables 1 and 2). Further, Hogan's model of moral development, a component model which relates a number of personality characteristics to helping behavior, was shown to be useful for organizing the empirical research and for making predictions.

Suggestions for future research would include:

(a) looking for empathy effects with other varieties of helping groups; (b) developing a reliable rating scale of helping behavior that could be used as a dependent variable

in studies of this nature; (c) assessing the relationship between assertiveness and social desirability; (d) using another measure of assertiveness to further explore the proposed empathy by assertiveness interaction; (e) continuing to investigate the interaction of empathy, assertiveness, and socialization; and (f) using the multivariate statistical approach to investigate models such as Hogan's which attempt to relate a number of components to helping behavior.

Reference Notes

1. Iannotti, R. J. Personal communication, October, 1979.
2. Selman, R. L. Personal communication, October, 1979.

REFERENCES

- Aderman, D. Elation, depression, and helping behavior. Journal of Personality and Social Psychology, 1972, 24, 91-101.
- Aderman, D., Archer, R. L., & Harris, J. L. Effect of emotional empathy on attribution of responsibility. Journal of Personality, 1975, 43, 156-167.
- Aderman, D., & Berkowitz, L. Observational set, empathy and helping. Journal of Personality and Social Psychology, 1970, 14 (2), 141-148.
- Alberti, R. E., & Emmons, M. L. Your perfect right: a guide to assertive behavior. San Luis Obispo, California: Impact, 1974.
- Aleksic, P. M., & Savitsky, J. C. Validation of a test of emotional empathy among adolescent offenders. Unpublished manuscript, 1976.
- Aronfreed, J. Conduct and Conscience: The socialization of internalized control over behavior. New York: Academic Press, 1968.
- Bandura, A., & Walters, R. H. Social learning and personality development. New York: Holt, Rinehart & Winston, 1959.
- Barrett, B., & Yarrow, M. Prosocial behavior, social inferential ability and assertiveness in children. Child Development, 1977, 48, 475-48.
- Barron, F. Some personality correlates of independence of judgment. Journal of Personality, 1953, 21, 789-797.
- Bates, H. D., & Zimmerman, S. F. Toward the development of a screening scale for assertive training. Psychological Reports, 1971, 28, 99-107.
- Baumrind, D. Current patterns of parental authority. Developmental Psychology, 1971, 4 (1, pt. 2).

- Beck, J. C., Kantor, D., & Gelineau, V. A. Follow-up study of chronic psychotic patients "treated" by college case-aid volunteers. American Journal of Psychiatry, 1963, 120, 269-271.
- Becker, W. C. Consequences of different kinds of parental discipline. In M. Hoffman & L. W. Hoffman (Eds.), Review of child development research. Vol. 1 New York: Sage Foundation, 1964.
- Berger, S. M. Conditioning through vicarious instigation. Psychological Review, 1962, 69 (5), 450-466.
- Berkowitz, L. Responsibility, reciprocity, and social distance in help-giving. Journal of Experimental Social Psychology, 1968, 4, 46-63.
- Berkowitz, L. Social norms, feelings, and other factors affecting helping and altruism. In L. Berkowitz (Ed.), Advances in experimental social psychology. New York: Academic Press, 1972, 6, 63-108.
- Berkowitz L., & Connor, W. H. Success, failure, and social responsibility. Journal of Personality and Social Psychology, 1966, 4, 664-669.
- Berkowitz, L., & Daniel, L. R. Responsibility and dependency. Journal of Abnormal and Social Psychology, 1963, 66, 429-436.
- Berkowitz, L., & Daniel, L. R. Affecting the salience of the social responsibility norm: Effects of past help on the response to dependent relationships. Journal of Abnormal and Social Psychology, 1964, 68, 275-281.
- Berkowitz, L., & Friedman, P. Some social class differences in helping behavior. Journal of Personality and Social Psychology, 1967, 5, 217-225.
- Bickman, L. The effect of another bystander's ability to help on bystander intervention in an emergency. Journal of Experimental Social Psychology, 1971, 7, 367-379.
- Bickman, L. Social influence and diffusion of responsibility in an emergency. Journal of Experimental Social Psychology, 1972, 8, 438-445.
- Bock, R. D. Multivariate statistical methods in behavioral research. New York: McGraw Hill, 1975.

- Bronfenbrenner, U. Two worlds of childhood. New York: Simon and Schuster, 1970.
- Brown, F. G. Principles of educational and psychological testing. New York: Holt, Rinehart, & Winston, 1976.
- Bryan, J. H. Why children help: a review. Journal of Social Issues, 28 (3), 1972, 87-104.
- Bryan, J. H., & London, P. Altruistic behavior by children. Psychological Bulletin, 1970, 73, 200-211.
- Burns, P. R. Multivariate Analysis of Variance Routines for Statistical Packages for the Social Sciences. Evanston, Illinois: Northwestern University, 1980.
- Campbell, D. T., & Stanley, J. C. Experimental and quasi-experimental designs for research. Chicago: Rand McNally, 1963.
- Chandler, M. J. Social cognition: a selective review of current research. In W. F. Overton and J. M. Gallagher (Eds.), Knowledge and development, Vol. 1. New York: Plenum Press, 1977.
- Clark, K. B. Empathy: A neglected topic in psychological research. American Psychologist, 1980, 35, 187-190.
- Clark, III, R. D., & Word, L. E. Why don't bystanders help? Because of ambiguity? Journal of Personality and Social Psychology, 1972, 24, 392-400.
- Coley, K. Persons for others. Paper presented at Loyola-Baumgarth Symposium on Values and Ethics. Proceedings in press. Chicago: Loyola University of Chicago, 1980.
- Cooley, W. W., & Lohnes, P. R. Multivariate data analysis. New York: Wiley, 1971.
- Crowne, D. P., & Marlowe, D. A new scale of social desirability independent of psychopathology. Journal of Consulting Psychology, 1960, 60, 20-30.
- Darley, J. M., & Batson, C. D. From Jerusalem to Jerico: A study of situational variables in helping behavior. Journal of Personality and Social Psychology, 1973, 27, 100-108.

- Darley, J. M., & Latane, B. Bystander intervention in emergencies: diffusion of responsibility. Journal of Personality and Social Psychology, 1968, 8, 377-383.
- Darley, J. M., Teger, A. I., & Lewis, L. D. Do groups always inhibit individuals' responses to potential emergencies? Journal of Personality and Social Psychology, 1973, 26, 395-399.
- Dovidio, J. F., & Morris, N. N. Effects of stress and commonality of fate on helping behavior. Journal of Personality and Social Psychology, 1975, 31, 145-149.
- Eisler, R. M., Hersen, M., Miller, P. M., & Blanchard, E. B. Situational determinants of assertive behaviors. Journal of Consulting and Clinical Psychology, 1975, 43, 330-340.
- Elliot, R., & Vasta, R. The modeling of sharing: Effects associated with vicarious reinforcement, symbolization, age, and generalization. Journal of Experimental Child Psychology, 1970, 10, 8-15.
- Emler, N. P., & Rushton, J. P. Cognitive-developmental factors in children's generosity. British Journal of Social and Clinical Psychology, 1974, 13, 277-281.
- Feffer, M., & Gourevitch, V. Cognitive aspects of role taking in children. Journal of Personality, 1960, 28, 383-396.
- Fenichel, O. The psychoanalytic theory of neurosis. New York: Norton, 1954.
- Feshbach, N. D. Studies of empathic behavior in children. In B. Maher (Ed.), Progress in Experimental Personality Research (Volume 8). New York: Academic Press, 1978.
- Fink, E. L., Rey, L. D., Johnson, K. W., Spenner, K. I., Morton, D. R., & Flores, E. T. The effects of family occupational type, sex, and appeal style on helping behavior. Journal of Experimental and Social Psychology, 1975, 11, 43-52.
- Friedman, P. H. The effects of modeling and role playing on assertive behavior. (Doctoral dissertation, University of Wisconsin, 1968). Dissertation Abstracts, 1969, 29, 3557B-4901B.

- Friedrich, L. K., & Stein, A. H. Aggressive and prosocial television programs and the natural behavior of pre-school children. Monographs of the Society for Research in Child Development, 1973, 38 (4, Whole No. 151).
- Galassi, J. P., DeLo, J. S., Galassi, M. D., & Bastien, S. The College Self Expression Scale: A measure of assertiveness. Behavior Therapy, 1974, 5, 165-171.
- Galassi, J. P., & Galassi, M. D. A comparison of the factor structure of an assertion scale across sex and population. Behavior Therapy, 1979, 10, 117-128.
- Gergen, K. J., Ellsworth, P., Maslach, C., & Seipel, M. Obligation, donor resources, and reactions to aid in three cultures. Journal of Personality and Social Psychology, 1975, 31, 390-400.
- Goldman, J. A., & Olczak, P. V. Self-actualization and the cost of volunteering: Further evidence for the construct validity of the Personal Orientation Inventory. Journal of Clinical Psychology, 1975, 31, 287-292.
- Goodstadt, M. S. Helping and refusal to help: A test of balance and reactance theories. Journal of Experimental Social Psychology, 1971, 7, 610-622.
- Goranson, R. E., & Berkowitz, L. Reciprocity and responsibility reactions to prior help. Journal of Personality and Social Psychology, 1966, 3, 227-232.
- Gough, H. G. Manual for the California Personality Inventory. (Rev. Ed.). Palo Alto, Calif.: Consulting Psychologists Press, 1969.
- Gough, H. G., & Heilbrun, A. B., Jr. The Adjective Check List manual. Palo Alto, Calif.: Consulting Psychologists Press, 1965.
- Gough, H. G., & Peterson, D. R. The identification and measurement of predispositional factors in crime and delinquency. Journal of Consulting Psychology, 1952, 16, 207-212.
- Green, S. K. Causal attribution of emotion and its relationship to role taking and helping behavior in children. Unpublished doctoral dissertation. Chicago: Loyola University of Chicago, 1975.
- Greenblatt, M., & Kantor, D. Student volunteer movement and the manpower shortage. American Journal of Psychiatry, 1962, 118, 809-814.

- Greenglass, E. R. Effects of prior help and hindrance on willingness to help others. Journal of Personality and Social Psychology, 1969, 11, 224-231.
- Gruver, G. G. College students as therapeutic agents. Psychological Bulletin, 1971, 76, 111-127.
- Handlon, B. J., & Gross, P. The development of sharing behavior. Journal of Abnormal and Social Psychology, 1959, 59, 425-428.
- Hartup, W. W., & Keller, E. D. Nurturance in preschool children and its relation to dependency. Child Development, 1960, 31, 681-689.
- Hersch, P. D., Kulik, J. A., & Scheibe, K. E. Personal characteristics of college volunteers in mental hospitals. Journal of Consulting and Clinical Psychology, 1969, 33, 30-34.
- Hoffman, M. L. Empathy, role taking, guilt, and the development of altruistic motives. In T. Lickona (Ed.), Man and morality. New York: Holt, Rinehart, & Winston, 1974.
- Hoffman, M. L. The development of altruistic motivation. In D. D. DePalma & J. M. Foley (Eds.), Moral development: Current theory and research. Hillsdale, New Jersey: Lawrence Erlbaum, 1975a.
- Hoffman, M. L. Developmental synthesis of affect and cognition and its implications for altruistic motivation. Developmental Psychology, 1975b, 607-622.
- Hogan, R. Development of an empathy scale. Journal of Consulting and Clinical Psychology, 1969, 33, 307-316.
- Hogan, R. A dimension of moral judgment. Journal of Consulting and Clinical Psychology, 1970, 35, 205-212.
- Hogan, R. Moral conduct and moral character: A psychological perspective. Psychological Bulletin, 1973, 79, 217-232.
- Hogan, R. Theoretical egocentrism and the problem of compliance. American Psychologist, 1975, 30, 533-540.
- Holzberg, J. D., Gewirtz, H., & Ebner, E. Changes in moral judgment and self-acceptance as a function of companionship with hospitalized patients. Journal of Consulting Psychology, 1964, 28, 299-303.

- Horowitz, I. A. Effect of choice and locus of dependence on helping behavior. Journal of Personality and Social Psychology, 1968, 8, 373-376.
- Iannotti, R. J. Effect of role taking experiences on role taking, empathy, and aggression. Developmental Psychology, 1978, 14, 119-124.
- Kantor, D. Inducing preferences for mental health careers. National Association of Social Workers, 1959, 75.
- Kaplan, R. M., & Singer, R. D. Television violence and viewer aggression: A reexamination of the evidence. Journal of Social Issues, 1976, 32, 35-70.
- Kazdin, E., & Bryan, J. Competence and volunteering. Journal of Experimental Social Psychology, 1971, 7, 87-97.
- Keeley, M. J. Identifying successful college volunteers working with emotionally disturbed children. Unpublished doctoral dissertation. Chicago: Loyola University of Chicago, 1979.
- Kelley, K., & Byrne, D. Attraction and altruism: With a little help from my friends. Journal of Research in Personality, 1976, 10, 59-68.
- Kidd, R. F., & Berkowitz, L. Effect of dissonance arousal on helpfulness. Journal of Personality and Social Psychology, 1976, 33, 613-622.
- Kohlberg, L. Development of moral character and ideology. In M. L. Hoffman & L. W. Hoffman (Eds.), Review of child psychology. New York: Russell Sage Foundation, 1964.
- Kohlberg, L. Moral development. In D. L. Sills (Ed.), International Encyclopedia of the Social Sciences (Vol. 10). New York: Crowell, Collier, & Macmillan, 1968.
- Kohlberg, L. Stage and sequences: The cognitive development approach to socialization. In D. Goslin (Ed.), Handbook of socialization theory and research. Chicago: Rand McNally, 1969.
- Kohlberg, L. Moral stages and moralization: The cognitive developmental approach. In T. Lickona (Ed.), Moral development and behavior. New York: Holt, Rinehart, & Winston, 1976.
- Kraut, R. E. Effects of social labeling on giving to charity. Journal of Experimental Social Psychology, 1973, 9, 551-562.

- Krebs, D. L. Altruism: An examination of the concept and a review of the literature. Psychological Bulletin, 1970, 73, 258-302.
- Krebs, D. L. Empathy and altruism. Journal of Personality and Social Psychology, 1975, 32, 1134-1146.
- Krebs, D., & Stirrup, B. Role taking ability and altruistic behavior in elementary school children. Paper presented at the meeting of the American Psychological Association, New Orleans, August, 1974.
- Kurdek, L. A. Perspective taking as the cognitive basis of children's moral development: A review of the literature. Merrill-Palmer Quarterly, 1978, 24, 3-28.
- L'Armand, K., & Pepitone, A. Helping to reward another person: A cross-cultural analysis. Journal of Personality and Social Psychology, 1975, 31, 189-198.
- Lawrence, P. S. The assessment and modification of assertive behavior (Doctoral dissertation, Arizona State University, 1970). Dissertation Abstracts International, 1970, 31, 1B-971B.
- Leckie, G. Ontwikkeling van sociale cogniti: Een ontwikkelingsmodel voor rolne mongsvaardigheid bij kindern. Unpublished doctoral dissertation, University of Nijmegen, 1975. Cited by L. A. Kurdek, Perspective taking as the cognitive basis of children's moral development: A review of the literature, Merrill-Palmer Quarterly, 1978, 24, 3-23.
- Lickona, T. Critical issues in the study of moral development and behavior. In T. Lickona (Ed.), Moral development and behavior. New York: Holt, Rinehart, & Winston, 1976.
- Loyola-Baumgarth Symposium on Values and Ethics. Proceedings in press. Chicago: Loyola University of Chicago, 1980.
- McCall, R. B. The use of multivariate procedures in developmental psychology. In P. H. Mussen (Ed.), Car-michael's manual of child psychology. New York: Wiley, 1970.
- McDougall, W. An introduction to social psychology. London: Methuen, 1908.
- Mehrabian, A., & Epstein, N. A measure of emotional empathy. Journal of Personality, 1972, 40, 525-543.

- Murphy, L. B. Social behavior and child personality: An exploratory study of some roots of sympathy. New York: Columbia University Press, 1937.
- O'Connor, M., Dollinger, S., Kennedy, S., & Pelletier-Smetko, P. Prosocial behavior and psychopathology in emotionally disturbed boys. American Journal of Orthopsychiatry, 1979, 49, 301-310.
- Olejnik, A. B. Developmental changes and interrelationships among role taking, moral judgments, and children's sharing. Paper presented at the meeting of the Society for Research in Child Development, Denver, April, 1975.
- Peterson, T. J. A preliminary study of the effects of previous nursery school attendance upon five-year-old children entering kindergarten. University of Iowa Studies, Studies in Child Welfare, 1938, 14 (New Series No. 346), 197-248.
- Piaget, J. The psychology of intelligence. New York: Harcourt, Brace, & World, 1950.
- Pilavin, J. A., & Pilavin, I. M. The good samaritan: Why does he help? Unpublished manuscript, 1973. Cited by Coke, J. S., Batson, C. D., & McDavis, K. Empathic mediation of helping: A two-stage model. Journal of Personality and Social Psychology, 1978, 36, 752-766.
- Pruitt, D. G. Reciprocity and credit building in a laboratory dyad. Journal of Personality and Social Psychology, 1968, 8, 143-147.
- Rathus, S. S. A 30-item schedule for assessing assertive behavior. Behavior Therapy, 1973, 4, 398-406.
- Reardon, R. C., Hersen, M., Bellack, A. S., & Foley, J. M. Measuring social skill in grade school boys. Journal of Behavioral Assessment, 1979, 1, 87-105.
- Regan, J. W. Guilt, perceived injustice, and altruistic behavior. Journal of Personality and Social Psychology, 1971, 18, 124-132.
- Rich, A. R., & Schroeder, H. E. Research issues in assertiveness training. Psychological Bulletin, 1976, 83, 1081-1096.
- Rodin, J., & Slochower, J. Fat chance for a favor: Obese-normal differences in compliance and incidental learning. Journal of Personality and Social Psychology, 1974, 29, 557-565.

- Rokeach, M. The nature of human values. New York: The Free Press, 1973.
- Rosenbaum, M. & Blake, R. R. Volunteering as a function of field structure, Journal of Abnormal and Social Psychology, 1955, 50, 193-196.
- Rotter, J. B. Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs: General & Applied, 1966, 80, 1-28.
- Rubin, K. H., & Schneider, F. W. The relationship between moral judgment, egocentrism, and altruistic behavior. Child Development, 1973, 44, 661-665.
- Rushton, J. P. Socialization and the altruistic behavior of children. Psychological Bulletin, 1976, 83, 898-913.
- Rushton, J. P., & Campbell, A. Modeling, vicarious reinforcement, and extraversion on blood donating in adults: Immediate and long-term effects. European Journal of Social Psychology, 1977, 7, 297-306.
- Rushton, J. P., & Weiner, J. Altruism and cognitive development in children. British Journal of Social and Clinical Psychology, 1975, 14, 341-349.
- Schopler, J., & Bateson, N. The power of dependence. Journal of Personality and Social Psychology, 1965, 2, 247-254.
- Schopler, J., & Matthews, M. W. The influence of the perceived causal locus of partner's dependence on the use of interpersonal power. Journal of Personality and Social Psychology, 1965, 2, 609-612.
- Schopler, J., & Thompson, V. The role of attribution process in mediating amount of reciprocity for a favor. Journal of Personality and Social Psychology, 1968, 10, 243-250.
- Schwartz, S. H. Elicitation of moral obligation and self-sacrificing behavior: An experimental study of volunteering to be a bone marrow donor. Journal of Personality and Social Psychology, 1970, 15, 283-293.
- Schwartz, S. H. Normative explanations of helping behavior: A critique, proposal, and empirical test. Journal of Experimental and Social Psychology, 1973, 9, 349-364.

- Schwartz, S. H., & Clausen, G. T. Responsibility, norms, and helping in an emergency. Journal of Personality and Social Psychology, 1970, 16, 299-310.
- Sears, R. R., Roe, L., & Alpert, R. Identification and child rearing. Stanford, California: Stanford University Press, 1965.
- Selman, R. L. Social-cognitive understanding: A guide to educational and clinical practice. In T. Lickona (Ed.), Moral development and behavior. New York: Holt, Rinehart, & Winston, 1976.
- Sherrod, D. R., & Downs, R. Environmental determinants of altruism: The effects of stimulus overload and perceived control on helping. Journal of Experimental Social Psychology, 1974, 10, 468-479.
- Simmons, C. H., & Lerner, M. J. Altruism as a search for justice. Journal of Personality and Social Psychology, 1968, 9, 216-235.
- Simon, W. E. Helping behavior in the absence of visual contact as a function of sex of person asking for help and sex of person being asked for help. Psychological Reports, 1971, 28, 609-610.
- Smith, R. E., Smythe, L., & Lien, D. Inhibition of helping behavior by a similar or dissimilar nonreactive fellow bystander. Journal of Personality and Social Psychology, 1972, 23, 414-419.
- Spoerl, O. H. An activity-centered volunteer program for university students. Hospital and Community Psychiatry, 1968, 19, 114-116.
- Staub, E. Helping a person in distress: The influence of implicit and explicit "rules" of conduct on children and adults. Journal of Personality and Social Psychology, 1971, 17, 137-144.
- Staub, E. To rear a prosocial child: Reasoning, learning by doing, and learning by teaching others. In D. D. DePalma & J. M. Foley (Eds.), Moral development: Current theory and research. Hillsdale, N. J.: Lawrence Erlbaum, 1975.
- Stotland, E. Exploratory investigations of empathy. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology (Vol. 4). New York: Academic Press, 1969.

- Stotland, E., & Dunn, R. E. Empathy, self-esteem and birth order. Journal of Abnormal and Social Psychology, 1963, 66, 532-540.
- Stotland, E., & Walsh, J. Birth order in an experimental study of empathy. Journal of Abnormal and Social Psychology, 1963, 61, 610-614.
- Strong, E. K. Manual for Strong Vocational Interest Blanks for men and women. Palo Alto, Calif.: Consulting Psychologists Press, 1959.
- Sullivan, H. S. The interpersonal theory of psychiatry. New York: Norton, 1953.
- Tedeschi, J. T., & Lindskold, S. Social psychology: interdependence, interaction, and influence. New York: Wiley, 1976.
- Tipton, R. M., & Browning, S. Altruism: Reward or punishment? Journal of Psychology, 1972, 80, 319-322.
- Van Ornum, W. E. Tune in and help out?: Empathy, modeling, dependency, perspective taking, and television, and their relationship to altruism in children. Unpublished masters thesis. Chicago: Loyola University of Chicago, 1978.
- Van Ornum, W. E., Foley, J. M., & Brady, B. Empathy, perspective taking, and altruism in college students. Unpublished pilot study, 1978.
- Wagner, C., & Wheeler, L. Model, need, and cost effects in helping behavior. Journal of Personality and Social Psychology, 1969, 12, 111-116.
- Weiner, F. H. Altruism, ambiance, and action: The effects of rural and urban rearing on helping behavior. Journal of Personality and Social Psychology, 1976, 34, 112-124.
- WickramaSekera, I. Effects of "hypnosis" and task motivational instructions in attempting to influence the "voluntary" self-deprivation of money. Journal of Personality and Social Psychology, 1971, 19, 311-314.
- Wilke, J., & Lanzetta, J. T. The obligation to help: The effects of prior help on subsequent helping behavior. Journal of Experimental Social Psychology, 1970, 6, 488-493.

Wright, B. Altruism in children and the perceived conduct of others. Journal of Abnormal and Social Psychology, 1942, 37, 218-233.

APPENDIX A

Appendix A
Demographic Data

	Biology		Volunteer	
	N	%	N	%
1. Number of Subjects	37		25	
2. Sex				
Male	20	54	7	28
Female	17	46	18	72
3. Year in School				
1st	4	11	8	32
2nd	12	32	5	20
3rd	15	40	8	32
4th	6	16	3	12
5th			1	4
4. Age				
18	1	3	3	12
19	9	24	5	20
20	12	32	8	32
21	12	32	4	16
22	3	8	1	4
23	--			
5. Academic Major				
Social Work	--		1	4
Nursing	--		5	20
Philosophy	--		1	4
Psychology	--		3	12
Biology	35	94	5	20
Applied Psychology	--	3	3	12
Undeclared	1	3	3	12
English Literature	--		1	4
Speech	--		1	4
Business	--		1	4
Political Science	--		2	8
Theology	1	3	1	4

Appendix A (continued)

	Biology		Volunteer	
	N	%	N	%
6. Do you work?				
No	19	51	12	48
Yes	18	49	13	52
7. If yes, number of hours worked				
8. Number of groups belonged to at school	M = 1.78		M = 1.56	
9. Number of groups belonged to outside of school	M = .595		M = .708	
10. Mother's Ethnic Background				
Black	--		1	4
Arabic	1	3	1	4
Asian	2	5	1	4
European	31	84	17	68
Latino	--		1	4
Other	3	8	4	16
11. Father's Ethnic Background				
Black	--		1	4
Arabic	1	3	--	
Asian	2	5	3	12
European	31	84	16	64
Latino	--		1	4
Other	3	8	5	20
12. Were parents/grandparents the first to settle in the U.S.A.				
No	10	27	15	60
Yes	27	73	10	40

Appendix A (continued)

	Biology		Volunteer	
	N	%	N	%
13. Primary Language				
English	32	86	25	100
Korean	1	3	--	
Greek	1	3	--	
Indian	1	3	--	
Arabic	1	3	--	
Spanish	1	3	--	
14. Religion				
Catholic	27	73	23	92
Protestant	1	3	1	4
Jewish	2	5	1	4
Greek Orthodox	4	11	--	
Other	3	8	--	
15. Do you consider yourself an active participant in religious affairs?				
No	7	19	9	36
Yes	30	81	16	64
16. Grade Point Average	M = 3.55		M = 3.07	

APPENDIX B

Please answer the following questions as best as you can. How true is each of the following statements about you? For example, if the statement is true about you 100% of the time, circle 100%. If it is true about you 0% of the time, circle 0%. If it is true about you 50% of the time, circle 50%. If it is true about you somewhere between 0% and 50% of the time, place a circle around the "X" which is your best estimate. If it is true about you somewhere between 50% and 100% of the time, place a circle around the X which is your best estimate.

1. It makes me sad to see a lonely stranger in a group.
0% X X X 50% X X X 100%
2. People make too much of the feelings and sensitivity of animals.
0% X X X 50% X X X 100%
3. I often find public displays of affection annoying.
0% X X X 50% X X X 100%
4. I am annoyed by unhappy people who are just sorry for themselves.
0% X X X 50% X X X 100%
5. I become nervous if others around me seem to be nervous.
0% X X X 50% X X X 100%
6. I find it silly for people to cry out of happiness.
0% X X X 50% X X X 100%
7. I tend to get emotionally involved with a friend's problems.
0% X X X 50% X X X 100%
8. Sometimes the words of a love song can move me deeply.
0% X X X 50% X X X 100%
9. I tend to lose control when I am bringing bad news to people.
0% X X X 50% X X X 100%
10. The people around me have a great influence on my moods.
0% X X X 50% X X X 100%
11. Most foreigners I have met seemed cool and unemotional.
0% X X X 50% X X X 100%
12. I would rather be a social worker than work in a job training center.
0% X X X 50% X X X 100%
13. I don't get upset just because a friend is acting upset.
0% X X X 50% X X X 100%
14. I like to watch people open presents.
0% X X X 50% X X X 100%
15. Lonely people are probably unfriendly.
0% X X X 50% X X X 100%
16. Seeing people cry upsets me.
0% X X X 50% X X X 100%
17. Some songs make me happy.
0% X X X 50% X X X 100%
18. I really get involved with the feelings of the characters in a novel.
0% X X X 50% X X X 100%
19. I get very angry when I see someone being ill-treated.
0% X X X 50% X X X 100%

Continued on the other side.

20. I am able to remain calm even though those around me worry.
 0% X X X 50% X X X 100%
21. When a friend starts to talk about his problems, I try to
 steer the conversation to something else.
 0% X X X 50% X X X 100%
22. Another's laughter is not catching for me.
 0% X X X 50% X X X 100%
23. Sometimes at the movies I am amused by the amount of crying
 and sniffing around me.
 0% X X X 50% X X X 100%
24. I am able to make decisions without being influenced by
 people's feelings.
 0% X X X 50% X X X 100%
25. I cannot continue to feel OK if people around me are depressed.
 0% X X X 50% X X X 100%
26. It is hard for me to see how some things upset people so much.
 0% X X X 50% X X X 100%
27. I am very upset when I see an animal in pain.
 0% X X X 50% X X X 100%
28. Becoming involved in books or movies is a little silly.
 0% X X X 50% X X X 100%
29. It upsets me to see helpless old people.
 0% X X X 50% X X X 100%
30. I become more irritated than sympathetic when I see someone's
 tears.
 0% X X X 50% X X X 100%
31. I become very involved when I watch a movie.
 0% X X X 50% X X X 100%
32. I often find that I can remain cool in spite of the excitement
 around me.
 0% X X X 50% X X X 100%
33. Little children sometimes cry for no apparent reason.
 0% X X X 50% X X X 100%

Go on to the next questionnaire
on the following page.

APPENDIX C

The following inventory is designed to provide information about the way in which you express yourself. Please answer the questions by drawing a circle around the appropriate number, from 0 to 4 (Almost Always or Always, 0; Usually, 1; Sometimes, 2; Seldom, 3; Never or Rarely, 4;). Your answer should reflect how you generally express yourself in the situation.

	0= Almost Always or Always	1= Usually	2= Sometimes	3= Seldom	4= Never or Rarely
1. Do you ignore it when someone pushes in front of you in line?	0	1	2	3	4
2. When you decide that you no longer wish to date someone, do you have marked difficulty in telling the person of your decision?	0	1	2	3	4
3. Would you exchange a purchase you discover to be faulty?	0	1	2	3	4
4. If you decided to change your major to a field which your parents will not approve, would you have difficulty telling them?	0	1	2	3	4
5. Are you inclined to be over-apologetic?	0	1	2	3	4
6. If you were studying and if your roommate were making too much noise, would you ask him to stop?	0	1	2	3	4
7. Is it difficult for you to compliment and praise others?	0	1	2	3	4
8. If you are angry at your parents, can you tell them?	0	1	2	3	4
9. Do you insist that your roommate does his fair share of the cleaning?	0	1	2	3	4
10. If you find yourself becoming fond of someone you are dating, would you have difficulty expressing these feelings to that person?	0	1	2	3	4
11. If a friend who has borrowed \$5.00 from you seems to have forgotten about it, would you remind this person?	0	1	2	3	4
12. Are you overly careful to avoid hurting other people's feelings?	0	1	2	3	4
13. If you have a close friend whom your parents dislike and constantly criticize, would you inform your parents that you disagreed with them and tell them of your friend's assets?	0	1	2	3	4
14. Do you find it difficult to ask a friend to do a favor for you?	0	1	2	3	4
15. If food which is not to your satisfaction is served in a restaurant, would you complain about it to the waiter?	0	1	2	3	4

Continue on the other side.

- | | 0=
Almost
Always or
Always | 1=
Usually | 2=
Sometimes | 3=
Seldom | 4=
Never
or Rarely |
|-----|--|---------------|-----------------|--------------|--------------------------|
| 16. | If your roommate without your permission eats food that he knows you have been saving, can you express your displeasure to him? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 17. | If a salesman has gone to considerable trouble to show you some merchandise which is not quite suitable, do you have difficulty in saying no? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 18. | Do you keep your opinions to yourself? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 19. | If friends visit when you want to study, do you ask them to return at a more convenient time? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 20. | Are you able to express love and affection to people for whom you care? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 21. | If you were in a small seminar and the professor made a statement that you considered untrue, would you question it? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 22. | If a person of the opposite sex whom you have been wanting to meet smiles or directs attention to you at a party, would you take the initiative in beginning a conversation? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 23. | If someone you respect expresses opinions with which you strongly disagree, would you venture to state your own point of view? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 24. | Do you go out of your way to avoid trouble with other people? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 25. | If a friend is wearing a new outfit which you like, do you tell that person so? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 26. | If after leaving a store you realize that you have been "short-changed," do you go back and request the correct amount? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 27. | If a friend makes what you consider to be a unreasonable request, are you able to refuse? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 28. | If a close and respected relative were annoying you, would you hide your feelings rather than express your annoyance? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 29. | If your parents want you to come home for a weekend but you have made important plans, would you tell them of your preference? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 30. | Do you express anger or annoyance toward the opposite sex when it is justified? | | | | |
| | 0 | 1 | 2 | 3 | 4 |
| 31. | If a friend does an errand for you, do you tell that person how much you appreciate it? | | | | |
| | 0 | 1 | 2 | 3 | 4 |

Continue on the next page.

	0= Almost Always or Always	1= Usually	2= Sometimes	3= Seldom	4= Never or Rarely
32.	When a person is blatantly unfair, do you fail to say something about it to him?				
	0	1	2	3	4
33.	Do you avoid social contacts for fear of doing or saying the wrong thing?				
	0	1	2	3	4
34.	If a friend betrays your confidence, would you hesitate to express annoyance to that person?				
	0	1	2	3	4
35.	When a clerk in a store waits on someone who has come in after you, do you call his attention to the matter?				
	0	1	2	3	4
36.	If you are particularly happy about someone's good fortune, can you express this to that person?				
	0	1	2	3	4
37.	Would you be hesitant about asking a good friend to lend you a few dollars?				
	0	1	2	3	4
38.	If a person teases you to the point that it is no longer fun, do you have difficulty expressing your displeasure?				
	0	1	2	3	4
39.	If you arrive late for a meeting, would you rather stand than go to a front seat which could only be secured with a fair degree of conspicuousness?				
	0	1	2	3	4
40.	If your date calls on Saturday night 15 minutes before you are supposed to meet and says that she (he) has to study for an important exam and cannot make it, would you express your annoyance?				
	0	1	2	3	4
41.	If someone keeps kicking the back of your chair in a movie, would you ask him to stop?				
	0	1	2	3	4
42.	If someone interrupts you in the middle of an important conversation, do you request that the person wait until you have finished?				
	0	1	2	3	4
43.	Do you freely volunteer information or opinions in class discussions?				
	0	1	2	3	4
44.	Are you reluctant to speak to an attractive acquaintance of the opposite sex?				
	0	1	2	3	4
45.	If you lived in an apartment and the landlord failed to make certain necessary repairs after promising to do so, would you insist on it?				
	0	1	2	3	4

Continue on the other side.

0=	1=	2=	3=	4=
Almost Always or Always	Usually	Sometimes	Seldom	Never or Rarely

46. If your parents want you home by a certain time which you feel is much too early and unreasonable, do you attempt to discuss or negotiate this with them?
- 0 1 2 3 4
47. Do you find it difficult to stand up for your rights?
- 0 1 2 3 4
48. If a friend unjustifiably criticizes you, do you express your resentment there and then?
- 0 1 2 3 4
49. Do you express your feelings to others?
- 0 1 2 3 4
50. Do you avoid asking questions in class for fear of feeling self-conscious?
- 0 1 2 3 4

Go on to the next questionnaire
on the next page.

APPENDIX D

This questionnaire contains a series of statements. Read each one, decide how you feel about it, and then mark your answer on the questionnaire. If you agree with a statement, or feel that it is true about you, circle "T" (True). If you disagree with a statement, or feel that it is not true about you, circle "F" (False).

If you find a few questions which you cannot or prefer not to answer, they may be omitted.

1. I often feel that I made a wrong choice in my occupation. T F
2. When I was going to school I played hooky quite often. T F
3. I think Lincoln was greater than Washington. T F
4. I would do almost anything on a dare. T F
5. With things going as they are, it's pretty hard to keep up hope of amounting to something. T F
6. I think I am stricter about right and wrong than most people. T F
7. I am somewhat afraid of the dark. T F
8. I hardly ever get excited or thrilled. T F
9. My parents have often disapproved of my friends. T F
10. My home life was always happy. T F
11. I often act on the spur of the moment without stopping to think. T F
12. My parents have generally let me make my own decisions. T F
13. I would rather go without something than ask for a favor. T F
14. I have had more than my share of things to worry about. T F
15. When I meet a stranger I often think that he is better than I am. T F
16. Before I do something I try to consider how my friends will react to it. T F
17. I have never been in trouble with the law. T F
18. In school I was sometimes sent to the principal for cutting up. T F
19. I keep out of trouble at all costs. T F
20. Most of the time I feel happy. T F
21. I often feel as though I have done something wrong or wicked. T F
22. It is hard for me to act natural when I am with new people. T F
23. I have often gone against my parents' wishes. T F
24. I often think about how I look and what impression I am making upon others. T F
25. I have never done any heavy drinking. T F
26. I find it easy to "drop" or "break with" a friend. T F
27. I get nervous when I have to ask someone for a job. T F
28. Sometimes I used to feel that I would like to leave home. T F

Continued on the other side

29. I never worry about my looks. T F
30. I have been in trouble one or more times because of my sex behavior. T F
31. I go out of my way to meet trouble rather than try to escape it. T F
32. My home life was always very pleasant. T F
33. I seem to do things that I regret more often than other people do. T F
34. My table manners are not quite as good at home as when I am out in company. T F
35. It is pretty easy for people to win arguments with me. T F
36. I know who is responsible for most of my troubles. T F
37. I get pretty discouraged with the law when a smart lawyer gets a criminal free. T F
38. I have used alcohol excessively. T F
39. Even when I have gotten into trouble I was usually trying to do the right thing. T F
40. It is very important to me to have enough friends and social life. T F
41. I sometimes wanted to run away from home. T F
42. Life usually hands me a pretty raw deal. T F
43. People often talk about me behind my back. T F
44. I would never play cards (poker) with a stranger. T F
45. I don't think I'm quite as happy as others seem to be. T F
46. I used to steal sometimes when I was a youngster. T F
47. My home as a child was less peaceful and quiet than those of most other people. T F
48. Even the idea of giving a talk in public makes me afraid. T F
49. As a youngster in school I used to give the teachers lots of trouble. T F
50. If the pay was right I would like to travel with a circus or carnival. T F
51. I never cared much for school. T F
52. The members of my family were always very close to each other. T F
53. My parents never really understood me. T F
54. A person is better off if he doesn't trust anyone. T F

Go to the next questionnaire
on the following page

APPENDIX E

On the page below are eighteen values listed in alphabetical order. Your task is to arrange them in order of their importance to YOU as guiding principles in YOUR life. Study the list carefully and pick out the value that is most important to YOU. Put a one (1) in the box to the left of it. Then pick out the one that is second most important to you. Then continue in the same fashion for each of the remaining values. The value which is least important to you is numbered eighteen (18).

1. () A COMFORTABLE LIFE (a prosperous life)
2. () AN EXCITING LIFE (a stimulating, active life)
3. () A SENSE OF ACCOMPLISHMENT (lasting contribution)
4. () A WORLD AT PEACE (free of war and conflict)
5. () A WORLD OF BEAUTY (beauty of nature and the arts)
6. () EQUALITY (brotherhood, equal opportunity for all)
7. () FAMILY SECURITY (taking care of loved ones)
8. () FREEDOM (independence, free choice)
9. () HAPPINESS (contentedness)
10. () INNER HARMONY (freedom from inner conflict)
11. () MATURE LOVE (sexual and spiritual intimacy)
12. () NATIONAL SECURITY (protection from attack)
13. () PLEASURE (an enjoyable, leisurely life)
14. () SALVATION (saved, eternal life)
15. () SELF-RESPECT (self-esteem)
16. () SOCIAL RECOGNITION (respect, admiration)
17. () TRUE FRIENDSHIP (close companionship)
18. () WISDOM (mature understanding of life)

Continue on the other side.

Here is another list of 18 values. Arrange them in order of importance as before.

1. () AMBITIOUS (hard-working, aspiring)
2. () BROADMINDED (open-minded)
3. () CAPABLE (competent, effective)
4. () CHEERFUL (lighthearted, joyful)
5. () CLEAN (neat, tidy)
6. () COURAGEOUS (standing up for your beliefs)
7. () FORGIVING (willing to pardon others)
8. () HELPFUL (working for the welfare of others)
9. () HONEST (sincere, truthful)
10. () IMAGINATIVE (daring, creative)
11. () INDEPENDENT (self-reliant, self-sufficient)
12. () INTELLECTUAL (intelligent, reflective)
13. () LOGICAL (consistent, rational)
14. () LOVING (affectionate, tender)
15. () OBEDIENT (dutiful, respectful)
16. () POLITE (courteous, well-mannered)
17. () RESPONSIBLE (dependable, reliable)
18. () SELF-CONTROLLED (restrained, self-disciplined)

APPENDIX F

Student Organization _____

Code Name of Student _____

1. How genuine is this person's interest in helping others?

not at
all | | | | | extremely

2. How involved, compared with other people of his or her age whom you know, is this person in helping others?

not at
all | | | | | extremely

3. Does this person display a caring attitude?

not at
all | | | | | extremely

4. Does this person seem to put the needs of others above himself or herself?

not at
all | | | | | extremely

5. Is this person concerned about needy people whom he or she has never met (such as the poor in other countries, etc.)?

not at
all | | | | | extremely

6. Do you feel that this person will pursue a career in which he or she will help others (doctor, nurse, teacher, etc.)?

not at
all | | | | | extremely

7. If this person does not pursue a career which stresses the helping of others (engineer, accountant, etc.) do you feel that he or she will become involved in helping activities outside of work hours?

not at
all | | | | | extremely

8. Does this person seem satisfied with himself or herself?

not at
all | | | | | extremely

9. Do this person's mannerisms contribute to making the person who they are helping feel relaxed and comfortable?

not at
all | | | | | extremely

10. Does this person seem anxious when helping others?

not at all | | | | | extremely

11. Would you feel comfortable in asking this person to do a favor for you?

not at all | | | | | extremely

12. In your opinion, is this person a "competent" resource for helping activities?

not at all | | | | | extremely

13. Does this person seem to be a consistent helper?

not at all | | | | | extremely

14. Does helping others appear to be a major source of satisfaction in this person's life?

not at all | | | | | extremely

15. When engaged in a helping project, does this person appear to be more interested in socializing with friends and fellow students than in actually helping others?

not at all | | | | | extremely

16. Do you feel the person participates in helping behavior for ulterior motives, i.e., "It looks good on a resume."?

not at all | | | | | extremely

17. Does this person attend many events and meetings in which helping projects are discussed or planned?

not at all | | | | | extremely

18. Do you get the impression that this person would go out of his or her way to help a needy stranger he or she might meet during the course of a day's activities?

not at all | | | | | extremely

APPENDIX G

19. How would you rate this person's personality in terms of providing service?

not at
all |-----| extremely

20. If you were in need would you like a person such as this to be of service to you?

not at
all |-----| extremely

Instructions to Raters

The purpose of this scale is to rank members of different student groups at Loyola along a dimension of "helpfulness". A numerical score will be obtained for each subject. These scores will be used as part of the research project. You will submit the scores for each person under a code name (i.e., mother's maiden name) so the coordinator of the project will not know the identity of the subjects.

When filling out the ratings, there are a few things to keep in mind:

- (a) Try to compare the student to all other students who attend Lake Shore campus.
- (b) On a rating scale such as this, your first impression is often the most valid. Your ratings will be averaged with those of another rater to obtain a reliable estimate.
- (c) Try to answer every question.
- (d) The questions are scored on a scale. Upon which there are 6 possible ratings, usually ranging from "not at all" to "extremely." Use your judgement and place this person on an end-point or somewhere between the end-points.
- (e) To ensure confidentiality, please make sure that you use "mother's maiden name" as a code name for each subject.

Example: John is a junior at Loyola University. He is well-liked by students and faculty and is sensitive to the feelings of other people. He obtains good grades and often shares his notes with other students in his classes. However, he is somewhat unsure of himself and on service projects such as tutoring it takes him awhile to build up rapport with the person he is helping.

John might be rated in the following way:

- (3) Does this person display a caring attitude?

not at all extremely

(4) Does this person seem to put the needs of others above himself or herself?



(10) Does this person seem anxious when helping others?



(12) In your opinion, is this person a "competent" resource for helping activities?



From this simple example one may obtain an idea of how to answer each question

Below are a number of points that hopefully will clarify some of the questions.

- (1) This question refers both to helping behavior in the course of a day's activities, such as sharing class notes to a friend, or activities such as participation in social welfare projects. By "genuine" is meant that the person seems to really be aware of the needs of the other person and tries to meet them. In other words, when helping others, the person does not come across as a "do-gooder."
- (2) Try to imagine how much time during a typical school week this person helps others. Favors, acts of kindness and involvement in structural activities (such as volunteering) can all be considered. Compare to the average Lake Shore campus student.
- (3) By "caring attitude" is meant "sensitive to the needs of others."
- (4) In order to answer this question "extremely", your perception must be that this person puts the needs of others first in a positive sense. If a person puts the needs of others first, such as by being timid or passive or non-assertive, then he or she would be ranked toward the middle of the scale.
- (5) A person can be considered as "concerned" if he or she talks about the needs of others he or she has not met (by saying things such as "It's a shame about those people who were featured in the paper today..."). He or she would be rated higher if he or she both talks concerned and acts concerned (such as by working on a volunteer drive, donating to charity, etc.).
- (7) "Helping activities outside of working hours" could include

such things as volunteer work for charitable groups or religious organizations, youth work, etc.

- (9) For example, a person may be talkative and by talking to others may put them at ease. On the other hand, a quieter person might communicate calmness, strength and caring through non-verbal gestures. Regardless of how he or she accomplishes it, does this helper put the helpee at ease?
- (10) Anxiety can be assumed if the person acts unusually awkward or displays mannerisms such as shifting, tapping parts of the body constantly, nervous tone of voice, etc.
- (13) "Consistent helper" means a person who can be relied on, who keeps promises, attends meetings, etc.
- (16) This is a difficult judgement to make. However, give your best impression. If you are not sure one way or the other, pick one of the middle responses.
- (17) If your student organization is not devoted specifically to helping projects, this question may be interpreted as asking "To what extent does the person participate in helping projects in the group?, such as tutoring, etc."

Thank you very much for your help on this project. It is hoped that this study will provide interesting and meaningful information about students at Loyola University.

APPENDIX H

Demographic Information

1. Year in school _____.
2. Sex: Male _____ Female _____.
3. Date of birth: _____ Year: _____
4. College Major: _____
5. Do you work? _____ If yes, approximately how many hours do you work per week? _____
6. Other groups that you belong to at school: _____

7. Groups that you belong to outside of school: _____

8. What is your mother's nationality? _____
9. Your father's nationality? _____
10. Were your parents or grandparents the first of your family to settle in this country? Yes _____ No _____
11. Is English your primary language? Yes _____ No _____
If no, what is your primary language? _____
12. What is your religious affiliation? _____
13. Do you consider yourself to be an active participant in religious activities? Yes _____ No _____
14. IMPORTANT: To permit data analysis and ensure confidentiality, please go by your mother's maiden name. What is your mother's maiden name?:

Please make sure you have answered all of the questions, and then go on to the next page.

APPROVAL SHEET

The dissertation submitted by William Edward Van Ornum has been read and approved by the following committee:

Jeanne M. Foley, Ph.D., Director
Professor of Psychology and Chairperson
Department of Psychology, Loyola University
of Chicago

Alan S. DeWolfe, Ph.D.
Professor of Psychology
Loyola University of Chicago

Eugene C. Kennedy, Ph.D.
Professor of Psychology
Loyola University of Chicago

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Psychology.

May 28, 1980
Date

Jeanne M. Foley
Director's Signature