

EMPATHY AND PERCEPTIONS OF PARENT BEHAVIOR

By

JOHN DAVID HURLBURT

Bachelor of Arts
University of Arkansas
Fayetteville, Arkansas
1976

Master of Science
Oklahoma State University
Stillwater, Oklahoma
1980

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
DOCTOR OF PHILOSOPHY
July, 1985

Thesis
1985 D
H965e
cop. 2



EMPATHY AND PERCEPTIONS OF PARENT BEHAVIOR

Thesis Approved:

Alfred Carozzi
Thesis Adviser

Judith E. Dobson

Kenneth P. Sandwell

Michael C. Perry

R. T. Finneyan

Norman D. Murham
Dean of the Graduate College

ACKNOWLEDGMENTS

I would like to express my appreciation to Dr. Al Carlozzi who served, not only as the director of my dissertation, but as a role model during my graduate study. I am grateful for his support and guidance during this endeavor and during the last six years.

Appreciation is also extended to Dr. Judy Dobson for her encouragement and unfaltering ability to offer a different, helpful perspective when needed. Thanks are extended, but are most likely not expected, to Dr. Rex Finnegan, who has been counselor, mentor, friend, and colleague. I would also like to thank Dr. Michael Kerr for his input and assistance with the analysis of the data and to Dr. Ken Sandvold for his feedback and time as a member of my doctoral committee.

Special thanks are offered to my friends, Drs. Linda T. Bycott and Nancy G. Mize for their most appreciated efforts in the collection of the data for this study. I also want to express my thanks to the 192 persons who willingly gave their time to serve as participants in this study.

To my parents, I express my sincere thanks and gratitude for teaching me the value of an education and the love of learning. Without these beliefs, this degree could never have become a reality.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION.	1
Significance of the Study.	8
Statement of the Problem	10
Limitations of the Study	11
Research Hypotheses.	11
Organization of the Study.	12
II. REVIEW OF RELATED RESEARCH.	13
Introduction	13
Empathy.	13
Theoretical Perspectives and Definitions.	13
Contribution of Cognitive Theory.	25
Contribution of Social Interaction.	34
Empathy and Prosocial Behavior.	46
Parent Behavior.	60
Perceptions of Parent Behavior.	60
Parent Behavior and Empathy	70
Summary.	92
III. METHODOLOGY	94
Introduction	94
Subject Selection.	94
Instrumentation.	95
The Hogan Empathy Scale	95
The Parent Behavior Form.	107
Procedures	111
Analysis of Data	112
Summary.	112
IV. RESULTS	114
Introduction	114
Summary.	122
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	125
Summary.	125

Chapter	Page
Conclusions	127
Recommendations	134
REFERENCES	136
APPENDIXES	153
APPENDIX A - RESPONDENT INFORMATION SHEET	154
APPENDIX B - PBF SCALE DESCRIPTIONS	156

LIST OF TABLES

Table	Page
1. Means and Standard Deviations of Subjects on Empathy and Parent Behavior Measures	115
2. PBF Factor Scores for Fathers.	117
3. PBF Factor Scores for Mothers.	118

CHAPTER I

INTRODUCTON

Interest in empathy as a therapeutic construct has been persistent in the twentieth century. Hackney (1978) reported that over 50 years of usage had preceded Roger's (1957) definition of empathy as a therapeutic construct. One of the main reasons empathy has been of such great interest has been its relationship to positive outcomes in helping relationships (Rogers, 1957, 1975; Rogers, Gendlin, Kiesler & Truax, 1967; Truax & Carkhuff, 1965; Truax & Mitchell, 1971), counselor effectiveness (Mikelson & Stevic, 1971; Wiggins, 1978), group therapy (Long & Schultz, 1973), vocational rehabilitation (Truax & Lister, 1970), and in educational and classroom settings (Aspy, 1975; Aspy & Roebuck, 1975). In addition, empathy has been identified as a variable in the mediation of prosocial behavior (Hoffman, 1979; Hogan, 1973, 1975; Zahn-Waxler, Radke-Yarrow, & King, 1979), cooperative behavior (Levine & Hoffman, 1975; Marcus, Tellen, & Roke, 1979), and altruistic behavior (Eisenberg-Berg & Mussen, 1978; Yarrow, Scott, & Waxler, 1973).

Due to the great amount of interest and research in the area, numerous definitions of empathy have been advanced over the last 80 years. However, empathy remains a construct that is not fully understood (Deutsch & Madle, 1975). Some have sought to define empathy in terms of its differentiation from similar, but different, feeling

states such as sympathy (Boring, 1929; Lipps, 1909) or differentiation between self and object (Lipps, 1909, Ribot, 1897; Titchner, 1910). Others defined empathy as an understanding of another's affect alone (Köhler, 1929, 1947), mutual transference (Stewart, 1954, 1955, 1956), and still others explored aspects of self-other differentiation as an explanation for the empathic response (Freud, 1961; Fromm-Reichman, 1950; Sullivan, 1950). Empathy has also been examined with respect to its affective and cognitive components (Feshbach, 1975; Hoffman, 1976; Mead, 1934, Piaget & Inhelder, 1969), role-taking ability (Hogan, 1975; Kalisch, 1973), its differentiation from projection (Dymond, 1948, 1949, 1950), and as a cyclical communication process between two people (Barrett-Leonard, 1981). For the purpose of this study, however, empathy was operationally defined from a role-theoretical perspective and measured with the Hogan Empathy Scale (HES) (Hogan, 1969). The major underlying assumption of such a perspective is that in order to interact effectively with others, one must take into account the view that others hold regarding themselves and the situation in which they find themselves. This perspective of empathy takes into account the ability of the individual to be internally sensitive to the affective state of another person and encompasses aspects of social comprehension and perspective-taking, as well as the capacity to adopt a broad moral perspective (Hogan, 1969, 1975).

The focus of much of the study of empathy has been upon its development. From a cognitive theoretical perspective, Piaget (1967) has argued that young children are unconsciously centered upon themselves and are therefore unable to take another's point of view until about the age of seven. Hoffman (1977a) maintained that these assumptions

regarding the contribution of cognitive development to empathy development have been instrumental in formulating a developmental model for empathy development. It can be assumed that as the individual passes through cognitive developmental stages, changes in empathic ability will occur. Several studies have supported the contention that empathy, defined as social awareness, increases with age (Burns & Cavey, 1957; Chandler & Greenspan, 1972; Dymond, Hughes, & Raabe, 1952; Hughes, Tingle, & Sawin, 1981; Flapan, 1968; Rothenberg, 1970). However, some studies reported that children younger than seven years of age are socially sensitive and that social sensitivity increases with age (Borke, 1971, 1973; Deutsch, 1974).

Of interest to researchers has been the impact of the social environment on the development of empathy. Rothenberg (1970) defined empathy as social sensitivity and investigated the child's social sensitivity, or empathy, and its relationship to interpersonal competence, intrapersonal comfort, and intellectual level. The results of this study indicated that there was a positive relationship between age and social sensitivity, intelligence, and interpersonal adjustment.

Feshbach (1975) has argued that the process of empathy implies a shared interpersonal experience and is implicated as a mediating variable in a number of important social behaviors. Consequently, many researchers have explored the relationship between empathy and prosocial behaviors, such as aggression (Feshbach, 1974; Feshbach & Feshbach, 1969; Letourneau, 1981), cooperation (Levine & Hoffman, 1975); altruism (Eisenberg-Berg & Mussen, 1978; Krebs, 1975; Yarrow et al., 1973; Zahn-Waxler & Radke-Yarrow, 1982; Zahn-Waxler et al., 1979, 1983), and social recognition (Mood, Johnson, & Shantz, 1973;

Shantz, 1975b). Research (Carlozzi & Hurlburt, 1982; Hurlburt & Carlozzi, 1981) has indicated that expressive traits and empathy are positively related. Other researchers have examined the relationship between empathy and social development (Hoffman, 1963, 1976, 1977a, 1977b, 1979, Hogan, 1973) and empathy and ego development (Carlozzi, Gaa, & Liberman, 1983).

These studies lend considerable support to the notion that empathy provides a motive base for prosocial behavior. Given that empathy is important at the interpersonal level and strongly implicated to be equally as important at the social and societal level, it would be important to identify the antecedents of empathic behavior. Clark (1980, p. 187) defined empathy as ". . . that unique capacity of the human being to feel the experiences, needs, aspirations, frustrations, sorrows, joys, anxieties, hurt, or hunger of others as if they were his or her own." In a review of the empathy literature since 1970, Clark found that there was an average of 15 to 20 entries per month under that category. However, few articles addressed the more fundamental problems of the nature and determinants of empathy. Clark contended that the ability of human beings to empathize has greater applicability than a skill to be used in the process of therapy. He argued that the ability to empathize extends to the functioning of our society in general and to the support we offer to our fellow human beings. Clark maintained that it is the inability of human beings to lend support to their contemporaries that contributes to a number of current social and political ills. Finally, Clark stated that the survival of the human species may depend upon the universal increase of

functional empathy and he calls for empathy research to be directed at the determinants or antecedents of empathy.

Implicit in a great deal of the developmental research on empathy is the assumption that parenting behaviors forcefully impact the personality of the child (Zahn-Waxler et al., 1983). Explicit in this study is the assumption that childrearing conditions forcefully influence children's regard for others. Historically, research on the influences of childrearing behaviors has been complicated by attempts to deal with the many aspects of the parenting process, while attempting to examine one aspect of this intricate configuration of behaviors at a time.

Research efforts have been further complicated by a trend to measure the contribution of childrearing through direct observation. Walters and Stinnett (1971) argued that this trend in research tactics may have been motivated by a desire to decrease social desirability sets and response biases in parent behavior studies. However, it may have resulted in a decrease of attention given to important person perception processes.

Several studies have demonstrated that children's perceptions of their parents' behavior are more relevant determinants of children's behavior and adjustment than the objective reality to which those perceptions refer (Bronfenbrenner, 1974; Michaels, Messé, & Stollack, 1977). Bronfenbrenner (1979) argued that what matters for the behavior and development of the child is the environment as it is perceived, rather than how it may exist in "reality." Interpersonal theories of personality development have argued that the degree to which social perceptions are congruent has an impact on the quality of interpersonal

functioning (Freedman, Leary, Ossorio, & Coffey, 1951; Sullivan, 1950). Sullivan (1969) speculated that mutual agreement in the perceptions of the parent and child enables them to draw closer and to establish real communication. Several studies have explored the agreement of the perceptions of children and parents (Brook, Whiteman, Gordon, Brenden, & Jinishian, 1980; Bronfenbrenner, 1977, 1979; Droppleman & Schaefer, 1963; Mead, 1934; Michaels et al., 1977; Serot & Teevan, 1961; Stinnett, Farris, & Walters, 1974; Zucker & Barron, 1971) and results indicated that often there is a disagreement between the perceptions of parents and children.

In a recent study, Brook et al. (1980) noted that an issue critical to importance to the study of children's perceptions of parent behavior is the degree of correspondence between children's perceptions and those of their parents. Brook et al. (1980) cited only one other study by Zucker and Barron (1971) that dealt with these issues. In the review conducted for this study, one other study was found that dealt with the correspondence between children's perceptions and their parents' (Michaels et al., 1977). Of these three studies, two dealt with the perceptions of adolescents (Michaels et al., 1977; Zucker & Barron, 1971) and one with younger children (Brooks et al., 1980). No studies could be found that dealt with the perceptions of an adult population. The perceptions of adults with respect to their parents' behavior were the focus of this study. Perceptions of parent behavior were operationally defined as scores on the Parent Behavior Form (PBF) (Worrell & Worrell, 1975).

Kelly (1975) factor analyzed PBF data from an earlier study (Kelly & Worrell, 1976). Three factors emerged across sex of

respondent and sex of parent. Factor 1 was a warmth dimension, factor 2 was a parental control dimension, and factor 3 reflected parental cognitive involvement. Together, these principal components accounted for 72.3% to 74.3% of the total variance. A factor analysis of PBF scores was conducted using the present sample. The rationale for the factor analysis was to compare the present sample to the earlier sample and for the purpose of data reduction. Separate factor analyses were conducted for fathers and mothers. These three factors best described fathers: nurturant independence, control, and permissiveness. Mothers were best described by these three factors: nurturant independence, demanding control, and conforming control. These factor scores were used as dependent variables in this study.

Of specific interest in this study was adult subjects' perceptions of their parents' behavior and the subjects' empathy. Numerous studies have examined the relationship between parent behavior and behaviors other than empathy, such as social development (Eisenberg-Berg & Mussen, 1978; Hoffman, 1963, 1970; Hoffman & Saltzstein, 1967), cooperation (Levine & Hoffman, 1975; Marcus et al, 1979), aggression (Feshbach, 1974), competitiveness (Barnett, Matthews, & Howard, 1979), and altruistic behavior (Yarrow et al., 1973; Zahn-Waxler et al., 1979, 1983).

Several studies have found a positive relationship between perceptions of their parental expressiveness and the development of expressive qualities in children (Balswick & Averett, 1977; Slevin & Balswick, 1980). The relationship between parent behavior and the development of empathy has been studied by Roe (1977, 1980). Barnett, King, Howard, and Dino (1980) explored the relationship between

the empathy of young children and their parents' self-reported empathy, affection, and emphasis on another's feelings in different disciplinary situations. Abraham, Kuehl, and Christopherson (1983) explored the potential effect of the child's age on the relationship between parental behaviors and the development of empathy in young children. These findings suggest that parent behavior does significantly impact the development of empathy in children.

Perceptions of parent behavior and the development of empathy have been the focus of much study. However, in the review of literature conducted for this investigation, no studies could be found that addressed the issue of adults' perceptions of their parents' behavior. Additionally, even though several studies examined the relationship between parent behaviors and empathy, no studies could be found that examined the relationship between perceptions of parent behavior and empathy. Consequently, it would appear that this is an area that warrants investigation.

Significance of the Study

Several researchers have argued for the further study of the antecedents of empathy. Clark (1980) argued that while there seems to be a great deal of research in the area, relatively little study is targeted at the more fundamental problems of the nature and determinants of empathy. Clark suggested that empathy remains an important neglected topic in social science. Furthermore, he contended that it is incumbent upon the social and behavioral sciences to address the important problem of the determinants of empathy.

Letourneau (1981) contended that further research in the area of parent behavior and empathy is needed. In his study of empathy and stress and how these variables effect parental aggression, the results supported the theory that empathy mediates parental aggression and was positively related to nurturing styles of parenting. Letourneau concluded that, if theorists are correct in their belief that children learn empathy through socialization by their parents, then abused children are in danger of growing up deficient in role-taking and empathic skills. He argued that programs for abusive parents should focus on developing empathy and changing patterns of punitive and unresponsive parenting. Furthermore, research should focus on parent behaviors that are facilitative of empathy development in children.

Yarrow et al. (1973) studied caregiver behavior and altruism. These researchers suggested that, in terms of future research, two lines of research should be pursued--one with a focus on the origins and development of empathic and sympathetic capabilities, and a second concerned with the phenotypic behaviors that result in benefit to others. In the second, the objective would be to determine the kinds of childrearing histories or antecedents or contextual variables associated with the development of altruistic or empathic behavior.

Zahn-Waxler et al. (1983) contended that some of the parental practices that were identified in the Yarrow et al. (1973) study suggest a potential for early modifiability in children's capacities for caring for others. Zahn-Waxler et al. argued that the results of this research have corresponding implications for parent education programs in which parents could be taught not only to become aware of, and responsive to children's prosocial behaviors, but also to practice

specific techniques that would encourage the development of prosocial behaviors such as altruism and empathy.

Abraham et al. (1983) investigated the age-specific influence of parental behaviors on the development of empathy in preschool children. Their study represented an initial attempt to investigate the effect of a child's age on the relationship between parent behavior and children's empathy. However, this study failed to examine variables such as type of childcare arrangement, presence of siblings, family configuration, and combinations of mother-father behavior operating simultaneously. Abraham et al. argued for additional research in terms of parent behavior and empathy and recommended that future research be conducted to clarify the effects of these other variables. This study represents an effort to explore the relationship between empathy in adults and their perceptions of their parents' behavior. Recently, there has been a high level of interest in adult development (Levinson, Darrow, Klein, Levinson, & McKee, 1978; Sheehy, 1976; Gould, 1978). In addition, the role of empathy in the development of a healthy personality has also been the focus of study (Clark, 1980). The review of the literature conducted evidenced a paucity of research dealing with adults' perceptions of their parents or the relationship between perceptions of parent behavior and empathy. The significance of the present study lies in the fact that it represents an effort to explore relationships that have yet to be addressed in the literature.

Statement of the Problem

The purpose of this study was to examine the relationship between

the empathy of adults and their perceptions of their parents' behavior. In addition, the role of gender, age, level of degree program, major area, number of credit hours, ethnic group, type of home, number of siblings, and birth order as covariates was also investigated.

Limitations of the Study

The following limitations are inherent in this study:

1. Subjects for this study were graduate students enrolled in courses leading to a career in the helping professions in one southwestern and one southeastern university. Therefore, the results are not generalizable to all graduate students.
2. Since the definition of empathy used for this study taps only certain aspects of the empathic process, the results will not be generalizable to all aspects and components of the empathic process.
3. The parent behaviors assessed in this study are limited in terms of all the behaviors that are involved in the parenting process. Therefore, the results of this study will only be applicable to those behaviors under investigation and are not generalizable beyond that point.
4. The parent behavior of interest in this study was retrospective perceptions of parent behavior and should not be confused with actual observed parent behavior.

Research Hypotheses

In order to carry out this study, the following hypotheses were formulated with an alpha level of .05:

H1. Factors derived from the subscales of the PBF will correspond to those found with the previous factor analysis.

H2. There will be significant relationships between empathy and parent behavior when subject gender, age, level of degree program, major area, number of credit hours, ethnic group, type of home, number of siblings, and birth order are controlled.

Organization of the Study

This chapter presented the reader with an introduction to the topic under investigation. The Significance of the Study, Statement of the Problem, Limitations of the Study, and Research Hypotheses were provided. Chapter II presents a review of the literature relevant to the study, beginning with theoretical perspectives and definitions of empathy. The contributions of cognitive theory and social interaction are examined, together with an exploration of empathy and prosocial behavior. Chapter II concludes with a review of perceptions of parent behavior and parent behavior and empathy. Chapter III discusses subject selection, instrumentation, procedures, and methodology, and the analysis of the data. Chapter IV presents the results. Chapter V provides a summary of the study, along with conclusions and recommendations for further research.

CHAPTER II

REVIEW OF RELATED RESEARCH

Introduction

In reviewing the research related to empathy and parent behavior, it appears that specific childrearing behaviors relate to the development of empathic and other prosocial behaviors. This investigation was designed to extend the current findings to determine the relationship between perceptions of parent behavior and empathy.

The following review will begin with a discussion of theoretical perspectives and definitions of empathy. Findings related to the development of empathy in terms of its cognitive and social elements will be discussed. Empathy as a mediating variable in prosocial behavior will also be discussed. The review will conclude with a discussion of perceptions of parent behavior and the role of parent behavior in the development of empathy.

Empathy

Theoretical Perspectives and Definitions

Hackney (1978) reported that prior to 1957, when Carl Rogers presented his definition of empathy as a therapeutic construct, it had been preceded by over 50 years of usage. As a result of the interest, study, and usage of empathy as a therapeutic construct, its meaning

has expanded over the years. The expansion of the construct of empathy has resulted in confusion with regard to a definition that has applicability for both research and clinical practice (Hackney, 1978; Hogan, 1975).

In order to fully understand the meaning of empathy as it is used in the profession today it is useful to examine its evolution. While numerous definitions of empathy have been advanced during the past century, empathy remains a construct that is not fully understood (Deutsch & Madle, 1975).

By the advent of the twentieth century, Lipps (1909) coined the term "Einfühlung," which was translated into empathy or "feeling together with" (Buchheimer, 1963). Lipps differentiated "Einfühlung," or empathy, from "Mitgefühl," or sympathy. "Mit" in this context must be translated as "along with," rather than "together with." A sympathetic person feels along with another person, but not necessarily into a person. A sympathetic person does not need to interact with another person. To feel along with him/her, he/she may understand the other person, but he/she does not need to communicate the understanding to the other person. Empathic behavior implies a convergence of behavior. "Sympathetic" implies a parallelism in the behavior of two individuals, a "Mitgefühl" rather than an "Einfühlung." However, researchers (Lipps, 1909; Ribot, 1897; Titchner, 1910) assessed the self in relation to physical objects, rather than self-other differentiation. They also were not interested in studying empathy as shared feelings, or an understanding of another's affect alone or in a context. In addition, they did not explore the processes that might explain empathy.

Approximately 15 years later, Lipps (1926, 1935) altered his initial position, allowing for the inferences that the empathic response is: (a) a response to a person rather than an object, (b) both a sharing and understanding of postures and expressions, and (c) explained by the mechanisms of projection and imitation. He argued that as a result of individuals partially imitating others with slight movements in either expressions or postures, inner cues are created which lead to an understanding and sharing of feelings. Therefore, Lipps' position appears to be an isomorphic one--as imitation of affect increases, empathy increases.

Much later than Lipps, Stewart (1954, 1955, 1956) defined empathy as mutual transference. He traced the development of empathy as a sequence beginning with identification, moving to transitorial imitation, then to conscious imitation, and finally to mutual transference. He described the latter as the ability to identify without enactment. Stewart also maintained that good will and empathy are quite similar; he argued that empathy, like good will, can only be illustrated through action and thus known only through action. Stewart's concept seems to be close to Adler's (1956, p. 127) concept of "Gemeinschaftsgefühl," or social interest.

Köhler (1929, 1947) defined an empathic response as an observer's understanding of an individual's affect alone. He argued that the degree to which physical cues were used to infer another's emotion is empathy, rather than assessing an individual's replication of physical states. Köhler asserted that because mental and physical behavior are highly related, our perception of physical behavior gives us direct contact with and knowledge of expressed mental processes.

In an effort to assess the observer's perception of an individual's affect in an experimental setting, a variety of mimicry tasks were developed. These tasks appeared to be assessing whether mimicry is a process by which one shares another's motoric and/or affective state. Thus, an attempt was made to explain the way one may share affect, not specifically understand it.

For example, Gordon (1934) designed a measure of empathy which had a series of photographs depicting a Mexican with his arms in several different positions. These pictures were presented, one at a time, to subjects who were then asked about the figure. The subjects responded with a variety of gestures. As the early empathy measures assessed postural imitation, one concludes that an understanding of affect was not measured and that no distinction between self and other was considered.

A similar type of conceptualization in which there also is no consideration of self-other differentiation was pursued by Freud (1961), Ferreria (1961), Fromm-Reichman (1950), and Sullivan (1950). Insisting that the imitative explanation of empathy began in infancy, they viewed empathy as a peculiar emotional linkage between mother and infant. Through both the kinesthetic and olfactory senses, the link between mother and child provides a psychological umbilical cord by which the infant has direct access to the mother's inner self. To illustrate research in this area, Escalona (1945) reported that the infants of imprisoned mothers were more upset on the days when the mothers were waiting anxiously to appear before a parole board than at other times. Equating empathy as emotional contagion appears to be weak, because a distressed mother's infant may

experience noxious handling which is responded to by distress, just as the mother is responding to the impending parole examination. Thus, the infant's distress which is similar, phenotypically, to the mother's distress, may be a co-occurrence--both responding to their own set of cues. A classical conditioning paradigm might more appropriately explain how such events could result in the development of empathy. When the mother experiences distress, as in the illustration, her body may stiffen, resulting in the child's distress, if handled. The mother's cues, facial and/or verbal, which accompany her distress, could become conditioned stimuli which subsequently evoke the child's distress response. Even similar cues by other persons could produce distress responses in the child via stimulus generalization.

With the work of Mead (1934), the affective and cognitive components of empathy, reference to the environment, and need for self-other differentiation were brought to the forefront. Empathy was defined as a capacity to take the role of the other person with whom one interacts, or putting yourself in his/her place. Mead stated that via the accumulation and organization of experiences, relevant internal interpersonal images would be acquired. Through his observations, he noted that role-play activity provides the means for developing interpersonal images and subsequently facilitates one's ability to understand another person's affective behavior in certain situations. With Mead's work on "role-playing," certain factors, such as intelligence, were studied to determine what enhances the acquisition of empathy. Mead's findings supported other researchers (Gates, 1923; Walton, 1936) who found a positive relationship between both

intelligence, age, and the ability to correctly identify the intended emotional expressions depicted in a series of pictures. Empathy was no longer viewed as purely a perceptual awareness of an individual's affect or sharing of feeling, but rather an ability to understand a person's emotional reactions in consort with the context.

Aronfreed (1968) attempted to clarify what an individual perceives when judgments are made about another's feelings and the circumstance involved. He suggested that perceiving another's emotional state by means of affective responses reflects an empathic relationship, whereas perceiving the emotionally arousing situation and affect refers to a vicarious relationship. Vicarious is the term used, because in this relationship an individual could possibly project or identify to a greater extent with the addition of the situational cues, thus assisting in an accurate perception of the affect. Some evidence supports this contention. Adults, for example, not only use situational cues for judging others, but also tend to perceive facial cues to match the situation (Bruner & Taguiri, 1954). Some studies have reported that younger children more spontaneously respond to contextual rather than facial stimuli (Burns & Cavey, 1957; Deutsch, 1974).

At this point, from a historic point of view, the question becomes one of whether an individual projects one's own responses to another's situation or whether one understands another's situation as the other does. One major problem with these conceptualizations of empathy therefore, was differentiating empathy from projection and identification. Cronbach (1955) demonstrated and suggested that empathic ability may reflect the similarity between the response

repertoires of two people or that by possessing knowledge of a type of person, one may project and thus seem empathic.

Freud (cited in Brown, 1967) stated that whenever the internal becomes confused with the external or the subjective is confused with the objective, then the individual projects. Projection could possibly explain why elementary school children are better able to empathize with other children than adults (Olden, 1954). In this study, empathy was measured as a verbal statement of what a person would do in a given situation.

Observational learning theory (Bandura & Walters, 1963) offers an explanation for why individuals more accurately perceive same-age than different-age others. If one considers an imitation or identification position, a person may have the tendency to reproduce actions, attitudes, or other responses exhibited by the model when there is similarity between the subject and target person depicted in an empathy measure. Person similarity is an important variable to consider when measuring empathy. Children were found to be more empathic when judging same-sex rather than cross-sex peers (Deutsch, 1975; Feshbach & Roe, 1968). Rothenberg (1970) optimized the dissimilarity between targets and observer by using adults' voices and experiences which were unfamiliar to children and found that older children were significantly more accurate in perceiving the adults' feelings than were younger children. Other direct evidence was advanced by Flapan (1968), who found younger children more likely to verbalize or answer questions about movie children's feelings than movie adults' feelings and reverse for older children.

In addition, Dymond (1948, 1949, 1950) distinguished empathy from projection and implied that the empathizer is neutral and detached. The empathic response is therefore considered as cognitive, requiring a clear self-other differentiation. Dymond (1950) argued that:

Projection can be an antithetical process to empathy, since it involves the attribution of one's own wishes, attitudes and behavior to something or someone other than the self . . . (therefore) empathy does not imply wanting to be the other person or to have an emotional tie (pp. 343-344).

Dymonds (1949, 1950) work offered the notion that the ability to empathize is influenced by cognitive role-taking skills. She also argued that the ability to take the role of another is positively related to the ability to understand oneself (Dymond, 1949).

Elaborating upon this notion, Flavell, Botkin, Fry, Wright, and Jarvis (1968) explained empathy via role-taking. Role-taking is an activity that attempts to discriminate role attributes. In order to assure that projection was not being measured per se, Flavell et al. devised a task in which the child/subject was required to take the role of another. The task consists of seven pictures. The researcher asks the child to tell the story, then removes the three central pictures and a second experimenter enters the room. The child then tells the story depicted by the remaining four pictures that he/she thinks the second experimenter would tell. This procedure illustrates one in which the method assures against projection, but there are other research designs such as game playing, communication behavior, and story analysis that accomplish the same goal (Shantz, 1975).

A different approach to empathy as role taking has been adapted by some clinicians (Kalisch, 1973). That is, the helper only borrows

the client's feelings in order to understand them fully, but always maintains separateness. Rogers (1951, 1957) was instrumental in exploring the therapeutic applications of empathy. In speaking of those factors that seem to be the most influential in facilitating therapeutic client change and improvement, Rogers (1957) stated that certain conditions are necessary and sufficient for personality change. These conditions are: empathy, unconditional positive regard, and genuineness. Empathy is defined as the ability to perceive the internal frame of reference of the other person with accuracy and to comprehend the emotional components and meanings which pertain thereto, as if one were the other person, but without ever losing the "as if" quality.

From these conceptualizations, there appears to be agreement that an empathic response requires self-other differentiation and that it is a response to another's affective state, either alone or in a situation. The major areas of disagreement, however, pertain to whether an empathic response is cognitive, affective, or both and what processes explain empathy.

Piaget and Inhelder (1969) argued that, like cognition, empathy develops in a series of continuous developmental changes. Piaget (1967) argued that a young child remains unconsciously centered upon him/herself, is primarily egocentric, and therefore cannot take another's point of view until the age of seven. The development of the ability to empathize, according to Piaget (1950) hinges on the cognitive development of the child and the increased ability to de-center or represent how the world looks to other people and to assess how those views are different from their own. Decreased egocentrism and decentration form one element of the process involved in the

development of empathy. Several studies supported the contention that the ability to empathize increases with other developmental tasks such as intelligence (Allport, 1937; Gates, 1923, 1927; Rothenberg, 1970) and social awareness (Borke, 1971; Burns & Cavey, 1957; Chandler & Greenspan, 1972; Rothenberg, 1970), and ego development (Carlozzi, Gaa, & Liberman, 1983).

Hogan (1975) took a role-theoretical perspective in viewing empathy. He asserted that the role-theoretical model of viewing social behavior is heavily dependent on the concept of empathy. Hogan argued that the major underlying assumption of a role-theoretical perspective is that "in order for people to interact effectively with others, people must take into account the view that others hold regarding them and the situation in which they are located" (pp. 14-15). The model that Hogan presented rests on two primary assumptions: (1) people need positive attention and dread social disapproval and (2) people need structure and order in their everyday lives. It is Hogan's contention that people are somewhat driven to seek social interaction that is governed by a framework of social rules. From this perspective, social interaction proceeds in terms of role performances aimed at gaining positive approval and avoiding social censure. Empathy is the mediating variable in social conduct that allows for the wide range of differences in interpersonal behavior. Hogan stated that the empathic disposition assures successful role performances, and therefore the empathic person should exhibit social self-confidence and be able to alter his/her interpersonal behavior to meet the needs of both the audience and situation. In contrast, the unempathic individual

will tend to appear inept in social role performances, communicate poorly, and exhibit a generalized insensitivity to social cues.

Feshbach (1975) examined empathy in terms of its cognitive and affective components. She stated that viewing empathy from only a cognitive or affective perspective severely limits the actual dimensions of the construct. Feshbach proposed that it is possible and preferable to conceptualize empathy in terms of both affective and cognitive factors. A three-component model of empathy is proposed that takes into account both cognitive and affective elements. Two components of the model involve cognitive elements: (1) the ability to discriminate the perspective and role of another and (2) discrimination of a role reflects a more advanced degree of cognitive competence. The third component of the model is made up of emotional capacity and responsiveness. According to this model, all three elements are required in order for an empathic response to be generated. Feshbach proposed that the child's capacity to empathize changes with social experiences and developmental advances that allow for a shift from an egocentric to an allocentric (other-centered) perspective.

Hoffman (1976) has also described both the cognitive and affective components of empathy. He proposed a developmental schema for empathy in which an initial empathic distress is transformed to sympathetic distress through the process of person permanence, role-taking, and awareness of identity. According to Hoffman, cognitive mediation plays a central role in empathy development. In searching for a comprehensive definition of empathy, Hoffman's definition seems to accurately reflect the multifaceted nature of the construct:

Empathy refers to the involuntary, at times forceful, experiencing of another person's emotional state. It is elicited either by expressive cues which directly reflect the other's feelings or by other cues which convey the affective impact of external events on him (p. 126).

It appears, then, that cognitive dimensions may be a necessary but insufficient condition for the expression of empathy.

Barrett-Leonard (1981) conceptualized empathy as a process cycle, a two-way exchange of messages and interaction between two people. He stated that empathy is first an inner experience, that is, the empathic individual has a predisposition to respond in an empathic manner. For this empathic response set to be meaningful, it must be communicated to another, and once expressed, its impact will depend on the qualities of the receiver. Barrett-Leonard stated further that while this communications aspect of the empathic inner experience is critical, without the ability to accurately detect another's affective state the communications aspect of empathy would have little significance.

Given the different elements of these conceptualizations of empathy, what can be concluded? There may be a relationship between one's understanding and sharing of feelings. This relationship was investigated by developing actual slide story sequences of children (Feshbach & Roe, 1968). Subjects, six- and seven-year-olds, were asked to respond to the question, "How do you feel?" after each sequence, and half of the subjects saw the same sequences again and were asked to reply to the question, "How does this child feel?" The subjects stated the depicted emotion more often in response to the

latter question. "Cognitive empathy" may be a necessary but not sufficient condition for "affective empathy." However, little supportive little data appears to exist. Mood et al. (1973) found that, regardless of whether a child correctly identifies how another child feels or not, there is a tendency for not conveying a similar feeling.

Mechanisms such as imitation, identification, projection, role-taking, and communication theory are often used to explain empathy. These mechanisms can influence how the empathic response is interpreted. Historically, for example, imitation, identification, and projection have been used to explain the sharing feelings, while role-taking has been offered as an explanation for the understanding of feelings. If cognitive processes help to determine how even the simplest emotion is experienced, then distinguishing the empathic response as affective or cognitive may be artificial (Hoffman, 1975). Feshbach (1975) supported the notion that empathy is a multidimensional construct involving affective, cognitive, and social elements, each adding its own unique contribution. To consider empathy only in terms of its affective or cognitive components severely limits the actual dimensions and utility of the construct.

Contribution of Cognitive Theory

Cognitive Development. From Piaget's (Piaget & Inhelder, 1969) observations of young children's spontaneous language, responses to cognitive tasks, and behavior in collective games, he concluded that, like cognition, empathy develops in a series of continuous developmental stages. According to Piaget (1967), a young child, remaining "unconsciously centered upon himself" (p. 20), is primarily egocentric

and, therefore, cannot take another's point of view until the age of about seven. These assumptions regarding the contribution of cognitive development to empathy development have been instrumental in formulation of developmental perspective with regard to empathy development (Deutsch & Madle, 1975; Hoffman, 1977).

Hoffman (1977) reviewed the role of cognition in empathic arousal. He stated that since empathy is a response to another person's feeling or situation, mature empathizers recognize self-other differentiation in both their own and the other person's affect. Young children who lack a self-other distinction may experience empathic arousal without these cognitions. Therefore, how people experience empathy depends on the level at which they cognize others, and that process undergoes dramatic changes developmentally (Hoffman, 1975). Briefly, for most of the first year, children appear to experience a fusion of self and other. By about 12 months, they attain person permanence and become aware of others as physical entities distinct from the self. By two or three years of age they acquire a rudimentary sense of others as having inner states (thoughts, perceptions, feelings) independent of their own; this is the initial step in role-taking which continues to develop into increasingly complex forms. Finally, by late childhood or perhaps sooner they become aware of others as having personal identities and life experiences beyond the immediate situation.

Hoffman (1975) maintained that individuals who progress through these four stages become capable of a high degree of empathic arousal. They can process information gained from their own vicarious affective reaction, from immediate situational cues, and from their own general fund of knowledge about the other's life. Thus, they have a better

developed capacity to offer appropriate empathic responses. Further, with increased cognitive development people may be able to comprehend the plight, not only of an individual, but of an entire group or class of people, such as those who are economically or politically oppressed. Despite the different cues of empathic distress in these situations, all distress experiences probably have a common affective core, however, and that, combined with the individual's high cognitive level at this age, provides the requisites for a generalized empathic arousal capability.

Cognitive Egocentrism. Speaking of the developmental nature of cognitive egocentrism, Piaget (1950) advanced that centration refers to the centering of attention on one detail of an object or event, and consequently, decentration refers to shifting attention from one aspect of an object or situation to another. Therefore, the child's reasoning seems distorted, since only those superficial features dominant on his/her perceptual field are assimilated. Elkind and Scott (1962) studied decentering in young children. The ability to decenter--perceiving different forms from ambiguous pictures--increased with articulation of pictures and intelligence. Others (Stuart, 1967; Sullivan & Hunt, 1967) have confirmed these results.

An essential precursor to role-taking is decentering, or shifting of attention from self to other. The role-taker must synthesize two types of information: (a) knowledge of people and their behavior in various situations and (b) perceptual input from cue sources in the immediate situation.

Six-, eight-, and eleven-year-olds, for example, were studied by Alvy (1968) in a communicative egocentrism task in which assuming another person's point of view was essential. Members of a pair were separated by an opaque screen; one subject selected from a set of pictures the one that was being described to him/her by the other member of the pair. Two main age trends were found: a decrease in egocentric communications and an increase in verbal exchanges. In a similar study, Cohen and Kline (1968) obtained similar results. Simply, egocentric communications were considered verbalizations which were not adapted to the needs of the listener. In this instance, egocentric communication would not assist the child's selection of the picture being described.

A measure of perceptual egocentrism, as obtained by Flavell et al. (1968, p. 55) is "the subject's ability to predict the appearance of a stimulus display from positions or perspectives other than his own." Presenting second through eleventh graders with a series of four stimulus displays, each subject was asked to reconstruct each display as it would look to the experimenter seated at a different vantage point vis-a-vis the display. That is, the subject's task was to reproduce the displays not as they appeared to him/her, but as they would appear to another who saw them from a different perspective. Flavell et al. reported that perceptual egocentrism decreased as children increased in age.

Developmental Changes. If the lack of egocentrism and the presence of decentration form one of the bases for empathy, then similar developmental changes ought to occur in empathy. Researchers have

found positive relationships between intelligence and the ability to judge the affective states of others, using situational empathy measures (Allport, 1937; Gates, 1923; Murphy, 1937; Rothenberg, 1970). Several studies of empathy have supported Piaget's (1967) contention that social awareness increases with age (Burns & Cavey, 1957; Chandler & Greenspan, 1972; Dymond, Hughes, & Raabe, 1952; Flapan, 1968; Gates, 1923; Hughes et al., 1981; Rothenberg, 1970; Walton, 1936).

However, Borke (1971) found that children as young as three years of age were aware of other people's feelings. The subjects, ranging from three to eight years of age, were presented with a series of short stories and were asked to indicate how the child in each situation felt by selecting a "happy," "sad," "afraid," or "angry" face to complete the picture accompanying each story. This task was well within the response capabilities of very young children, since it required a behavioral rather than verbal response. The general trend was for social sensitivity to increase with age. No significant gender differences were noted in the ability to identify other people's feelings. By the age of three, the children in this study were able to respond empathically to happy feelings and by three and one half to four years of age children were able to identify fear, sadness, and angry responses.

Borke (1971) concluded that, while her results generally supported Piaget's (1967) observations that social sensitivity increases with age, she challenged his position that young children are egocentric and unable to understand another's viewpoint. The data indicated that improvement of the ability to react on an empathic basis varied with

the response being identified and the particular situation in which the respondent found himself/herself.

Borke (1973) noted that in her earlier study, cultural and social class variables were not investigated. In order to identify what, if any, cross-cultural differences there were in the development of empathy, Borke replicated the earlier study using 288 American and 288 Chinese children. Twenty-four female and 24 male children--half from middle socioeconomic families and half from lower socioeconomic level families--were tested at six-month intervals between three and six years of age. This study used the same series of social interaction situations representing happiness, sadness, fear, and anger. Children from both cultural groups exhibited similar overall trends in their ability to recognize other people's emotional responses. By three years of age, the majority of American and Chinese children could differentiate between happy and unhappy reactions in other people. Perception of fear, sadness, and anger developed somewhat later and appeared to be influenced by social learning. This cross-cultural study confirms the results of the previous investigation (Borke, 1971) that very young children are capable of empathic responses. Borke maintained that the awareness of other people's feelings by young children from very different cultural backgrounds suggests that empathy may be a basic human characteristic related to social adaptation.

In a study prompted by the Borke (1971) study, Chandler and Greenspan (1972) investigated the ability of children to respond empathically to others. Chandler and Greenspan agreed that the methodology used by Borke tapped a preceding and different set of

conceptual skills than those designated by Piaget (1969) as the basis for sociocentric or perspectivistic thinking. They noted that Borke's methodology did not allow for a differentiation between accurate social judgment and projection and that this, in combination with the rather stereotypic character of the thematic materials used, would create a situation where egocentric and nonegocentric subjects could be expected to perform almost identically. Chandler and Greenspan developed a single assessment procedure which provided two separate measures of perspective taking skills. In this procedure the subjects were again presented with cartoons that depicted the emotions used in Borke's study (happy, sad, angry, and afraid) and were asked to interpret the story from their own perspective and a second character, a late coming bystander. The second character's perspective was intended to tap the subject's ability to adopt a perspective measurably different from their own. Subjects for the study were 49 boys and 37 girls drawn from grades one through seven of an upper middle class suburban public school system.

The results, using Borke's (1971) scoring procedure, were consistent with her findings. However, when the subjects were asked to demonstrate their own perspective-taking skills by adopting roles or points of view different from their own, the results were significantly different. The younger subjects tended to consistently confuse their own point of view with that of the bystander. Interestingly, these egocentric errors were found to systematically decrease with age.

Chandler and Greenspan (1972) concluded that, while in some respects the results of this study were in agreement with those of Borke (1971), they demonstrate that the ability to accurately assume

perspectives different from one's own is a relatively late-arriving developmental task which occupies most of middle childhood. These researchers, however, did not assess mental age or the effects of person similarity. Perhaps these two uncontrolled variables influenced their results (Deutsch, 1975). They also did not manipulate the stimulus features of their measures in order to assess whether individuals would respond differently to congruous or incongruous affective states and situations, a measure requiring the selection of an affective response stimulus which is congruous with the situation such as Borke's, or allowing the subject to see and tell stories which are congruous in affect and situation and then role-take, such as Chandler and Greenspan's, which may not maximize the subject's use of decentration (Deutsch & Madle, 1975).

A better test of decentration and empathy would be a task depicting a variety of stimuli which would maximize the probability that decentering is required for accurate responding. Burns and Cavey (1957) attempted to study the difference between younger (3-5 years) and older (5-6.5 years) children's ability to recognize the affective states depicted in pictures having congruous and incongruous facial and contextual cues. For example, incongruous cues were depicted as a birthday party scene with cake and gifts compared to a figure sitting on a chair with a frown, and congruous cues were depicted as a picture of a dentist's office compared to a figure on a chair with a frown. Older children empathized with a character in a picture when the two pictures represented incongruous cues more than younger children. Although this was an attempt at studying what type of cues dominated children's interpretation of affective states, the researchers used a

quantitative index of the number of verbalizations made about the figures' feelings in each picture-pair as the dependent variable. Perhaps the younger children's disadvantage was due to their language development.

In a study of 48 female preschoolers, Deutsch (1974) found that children were aware of adult females' affect and affective responses, intrapersonal behavior, and reasons for the final affective state. These children were asked to tell what happened in eight short videotaped episodes. Although this measure of empathy required verbal responses, the accuracy of the response was important, not the quantity. Both perceptual and communicative measures of empathy and egocentrism were obtained. Children who scored higher on measures were less egocentric than children who scored lower on empathy measures.

Deutsch (1974) also measured empathy based on cues which were, congruous, meaning affective responses and situations reflecting either positive or negative affective states; and incongruous, meaning affective responses and situations were opposite; for instance, a person who expressed a positive affective state as a result of a negative situation or vice versa. There were four of each type of episode. Deutsch found higher negative correlations between communicative egocentrism and empathy for the incongruous cue episodes than the congruous cue episodes.

It seems that decentering ability is important when children are required to shift attention to different aspects of stimuli. Although chronological age (range: 3.0-5.0 years) and empathy were not significantly correlated, high mental age children scored significantly better than low mental age children.

Contribution of Social Interaction

Social Sensitivity. Piaget (1950) argued that, in addition to the effects of maturation of biologically programmed "structures," children gain cognitive facility because of the changing nature of their interaction with their social environment. From repeated interpersonal interactions, it appears that the crucial factor in resolving childish egocentrism is the appearance of dissonant information in verbal exchanges with other persons, especially peers, because the child is forced to reexamine his/her own precepts and concepts of those of others. Accordingly, the children who are higher in social interaction will reduce their egocentrism more quickly and therefore may also be more adept at empathizing. It may be the cognitive conflict present during social interaction with peers that facilitates the children's comprehension of the affective states of their peers, thus they become more capable of empathizing.

Referring to empathy as social sensitivity, Rothenberg (1970) investigated the child's social sensitivity and its relationship to interpersonal competence, intrapersonal comfort, and intellectual level. She stated that social sensitivity (which she defined as the ability to accurately perceive and comprehend the behavior feelings and motives of other individuals) is a critical variable for the basic understanding of phenomena such as the development of a sense of "self" and self-concept, role acquisition, and interaction between and within groups. She noted that with age, children begin to develop a greater consciousness of and sympathy toward social relationships in their environment. While children may misinterpret the motives in the

behavior of the adults, those who do not develop in social sensitivity during preadolescence will have difficulty in their social relationships in later life. Rothenberg cited literature that supports a positive relationship between social sensitivity and social adjustment (Dymond, 1950; Rose, Frankel, & Kerr, 1956) and also suggested that an understanding of other's feelings toward oneself, as well as the reasons for these feelings, are crucial for the development of good interpersonal relations.

Rothenberg (1970) designed a study for primarily two purposes. First, to develop a measure of social sensitivity that would take into account some of the shortcomings of previous studies; second, to investigate relationships between social sensitivity and other variables that were considered to be theoretically important to the development of social sensitivity. The specific hypotheses (Rothenberg (1970) were as follows:

1. Social sensitivity increases with age during the pre-adolescent years.
2. Socially sensitive children have greater interpersonal competence as measured by teacher ratings and peer nominations.
3. Socially sensitive children have greater interpersonal comfort as seen in more favorable self-concepts.
4. Social interactions that are potentially anxiety induced are more difficult to comprehend than interactions that are nonanxiety feelings.
5. Social sensitivity increases with higher intelligence.
6. Girls are more socially sensitive than boys (p. 336).

Rothenberg (1970) developed a series of audio recordings depicting adults portraying four affective states and reported a positive correlation between social sensitivity and social interaction, but not

social sensitivity and popularity for third and fifth graders. Descriptions of feelings and motives were positively correlated with peer nominations on leadership, sensitivity, mood, friendliness, and sense of humor and negatively correlated with peer nominations of cruelty. The results of the study indicated that there was, in fact, a positive relationship between age/grade and social sensitivity. Rothenberg reported that this finding supports the contention that preadolescence is the period when the accurate perception of other people's feelings, thoughts, and motives occurs. The results also indicated that intelligence was clearly important to the understanding of other people's behavior. In general, the results of the study showed a positive relationship between social sensitivity and interpersonal adjustment. Rothenberg concluded from the results that age, intellectual ability, and interpersonal adjustment were the major contributors to the development of accurate social perceptions. No significant effects were found on social sensitivity due to gender, ordinal position, or size of family.

Deutsch (1974) reported that, among female preschoolers, observational popularity, which was scored as a child's frequency of contact with other classmates, is negatively correlated to communicative egocentrism, and positively related to empathy measures. A sociometric measure of popularity, the child's selection of whom he/she would like to play with, was related neither to communicative egocentrism nor empathy. Rubin (1972), however, found a significant relationship between communicative egocentrism and sociometric popularity for kindergarten and second graders, but not for fourth graders.

Thus, although a sociometric measure of popularity may not be related to egocentrism or empathy, observed popularity may be so. Only indirect evidence exists supporting this hypothesis. Rothenberg's (1970) measure of popularity was a sociometric one, which may explain why there was no relationship to social sensitivity; however, the social interaction measure which was similar to an observational popularity assessment was related to empathy.

In another study investigating the relationship between empathy and popularity, Deutsch (1975b) found a correlation of .52 between the ability to take another's point of view (low-communicative egocentrism) and one measure of popularity (the amount of social interaction of preschool females from three to five years of age), but no significant correlation with a measure of number of sociometric choices.

In a recent study, Marcus (1980) explored both the development of empathy in three- and four-year-old children and the relationship between empathy and popularity of preschoolers. Thirty-two preschool children were studied using both the Feshbach and Roe (1968) measure of empathy and a teacher rating of empathy, together with a teacher rating of the number and quality of peer relationships. Both measures of empathy were found to correlate positively and significantly with popularity ratings. Findings similar to those of Borke (1971) indicated that empathic sensitivity to happy feelings both develops prior to and separately from empathic sensitivity to negative feelings.

Social, Affective, and Cognitive Aspects. Feshbach (1975) stated that the process of empathy implies a shared interpersonal experience and is implicated as a mediating variable in a number of important

social behaviors, such as altruism, generosity, the regulation of aggression, and social cognition. Feshbach argued that viewing empathy only in terms of its cognitive or affective dimension severely limits the diversity of the construct. It is suggested that empathy can be conceptualized as a cognitive product which is mediated by emotional factors or as an affective response mediated by cognitive processes. In addition, due to the complexity of the social cognition and interaction (which is the feedback system by which responses acquire value or meaning), it becomes an arbitrary decision to specify the ordering of the affective or cognitive contributions to the final empathic response.

Feshbach (1975) maintained that empathy, unlike projection, is a veridical response contingent upon social understanding. Empathy requires an assessment of both subject and object in view of the fact that the empathic response is a reflection of the relationship between the two (Feshbach & Kuchenbecker, 1974). Feshbach defined empathy as "a match between the affective response of a perceiver and that of a stimulus person" (p. 26).

From this perspective, an adequate understanding of empathy must take into count both cognitive and affective factors. Feshbach (1973) proposed a three-component model of empathy involving both cognitive and affective elements. Two of these components are cognitive in nature: the ability to discriminate the perspective and role of the other person. Emotional capacity and responsiveness comprise the third element. All three elements are necessary for an empathic response to occur. Subsequently, the child's capacity to respond empathically changes in accordance with the child's life experiences

and developmental advances in the ability to differentiate and recognize the affective information conveyed in expressive cues, together with the child's developmental movement from an egocentric to an allocentric, or other-centered perspective.

Feshbach (1973) maintained that the affective component of empathy is also subject to development and modification through learning and life experiences. Aronfreed's (1968) research indicated that the affective response to the experience of others is not instinctive but depends, in part, upon the child's having previously experienced that affect. Moreover, this research suggested that those aspects of the socialization process that relate to the experience, expression, and restraint of affect or feeling are highly relevant to the development and expression of empathy.

In a study investigating the assessment and parameters of empathy, Feshbach and Roe (1968) made a special effort to assess the cognitive component independently of the empathic response. The subjects were 46 first-grade children (23 males and 23 females) from middle-class backgrounds, above average in intelligence, and ranged from 6.2 to 7.7 years of age. The Affective Situation Test (Feshbach & Roe, 1968) was developed for the study and was used to measure empathy. In this measure, children are individually administered a series of slide sequences depicting a boy or girl in different affective situations. Two sequences involve happy events (having a birthday party); other sequences involve sadness (being rejected socially), fear (being lost), and anger (being falsely accused). Each sequence consists of three slides, accompanied by a narration devoid of affective cues. There are two sequences for each of the four affects, with

separate sets prepared for male and female stimulus persons. After each sequence the child is asked to state how he/she felt. In order for empathy to be scored, the affect reflected in the response has to be an exact match with the affective situation observed. A separate assessment of the child's comprehension of the affective situations is performed by asking the child how the stimulus person in the slide feels.

Results of this study indicated that similarity between the child-subject and the stimulus-child significantly facilitated empathic responses. A discrepancy between the children's empathy scores and social comprehension scores was reported. The social comprehension scores reflected an almost complete understanding of the affective situations by this age group, regardless of gender of stimulus child or gender of subject. It would appear, based on these results, that while social understanding is a prerequisite for empathy, the converse is not true. Understanding the feelings of another does not necessarily lead to an empathic response. Consequently, while the cognitive element of empathy is clearly important, it is the affective element that gives the construct its unique property. The ability to take the role of another does not insure an empathic response; one may not be predisposed to use that ability. Even if one does possess the ability to take the role of another, the affective response may be blocked or poorly expressed.

Feshbach (1975) reviewed research which examined other groups and the relationship and development of empathy to other behavioral dimensions. Klein (1970) investigated the influence of similarity of ethnic group on empathy. The results indicated that similarity proved

to be a significant determinant of empathy. No consistent ethnic differences in the degree of empathy were manifested.

Mood, Johnson, and Shantz (1973) investigated the relationship between the understanding and sharing of affect. These researchers sought to discriminate between understanding of affect, emotional contagion, and the sharing of this understanding. Cognitive and affective empathy were both examined. Preschoolers were presented with familiar situations and each child was asked how the story child felt and how the subject child felt, with the questions being counter-balanced in order across the sample. The largest proportion of responses (40%) indicated an accurate understanding, but a different emotion felt by the subject. Very infrequently (17%) did children in this study feel the same emotion and correctly understand the others' feelings. This study indicates that, with young children, affective empathy is much less frequent than a correct understanding of another's feelings, and understanding is typically not accompanied by the same felt emotion, at least for this method of assessing the two types of empathy.

In a recent study, Freeman (1984) investigated: (a) the relationship between cognitive and affective dimensions of empathy and (b) the effects of gender of subject and gender and ethnic group of stimulus character on empathy development. Fifty-four Caucasian (male and female) preschoolers responded to story vignettes, both in terms of how they themselves felt and how the stimulus child felt. The results indicated that cognitive empathy may be easier for young children to express than affective empathy. No gender differences in empathy

development were found. This data supported the results of earlier work by Marcus et al. (1979) and Hughes et al. (1981).

In contrast, several studies (Feshbach & Feshbach, 1969; Feshbach & Roe, 1968; Kuchenbacher, Feshbach, & Pletcher, 1974) reported evidence that suggests that girls are more empathic than boys, this effect being more evident between four and seven years of age. The research by Feshbach and Roe (1968), with regard to the influence of gender of subject and gender of stimulus child, was not supported in this study. However, the effect of race of the stimulus child and the race of subject did have an influential effect for male subjects. Boys scored higher on cognitive empathy (the ability to correctly report the affective state of the stimulus child) than girls when the stimulus child was the same race as themselves. Affective empathy was the ability to report one's own affective state. Overall, the results indicated that empathy is comprised of both cognitive and affective components and that among preschoolers of either gender, the cognitive expression of empathy seems to emerge prior to the affective one.

Kuchenbecker, Feshbach, and Pletcher (1974) investigated the complex relationship between social comprehension and empathy. In this study, the researchers sought to carry out a more detailed appraisal of the child's social comprehension. The study involved middleclass, Caucasian boys and girls from kindergarten, first, and second grades, subjects were randomly assigned to one of three experimental conditions. The Affective Situation Test (Feshbach & Roe, 1968) was used and the auditory and visual components were experimentally varied to investigate the possible differential effects of modality of presentation. The three experimental conditions were as

follows: the standard procedure which includes the slides and accompanying narration, a visual condition in which the narration was omitted, and an audio condition in which the slides were omitted. A comparison of the results on the principal measure of comprehension and empathy reflects some similarities but also some important differences in the findings. A marked and significant grade effect for social comprehension for all the cognitive indices used to assess this dimension was found. In addition, a strong and significant developmental change in empathy scores were obtained, with second graders being most empathic and kindergarteners least empathic. The gender of the child seemed to have the least influence on most measures, including sympathy.

Data on the different sensory modes of presentation indicated the visual mode elicited the highest comprehension scores, being superior to the auditory-visual and auditory mode. In contrast, the highest empathy scores, especially for the younger children, were obtained with the auditory-visual mode of presentation.

These findings suggested that as the child matures, the ability to comprehend social situations increases, as does the ability to comprehend the role and affective state of the people involved in these social situations. The differential effects of the modality variation on empathy as compared to social comprehension indicates that these two categories of behavior are not merely different aspects of the same cognitive processes, but are distinct, related variables.

Hughes, Tingle, and Sawin (1981) explored the development of children's empathic understanding of other's feelings and also their cognitions about their own emotional reactions to the affective

experience of another child. Forty-eight children, with equal numbers from kindergarten and the second grade, participated and equal numbers of males and females were in each age group. The slide stories from the Affective Situations Test (Feshbach and Roe, 1968) were used. In two separate sessions, children were presented with the slide stories of the affective situations. In one session, the children were asked about their understanding of the story character's feelings and in the other session they were asked about their understanding of their own emotional reactions.

The results of this study begin to explain the development of children's empathy understanding in emotional situations. Several consistent developmental trends suggest that between five and eight years of age children become increasingly aware of other peoples' perspectives in emotion-eliciting situations and of the personal and psychological characteristics of others (and themselves) that may be involved in emotional experiences. Younger children's understanding of other's emotions was derived primarily from situational cues and the most salient arousal events. The older children, while also identifying these situational events, were more likely to focus on the person and to offer inferences about possible psychological reasons for the emotion. These transitions are similar to those found for children's attributions about social, behavioral interactions found in earlier research (Flapan, 1968; Livesley & Bromley, 1973).

The children's understanding of their own emotional reactions to affect were also marked by qualitative, developmental changes. Consistent with some of the literature on children's role-taking skills (Shantz, 1975a), these findings indicate that the older children quite

naturally placed themselves cognitively in the other's place, both in terms of their own vicarious emotional reactions and in their explanation of the causes of their empathic feelings.

Consistent with the findings of Stotland (1969), increased emotional responsiveness was found when subjects were asked to "imagine yourself as the other." The results suggested that the spontaneous use of such cognitive activity is a step in the development of empathic understanding. Correspondingly, the older children's reasons for their own emotional reactions were more likely to focus on psychological processes within themselves rather than exclusively on the situation of the story child, as was more characteristic of the younger children.

The findings of this study offered suggestions as to how this developmental process can be facilitated. It seemed that asking younger children about their understanding of their own emotional reactions (prior to being asked about the emotional reaction of the story child) showed an understanding of the story child's reaction similar to the maturity level of the older children's understanding. This finding is consistent with that of Youniss (1975), who argued that children do not simply work toward an objective conceptualization of others, but rather review their own thought as part of an attempt to know others. This is not to imply an egocentric perspective, but to suggest one's own cognitions about their own emotional responses to the affect of others may serve as useful data for understanding to others' emotions.

Empathy and Prosocial Behavior

Prosocial Motive Base. Many writers argue that empathy provides a motive base for prosocial behavior (Buckley, Siegal, & Ness, 1979; Clark, 1980; Hoffman, 1963, 1970, 1975, 1976, 1977a, 1977b, 1979; Hoffman & Levine, 1976; Hoffman & Saltzstein, 1967; Hogan, 1973; Krebs, 1975; Letourneau, 1981; Zahn-Waxler et al., 1983). Aronfreed (1968) experimentally tested the hypothesis that prior association between positive affect in the child and positive affect in another person results in an empathic response in the child which, in turn, leads the child to behave altruistically toward the other person. The hypothesis was confirmed, but no evidence was presented that empathy actually occurred. Similarly, the frequent finding of a positive relationship between inductive discipline techniques (which point out the effects of the child's behavior on others) and both consideration for others and moral internalization (Hoffman, 1970) has been explained as being due, in part, to the empathic response often elicited by inductions (Hoffman, 1963, 1977a). However, there is no evidence as yet that empathy is actually aroused by inductive discipline techniques.

In the earliest study of empathy and prosocial behavior, Murphy (1937) found a positive correlation between empathic behaviors such as "responding to another child's distress by staring with an anxious expression," and behaving in a comforting manner. However, empathy also related positively to aggression. Murphy suggested that this finding may have reflected the child's social activity level. In other words, highly active children were more empathic, helpful, and aggressive. Feshbach and Feshbach (1969) replicated Murphy's

aggression findings for boys: four- to five-year-old boys who obtained high empathy scores were rated as more aggressive by preschool teachers than boys with low empathy scores. For six- to seven-year old boys there was a negative relationship between empathy and teacher ratings of aggressiveness, which might suggest that by this age, empathy may be acting as an inhibitor of aggression. There was no relationship found between empathy and aggression for girls at either age level.

In a recent study, Letourneau (1981) investigated the relationship between empathy, stress, and parental aggression, defined as child abuse. In this study, empathy was viewed as both a cognitive and affective process and complex skill composed of three elements: (a) the ability to distinguish among and label the thoughts and feelings of another, (b) role-taking ability, and (c) the ability to become emotionally responsive to another person. Based on the theoretical work of Feshbach and Feshbach (1969), he predicted a negative relationship between empathy and child abuse. Letourneau defined stress as an aversive stimulus that precipitates a maladaptive response. Specifically, it was expected that the combination of high empathy and low stress would be reflected in little or no child abuse and vice-versa.

Two groups of mothers, 30 who had been identified as physically abusive and 30 who had been identified as nonabusive, agreed to participate in the study. Subjects were statistically equivalent in terms of income, race, social class, education, and family structure. They were also comparable in terms of age and number of children as well. The Hogan Empathy Scale (Hogan, 1969) and an empathy questionnaire

developed by Mehrabian and Epstein (1972) were used to measure empathy. Stress was measured by the Schedule of Recent Life Experiences developed by Holmes and Rahe (1969).

As predicted, the differences in empathy found between the two groups were highly significant, indicating that abusive mothers differed from nonabusive mothers in both their emotional responsiveness and role-taking ability. Abusive mothers were found to be less helpful and less comforting in response to the child's request for help and comfort. Abusive mothers were found to be more aggressive than the nonabusive mothers in their responses to taped vignettes of a child's negative behavior. A strong to moderate negative correlation was found between empathy and aggression, which supported the contention that empathy may help to mediate aggression. The hypotheses that abusive mothers would have experienced significantly more stress than the nonabusive mothers in the 12 months prior to the study was not supported. The results of this study would seem to support the contention that empathy is an important mediating variable in the physical abuse of children. These findings are consistent with those of other researchers (Hogan, 1973; Hoffman, 1977a, Mehrabian & Epstein, 1972) that indicate empathy's influence in promoting prosocial behavior and inhibiting acts that are harmful to others.

Moral Development. Eisenberg-Berg and Mussen (1978) examined the relationship between empathy and two measures of moral development. One measure was behavioral, volunteering to help the experimenter in another project. The other assessed the individual's levels of prosocial judgment or reasoning through the subject's responses to dilemmas

in which one's own need conflicts with those of another in the contexts in which laws, punishments, and formal obligations are irrelevant. The subjects were 72 students (35 males and 37 females) from an upper middle-class suburb, in grades 9, 11, and 12.

The results indicated that empathy was significantly related to moral reasoning for both sexes and to helping for males. Eisenberg-Berg and Mussen (1978) concluded that the results supported the hypothesis that empathy is a critical predisposing factor in prosocial reasoning.

Levine and Hoffman (1975) examined the relationship between empathy and cooperation in four-year-olds. The Affective Situation Test (Feshbach & Roe, 1968) and a modified version of Kagen and Madson's (1971) cooperation board were used. No correlation was found between empathy and cooperation, for either sex. In this study, subjects were asked why they cooperated. Only a few answered in empathic terms (that is, "Because he wanted me to help him," or "Because he would cry if I didn't," p. 534); most referred to the requirements of the game, or reciprocity. Thus, the emotional state of the other child was not salient during the game, even to the cooperating child, whose empathy capabilities may not have been engaged. This finding suggests that the empathic capability of young children may not often be engaged because their attention is easily captured by other more or less irrelevant social demands.

However, in a more recent study Marcus, Telleen, and Roke (1979), who also explored the relationship between empathy and cooperation in preschool children, found a positive relationship between empathy and ratings of cooperation. Marcus et al. used the same empathy measure

(Feshbach & Roe, 1968) as did Levine and Hoffman (1975), but cooperation was measured by using coded observations and a seven-point rating scale.

Males were found to be more cooperative than females and the gender differences in empathy were not statistically significant. Age correlated positively with empathy. Coded data on cooperation failed to reveal a relation to the measurement of empathy; this finding confirmed that of Levine and Hoffman (1975). However, all rated measures of cooperation correlated positively and significantly with the measure of empathy.

In an elaborate study of kindergarten boys, Kameya (1976) examined the relationship between empathy and role-taking training and prosocial behavior. The Feshbach and Roe (1968) empathy measure and several indices of helping behavior, which included helping an experimenter who dropped a pile of paper clips and expressed pain after bumping his knee, donating candy to poor children, and volunteering to color pictures for hospitalized children were used. Empathy did not correlate with any of these behaviors, perhaps for the reasons advanced by Levine and Hoffman (1975). However, among subjects who did volunteer to color pictures for hospitalized children, those who actually took the pictures with them and showed signs of following through on their promise had higher empathy scores than those who showed no signs of following through. This "follow through" behavior was the only altruism index involving considerable self-sacrifice over a prolonged period (the subjects were told that they would have to do the coloring during two successive recess periods while the other children were playing). A possible limitation was that since the

actions involved in following through were not anonymous, they might have been engaged in by children who were in need of social approval. There is evidence against this interpretation; however, research indicates that children who lack social approval and thus may be highly motivated to achieve it are less likely to help others (Murphy, 1937; Staub & Sherk, 1970). An alternative interpretation of Kameya's (1976) finding may be that, although empathy may not be engaged in young children, when it is engaged it may serve as a rather effective prosocial motivator.

Empathic Arousal and Prosocial Action. The aforementioned correlational research is somewhat inconclusive but does provide some support for the proposition that empathy may contribute to prosocial behavior. In contrast, the experimental research, all with adults, provides consistent support for the relationship between empathic arousal and prosocial action. If empathic distress does motivate prosocial behavior or action, it should: (a) be associated with a tendency to help, (b) precede and contribute to the helpful act, and (c) diminish in intensity following a helpful act but continue at a high level in the absence of action. The evidence is supportive on all three counts.

There are several studies that suggested that when people are exposed to another in distress they either respond empathically or with an overt helping act, whichever was being investigated (Berger, 1962; Craig & Wienstein, 1965; Staub, 1970; Stotland, 1969). This suggests that if data were collected on both empathy and helping in the same study, subjects would typically show both, which has indeed

been shown (Darley & Latané, 1968; Gaertner & Dovidio, 1970; Geer & Jarmecky, 1973; Krebs, 1975; Murphy, 1937; Weiss, Boyer, Lombardo, & Stich, 1973). There is also evidence that as the magnitude of the pain cues from the victim increases, the latency of the helping act decreases; that is, the subject acts more quickly (Geer & Jarmecky, 1973; Weiss et al., 1973). Furthermore, the intensity of the empathic arousal has been found to relate positively to the speed of helping (Gaertner & Dovidio, 1977). Clearly, there is a relationship between empathic arousal and helpful action.

In terms of the question as to whether the empathic distress merely accompanies or actually precedes and motivates the act of helping, studies by Krebs (1975) and Gaertner and Dovidio (1977) are important. Krebs employed physiological indices of empathy, introspective reports about the extent to which the subject identified with a model undergoing shock, and an altruistic index that required subjects to choose between helping the other at a cost to themselves or helping themselves at a cost to the other. The opportunity for altruism followed the empathy trials. There were two experimental conditions and the one in which the subjects showed more empathy, both physiologically and verbally, was the same one in which they showed more altruistic behavior. In that experimental condition, then, empathic arousal preceded an altruistic act. Gaertner and Dovidio's design was quite different and produced more convincing results. The subjects, female undergraduate students, observed (through earphones) a situation in which a confederate left an experimental task in order to straighten out a stack of chairs that she thought was about to topple over on her. A moment later, the confederate screamed that the

chairs were falling on her, and then was silent. The main finding was that the greater the subject's cardiac responsiveness (measured by heart-rate acceleration), the more quickly she intervened. Furthermore, the physiological arousal was not merely the artifactual result of the subject rising from her chair, since the arousal preceded the rising. The heart-rate acceleration score was based on data obtained during the 10-second period immediately following the confederate's scream, whereas the median delay prior to rising was 40 seconds. Thus, the speed of intervention was systematically related to the magnitude of the heart-rate acceleration just prior to the intervention.

Two experiments by Weiss and others are also pertinent (Weiss, Buchanan, Alstatt, & Lombardo, 1971; Weiss et al., 1973). The subjects viewed a model who evidenced overt signs of stress (sweating, reflex kicking) while performing a motor task and apparently receiving continuously painful shocks. The subjects' task was to make evaluations of the model's performance and record them by pressing certain buttons. Pressing the buttons also terminated the shock, as indicated by visible signs of relief from the model. There were 15 training trials. The main finding was that the subjects acquired the button-pushing response without any reinforcement other than the victim's expressions of relief. Furthermore, the learning curves closely resembled those obtained in more conventional escape conditioning studies. For example, the speed of the button-pushing response increased at an increasing rate over the 15 trials; it also increased when the distress cues from the model were more intense and variables like partial reinforcement and delay of reinforcement operated just as they do in conventional studies. It therefore appears that the consequences

to the observer of helping someone in distress correspond closely to the consequences of conventional reinforcement. This suggests that an aversive state such as empathic distress might have been inducted in the observer and the termination of that state functioned as a reinforcer in acquiring the helping response.

Weiss et al. (1973) did not collect systematic data on the affect aroused in subjects. They did note anecdotally, however, that the subjects "sweat visibly and show other signs of strain" (p. 397). From this, as well as from the findings with regard to empathic arousal in similar studies cited earlier, it can be concluded that the subjects probably did experience empathic distress. Weiss et al. also noted that the subjects often said they wished they could do something to help the confederate. There was no indicated as to when these statements were made but they must have been made in the early training trials before the subjects learned that there was something they could do, namely push the buttons. This is important because the speed of the button-pushing response was accelerated in the later trials. The study appeared to provide evidence that the subjects did experience empathic distress, which was accompanied by a felt desire to help and followed by helping behavior. These results suggested that the empathic distress was causally related to the helping act.

There is evidence that observers' empathically aroused affect diminishes in intensity after they engage in a helpful act. Darley and Latané (1968) reported this pattern in adults who heard sounds indicating that someone was having an epileptic seizure. Those who did not respond overtly continued to be aroused and upset, as indicated by trembling hands and sweaty palms; those who did respond

demonstrated fewer signs of being upset. A similar finding was obtained in Murphy's (1937) nursery school study. When children overtly helped others, their affective response appeared to diminish; when they did not help, the affect was prolonged.

Empathic arousal does not necessarily guarantee altruistic or prosocial behavior. The phenomenon of empathic overarousal may negatively effect altruistic action (Hoffman, 1977). Other factors may also influence the demonstration of prosocial behavior, the extent to which the situation points up the observer's responsibility to act rather than indicating that responsibility is diffused among many people (Darley & Latané, 1968; Geer & Jarmecky, 1973; Tilker, 1970). Furthermore, in individualistic societies, the motive to help will often be overridden by more compelling egoistic motives, as evidenced by the negative relationship obtained between helping others and competitiveness (Barnett, Matthews, & Howard, 1979; Rutherford & Mussen, 1968). As noted by Hoffman (1970) and Staub (1970), American middle-class children are often socialized both to help others and to respect authority, but in some situations one cannot do all those things at the same time. Perhaps the best-known instance of the way authority may serve as a deterrent to prosocial behavior is Milgrim's (1963) finding that adult males will administer high levels of shock on instruction from the experimenter, despite strong feelings of compassion for the victim. However, in a partial replication of the Milgrim study, Tilker (1970) found that when subjects were assigned the role of observer, they not only showed increasing empathic distress as the shock levels to the victims were increased, but often intervened to stop the experiment, despite specific instructions to

the contrary and continuing opposition from the person administering the shock.

In terms of prosocial behavior, Hoffman (1979) offered a developmental theory of empathic distress that he considered to be a precursor to the prosocial motive. He noted that when empathically aroused older children and adults know that they are responding to the plight of someone else, they have a sense of what the other is feeling. On the other hand, very young children may be empathically aroused without these cognitions. Therefore, the experience of empathy depends on the level at which one is able to process cognitive information about others.

Hoffman (1979) presented a four-stage model for the development of a cognitive sense of others. Empathy also has an affective component that increases in complexity as the child progresses through the four stages. As the four stages progress, there is a merging of empathic affect and the cognitive sense of others. The four stages of empathic distress are as follows:

1. The infant's empathic response lacks an awareness of who is actually in distress
2. With person permanence, one is aware that another person but not the self is in distress, but the other's inner states are unknown and may be assumed to be the same as one's own
3. With the beginning of role-taking, empathy becomes a more veridical response to the other's feelings in the situation
4. By late childhood, as a result of the developing conception of self and other as continuous persons with separate histories and

identities, one becomes aware the others feel pleasure and pain not only in the situation but also in their larger life experience

Consequently, though one may respond empathically to another's immediate situation, one's empathic response intensifies if the distress does not subside but becomes chronic. It is at this point that emotionally aroused affect merges with a cognitive awareness of the other's general level of distress. If the observer's perception of the degree of distress is in excess of what he/she holds as a standard for well-being, an empathic distress response may result even if contraindicated by the the other's apparent momentary state; that is, the representation generated by the awareness may override contradictory situational cues.

With further cognitive development, one can comprehend the plight of an entire class of people. While one's distress experience is different from the group, Hoffman (1979) asserted that all distress has a common affective core that allows for a generalized empathic distress capability. He maintained that this ability to combine empathic affect with the plight of an unfortunate group may be the most advanced form of empathic distress.

These levels of empathic response form the basis of the motive to help others and therefore have a relevance to moral development and other prosocial behavior. Research indicates that very young children (two to four years of age) typically react empathically to a hurt child, although they sometimes do nothing or act inappropriately (Murphy, 1937; Zahn-Waxler et al., 1979). Older children and adults react empathically as well, but this is usually followed by appropriate helping behavior (Leiman, 1978; Sawin, 1979). The level of

empathic arousal and the speed of a helping act increases with the number and intensity of distress cues from the victim (Geer & Jar-mecky, 1973). The level of arousal drops following a helping act but continues if there is no attempt to help (Darley & Latané, 1968).

Hoffman (1979) stated that these findings support the hypothesis that empathy is a prosocial motive. He suggested that some may argue that it is an egoistic motive rather than a prosocial one because one usually feels better after helping. However, there is evidence (Darley & Latané, 1968) that feeling better is usually not the aim of helping. Thus, it seems legitimate, according to Hoffman, to call empathy or empathic responding a prosocial motive, with perhaps a quasi-egoistic dimension.

Hogan (1973, 1975) stated that it has been proven both conceptually and empirically that moral development passes through three developmentally distinct phases: (1) compliance, (2) empathy, and (3) autonomy. The first phase spans approximately the ages of one to five. During this stage, the task is to acquire a sense of respect for societal rules. The child must develop the understanding that social conduct is mediated by rules, that the rules apply to him/her, and that in order to live in society he/she must comply with them. While this stage is crucial in the developmental process, it leaves the child with an authoritarian conscience. According to Hogan, at this point two problems must be dealt with: (a) an explanation is needed for the fact that children do outgrow this authoritarian ethic and (b) an explanation for the fact that not everyone who fails to internalize the rules of their culture becomes delinquent. Hogan maintained that the development of empathy provides an explanation for

both. He argued that, on the one hand, the empathic disposition facilitates the development of a relativistic perspective that "humanizes" the authoritarian conscience. On the other hand, the empathic disposition can help the individual to be sensitive to the expectations of others which results in socialized behavior and thereby compensates for the lack of internalized societal rules or social conscience.

In relation to moral development, empathy serves two purposes. It compensates for the authoritarian orientation that is a product of the first stage of moral development and it facilitates prosocial behavior in the case of an unsuccessful completion of the first stage of moral development. The development of an empathic response set is instrumental in the evolution of the child's sense of justice. In terms of development of empathy, Hogan (1975) stated that the development of empathy in children can be facilitated by parents who attempt to instill humanistic values in, and model empathic behavior for, their children.

There is strong evidence to support the contention that empathy provides a motive base for prosocial behavior. If this is true, then it would be important to identify the antecedents of empathic behavior. In other words, ascertain how and where empathic behavior is learned or acquired. Implicit is the assumption that childrearing conditions forcefully influence the children's regard for others and their active care of others. A logical starting point might be what the child observes, learns, and experiences through contact with the parent.

Parent Behavior

Perceptions of Parent Behavior

Importance of Perception. Explicit in this study is the assumption that childrearing conditions forcefully influence children's regard for others. Childrearing is many things simultaneously. For the young child, the parent is a caretaker, in a very pervasive sense--a model, controller, disciplinarian, source of nurturance, teacher, and a figure who is loved, hated, feared, and envied. The parent is never one of these alone. The child learns from observing the parent, from being taught directly, from being rewarded and punished, and from experiencing varying care and regard from the parent.

The history of research on childrearing influences illustrates the difficulties in dealing with these many aspects of childrearing and, at the same time, limits one aspect of socialization from another (Yarrow, Scott, and Zahn-Waxler, 1973). The research is complicated by studies that have demonstrated that children's perceptions of their parents' childrearing behaviors are more relevant determinants of children's behaviors and adjustment than the objective reality to which those perceptions refer. Both psychologists and sociologists have expounded the thesis that "What matters for behavior and development is the environment as it is perceived rather than how it may exist in 'objective reality'" (Bronfenbrenner, 1979, p. 4). This notion is epitomized in Thomas and Thomas' (1928, p. 572) dictum that "If men define situations as real, they are real in their consequences."

A trend in research on socialization in children has been an increase in attempts to measure parental childrearing behavior

directly through observations, rather than through the self-reports of family members themselves. This shift in research tactics appears to have been motivated by a desire to decrease the social desirability sets and other types of response biases in parental childrearing behavior (Walters & Stinnett, 1971). However, one negative consequence of this increasing effort towards obtaining "accuracy" in the measurement of parent attitudes and behaviors is a decrease in the attention given to some important person perception processes; that is, the definitions of the situation the individual brings to their social encounters and their awareness of each other's definitions. There is evidence that such perception variables are potentially important determinants of children's sociopsychological development (Michaels, Messé, & Stollack, 1977).

Correspondence of Perceptions. Interpersonal theories of personality development have noted that the degree to which social perceptions are congruent has an impact on the quality of interpersonal functioning (Freedman, Leary, Ossorio, & Coffey, 1951; Mead, 1934; Sullivan, 1950). Sullivan speculated that mutual agreement in the perceptions of parent and child enables them to draw closer together and to establish real communication. If the child and the parent view the parent's behavior similarly, it is more likely that the child would be able to anticipate correctly the parent's behavior in a particular situation, since the parent would be acting on similar perceptions of the situation as the child. On the other hand, if parents' self-perceptions and the children's self-perceptions of the parents' behavior differs, breakdowns in communication and

understanding may develop. When the parent's and child's perceptions of parent attitudes and behavior are markedly different, the child could find himself/herself in a "double bind," since the parent's verbalizations about his/her childrearing behavior (based on parental perceptions) tell the child that one thing is occurring, while the child's perceptions of the parent's actual behavior indicates that something very different is happening.

Similar difficulties may occur when there is a lack of correspondence between children's perceptions and parent's inferences. Mead (1934) has suggested, from the viewpoint of a symbolic interactionalist, that people continuously make judgments about how they appear to others and that they "regulate" their behavior in order to project a desired image of themselves to a significant other. However, in order to obtain the intended image of himself/herself in the other's eyes, the perceiver must be able to infer accurately how the other person views him/her. In the case of parent-child interaction, when the parents' inferences are generally accurate, the parent can deal effectively with the child's perceptions of him/her and can behave so that the child is likely to perceive the parent as the parent thinks best. On the other hand, misconstruing the child's perceptions of parent behavior may cause the parent to respond in ways that work against obtaining the desired image of himself/herself in the child's eyes.

Children's perceptions of parental behavior have been measured in terms of the children's perceptions of parent attitudes and childrearing behavior; the extent of correspondence between children's perceptions of parent behavior and parents' self-perceptions; and

the correspondence between children's perceptions, parents' self-perceptions, and parents' inferences.

There is some indirect and retrospective evidence to support the notion that children's perceptions of parent childrearing behavior changes with age and that, in general, the child's view of important others is different than the parent's view. Serot and Teevan (1961) compared children's and parents' perceptions of the "idealness" of the parent-child relationship in their family, using the Swanson Child-Parent Relationship Scale (Swanson, 1950). They found very little agreement (nonsignificant correlations) between parents' and children's perceptions. Unfortunately, means for parents' and children's idealness ratings were not presented; thus, it was not possible to determine whether or not there were any systematic differences between parents and children on the idealness ratings.

Zucker and Barron (1971) examined the retrospective reports of adolescents and parents concerning the parents' childrearing practices when the subjects were young children. The parents and adolescents completed the same instrument, which asked what the parents did during the time that the adolescent was growing up. Two kinds of analyses were performed to assess the degree of correspondence between the two sets of perceptions. First, separate correlation analyses were performed for each parent-child sex pair. In no case, however, were there significant correlations for a majority of the subscales. The correlational analyses also showed that there was a stronger relationship between daughters' and fathers' perceptions than between daughters' and mothers' perceptions. This, however, was not the case for the data from families of boys.

The second type of analyses examined the differences between parents and children. A number of differences between the parents and their children were found. For example, both mothers and fathers reported that they had been more affectionate and less punishing than their children had remembered them to be; parents reported that they had used more principled discipline and less physical punishment, affective punishment, and threats (fathers only) than their children remembered. These findings, while quite interesting, do not permit a direct examination of the degree of correspondence between parents' and children's perceptions because they were based on recollections of past events. Indeed, Zucker and Barron (1971) pointed this out by labeling the responses "family mythology."

Michaels et al. (1977) examined the degree of correspondence between children's perceptions of their parents' childrearing behavior, those parents' self-perceptions, and the parents' inferences about how their behavior would be perceived by their child. They expected there to be systematic differences in, and little, if any, correspondence between parents' self-perceptions and children's perceptions of the parents' behavior. In addition, the measure of parents' inferences about their children's perceptions permitted the examination of the ability of the parents to "decenter" and to "take the role" of their child. Thus, two additional comparisons were possible:

1. The comparison between children's perceptions and parents' inferences, which would reflect the parents' ability to "see" the child's world accurately

2. The comparison between parent's self-perceptions and their inferences of the child's perceptions, which would indicate the degree to which they realized that the child might view their behavior differently than they did

Eighty child-parent pairs (the children were all seven years of age) completed modified Parent Behavior Questionnaires (PBQ) (Bronfenbrenner, 1961) which were designed to elicit their perceptions and inferences about the parents' behavior with their children. Parents' and children's responses were compared on three composite measures, based on the result of a factor analyses of the responses to the questionnaire: loving, punishing, and demanding parent behavior. Significant mean differences were found between the children's perceptions and the parents' self-perceptions, between children's perceptions and parents' inferences, and between parents' self-perceptions and parents' inferences on all three PBQ factor composites. Results of the correlation analysis generally confirmed a conclusion that there was little correspondence between children's and parents' measures.

Gender Differences. Other studies have examined perceptions of parent behavior in terms of parent and gender of child. Droppelman and Schaefer (1963) reported that at the time of this study, existing studies of the child's perceptions and report of parents' behavior frequently did not analyze separately reports of maternal and paternal behavior or the reports of boys and girls. They suggested that differentiation of gender of parent and gender of child would provide more adequate data on parent-child interaction. Two studies were carried out to obtain information on the following questions: "What

differences are found between mother and father as reported by boys and by girls?" and "What differences are found between boys and girls in their descriptions of each parent?"

Data from both studies clearly demonstrated that gender of child and gender of parent interact in varied ways to determine how boys and girls report the behavior of their parents. The differences between mothers and fathers as reported by boys and girls were essentially the same in both studies. However, the results for the differences between boys and girls in their description of each parent were different in both studies. Droppleman and Schaefer (1963) accounted for the differential descriptions by a possible interaction between some or all of the following variables: gender of parent, gender of child, age of child, social class, and religious affiliation.

In general, the results from the first study indicated that on a group of scales that measured components of love, nurturance, or affection, mothers were reported to be significantly higher than fathers by both boys and girls. Boys tended to rate fathers higher on a scale that represented a more irritable negative type of involvement, while girls rated mothers higher. However, on a scale that revealed a more detached type of negative behavior (defined by scales of rejection, neglect, and ignoring), girls reported fathers as clearly higher and boys reported fathers as only slightly higher.

Mothers were reported to use covert, indirect methods of control more frequently than fathers by girls and boys alike. Strictness and punishment showed no significant differences between parents for both boys and girls. There was, however, a slight tendency for the opposite-sex parent to be reported as using more overt, direct methods of

punishment. There was a clear trend for the opposite-sex parent to be reported as granting more autonomy--girls reported fathers as higher and boys reported mothers as higher.

In terms of differences between boys and girls in their evaluation of each parent, girls reported receiving significantly more love, affection, or nurturance than boys from both father and mother. Boys reported receiving significantly more hostile, negative treatment from both parents. In addition, there was a strong tendency for boys to report more covert, indirect control as well as more overt, direct control than girls from both parents, particularly the father.

The purpose of the second study was to replicate the findings of the earlier study with a somewhat different instrument on a sample that differed in age and social class. In general, the results of the differences between mothers and fathers for both boys and girls in the second study were consistent with the results of the earlier study. The only discrepancy occurred in girls' reports of extreme autonomy. The mother-father difference was not significant in this sample, but the mother tended to be rated higher in contrast to the previous sample in which the father was reported as significantly higher.

The differences between boys and girls in their reports of each parent were significantly different from the earlier study. Girls reported receiving significantly more psychological control from mothers than did boys. There were no significant differences between boys and girls for either mother or father in any of the other comparisons.

In summary, Droppleman and Schaefer (1963) stated that the most straightforward results of this study were related to the major dimension of parent behavior which has been called love versus hostility,

acceptance versus rejection, and parental nurturance. They indicated that the data are in agreement with earlier studies (Funkenstein, King, & Drollette, 1955; Kagan, 1965) that found the mother as contrasted to the father being reported as more loving and affectionate and as less ignoring and neglecting.

Stinnett, Farris, and Walters (1974) compared the perceptions of male and female high school students concerning selected aspects of parent-child relationships. Significant differences were found to exist in the perceptions of males and females concerning each of the following: source of most parental discipline during childhood, degree of praise received during childhood, source of most affection during childhood, degree to which mother found time to do things with the respondent as a child, and the source of greatest parental influence in determining the kind of person the respondent had become.

The results indicated that twice as many males reported the father to be the primary source of parental discipline during childhood. This would seem to indicate that, at least according to the perception of the child, fathers play a more active role in the disciplining of sons than daughters and may be related to research (Goodenough, 1957) that indicates that fathers emphasize sex-role learning more for male children than female children.

More than twice as many females than males reported receiving praise often during childhood. This finding is quite interesting when viewed with the finding that the majority of boys reported the mother as the source of most affection and that boys were much less likely than girls to report that affection came from mother and father equally. This would seem to reflect the cultural expectation that it

is more appropriate for fathers to express affection and praise toward female children than toward male children.

A greater proportion of females than males reported that the mother "very often" found time to do things together with them during their childhood years. More females than males reported the greatest parental influence from the mother, while a greater proportion of males reported the greatest parental influence to be from the father. This finding is consistent with the cultural expectation that the child will identify with the same sex parent. However, the finding that the greatest proportion of both males and females reported the mother to be the greatest influence in terms of how they become the type of person they are, speaks to the role that mothers take in childrearing.

Stinnett et al. (1974) concluded that parents have a decidedly different effect on the lives of their sons and daughters and that mothers are more influential than fathers. They offered the tentative conclusion that adolescent girls seem to have more positive and supportive parent-child relationships than do adolescent boys.

Brook et al. (1980) noted that an issue of theoretical and methodological importance to the study of children's perceptions of parent childrearing behavior is the degree of correspondence between children's perceptions and those of their parents. Brook et al. cited only one study (Zucker & Barron, 1971) that had attempted to examine the correspondence between children's and parents' perceptions of parental childrearing practices, although there have been others (Michaels et al., 1977). This study was designed to examine the

correspondence between maternal and adolescents' perceptions of the mother's childrearing behavior.

Both the adolescents and their mothers completed questionnaires containing modified forms of several scales from the PBQ (Avgar, Bronfenbrenner, & Henderson, 1977) and the Children's Reports of Parent Behavior Inventory (CRPBI) (Schaefer, 1965).

Pearson-product moment correlations were computed between the adolescents' and mothers' versions of the scales. After correlation for attenuation, the maternal and adolescent reports of maternal behavior showed a substantial correspondence. However, for three of the dimensions, the correlations were low to moderate (affection, .20; emotional reward, .45; and nurturance, .52). The correlation between the positive versus negative scale comparison (.49 for all positive scales; .87 for all negative scales) suggested that mother-child congruence is higher for perception of rejecting/restricting maternal behavior than for accepting/rewarding behavior.

Parent Behavior and Empathy

Prosocial Behaviors and Moral Development. There have been numerous studies examining the relationship between perceived childrearing behaviors and children's behavior. Studies have examined perceived childrearing experiences and intelligence and academic achievement (Christopher, 1967; Cross & Allen, 1969; Kelly & Worrell, 1977; Moss & Kagan, 1961; Norris, 1968), psychosocial adjustment (Ausubel, Balthazar, Rosenthal, Blackman, Schpoont, & Welkowitz, 1954; Biller, 1969; Cicchetti, 1967; Craig, 1966; Horner, 1961; Karon, 1963; Kysar, 1968; Mitchell, 1969; Novak & Vanderveen, 1968; Reuter &

Biller, 1973; Vogel & Lauterbach, 1963), parental supportiveness (Funkenstein et al., 1955; Heilbrun & Tiemeyer, 1968; Kagan, 1956; Siegalman, 1965; Thomas, 1968; Walsh, 1968), and differential treatment according to gender of parent and gender of child (Bronfenbrenner, 1961a, 1961b; Bayley, 1965; Medinnus, 1967; Margolin & Patterson, 1975; Noller, 1978; Rothbart & Maccoby, 1966).

Considerable research has been conducted examining the relationship between childrearing behavior and prosocial behavior. Hoffman (1963) investigated aspects of parental discipline and the development of the child's consideration for others. He offered three basic assumptions regarding the development of other-directed concern by stating that concern for others involves affective, conative, and cognitive prerequisites: (a) the child will begin to alter his/her behavior out of consideration for others to the extent that he/she has a generally positive affective orientation toward others, (b) the child can control his/her impulses, and (c) the child is aware of the needs of others. Each of these prerequisite characteristics, Hoffman argued, can be traced to some aspect of the childrearing pattern. A positive affective orientation should result from parental acceptance. The ability to control impulses should depend, to a large extent, on the type of discipline used by the parent. The parent's use of techniques which are explicitly oriented towards the needs of others should enhance the child's awareness of the needs of others. These assumptions formed the hypothesis for Hoffman's study.

The only hypothesis that was supported was that parental acceptance relates to a positive affective orientation. By way of explaining the lack of support for the other hypothesis, Hoffman (1963)

thought that the child's response to consequence-oriented and other-oriented discipline techniques might be affected by the overall disciplinary atmosphere within which specific influence interactions take place and that this atmosphere in turn might be a function of the frequency with which the parent asserts power over the child.

In a later study, Hoffman and Saltzstein (1967) investigated the effects of types of parental discipline and the child's moral development. Seventh grade children were assessed on several dimensions of moral development by means of paper-and-pencil tests and ratings by parents, teachers, and peers. Extreme groups were formed along the dimensions of guilt, internalized moral judgments, and overt reactions to transgressions and they were compared to the measures of parental discipline based on reports from the children themselves and by each of the parents. Discipline techniques were coded into three categories: power assertion (the parent capitalizes on his/her power and authority over the child), love withdrawal (direct but nonphysical expressions of anger, disapproval, etc.), and induction (parent's focusing on the consequences of the child's actions for others). With considerable consistency, advanced development along the various moral dimensions was associated with infrequent use of power assertion of frequent use of induction. On the other hand, love withdrawal related infrequently to moral development.

Hoffman (1970), in a replication and extension of an earlier study (Hoffman & Saltzstein, 1967), took two groups of seventh-grade children with internal moral orientations and which were selected on the basis of moral judgment responses. One group displayed judgments which showed concern for human consequence of behavior and

consideration for extenuating consequences (humanistic); the other group had judgments showing rigid adherence to institutional norms regardless of consequences and circumstances (conventional). A third group oriented toward punishment and detection (external) was also selected. The humanistic and conventional subjects were found to be similar to each other and higher than the external on guilt, confession, acceptance of blame, and parent identification; their parents were reported to express affection and use induction discipline more frequently and power assertion less frequently. The major differences were that the humanistic subjects were more tolerant of antimoral impulses, more apt to feel guilt as a direct result of awareness of the consequences of their behavior for others, and more identified with the personal characteristics of their parents. Their parents' discipline techniques were more varied, ranging from permissiveness to power assertion, depending on the situation, and cushioning the handling of aggression by focusing on precipitating issues and suggesting reparation where possible. The conventional subjects appeared to be more repressed, more apt to experience guilt as a result of their own impulse expression rather than the harm done to others, and more identified with the power aspect of the parental role. Their parents' discipline was characterized by frequent use of love withdrawal and inductions highlighting the harm done to the parent by the child's action. The differences, especially on the guilt and repression indexes, were more pronounced for boys than for girls.

Eisenberg-Berg and Mussen (1978) examined the relationship between two measures of moral development (prosocial moral reasons and helping) and parental socialization practices. One of the measures of

moral development was behavioral, volunteering to assist the experimenter in another project. The other measure assessed the level of prosocial judgment or reasoning through the subject's responses to dilemmas in which one's own needs conflict with those of another in the contexts in which laws, punishments, and formal obligations are irrelevant. Parental behaviors were assessed by two 91-item Q-sorts devised by Block (1965) concerning the mother's childrearing practices; the other pertaining to the father's. The subjects were 72 students (35 males and 37 females) from an upper middle-class suburb in grades 9, 11, and 12.

The results indicated that empathy was significantly related to moral reasoning for both sexes and to helping for males. Maternal childrearing practices were related to sons' empathy; mothers of highly empathic boys were perceived as nonpunitive, nonrestrictive, egalitarian, and they maintained affectionate relationships with their sons. They encouraged their sons to discuss their problems with them a good impression on other people.

Parental practices were infrequently related to girls' empathy scores. Eisenberg-Berg and Mussen (1978) attributed this to the fact that girls were significantly more empathic than boys; hence, a ceiling effect may have operated so that specific parental socialization practices may not have appeared to influence girls' empathic capacities. Significant correlations were found only for boys' empathy and maternal Q-sorts; therefore, no information on paternal influences was reported. Eisenberg-Berg and Mussen concluded that empathy is a critical predisposing factor in prosocial reasoning.

Aggression. Feshbach (1974) examined the relationship of childrearing factors to children's aggression, empathy, and other related positive and negative social behaviors. She cited previous research that reported an inverse relationship between empathy and aggression (Feshbach & Feshbach, 1969; Mehrabian & Epstein, 1972). Aggression in children, in terms of its deviant social connotations and its often impulse quality, may be viewed as an immature moral response similar to other such negative moral behaviors as lack of resistance to temptation and cheating. Empathy, on the other hand, is seen as related to the emergence of moral development (Hoffman, 1970; Hogan, 1973; Kohlberg, 1969; Piaget, 1932; Staub, 1972).

A homogeneous group of 48 Caucasian six- and eight-year-old boys and girls, above average in intelligence, from middle-class professional homes and their mothers and fathers were included in the sample. Standard measures of empathy (Feshbach & Roe, 1968), cognitive moral judgment (Bandura & McDonald, 1963; Cowan, Langer, Heavenrich, & Nathanson, 1969; Grinder, 1964; Piaget, 1932), generosity (Handlow & Gross, 1959; Ugurel-Semin, 1952), cheating (Grim, White, & Kohlberg, 1968; Hartshorne & May, 1928), lack of temptation (Sears, Rau, & Alpert, 1965), and childrearing behaviors (Block, 1969) were collected. The child's aggressive tendencies were assessed by teachers' judgments based on a nine-item aggression rating scale primarily concerned with overt and physical behaviors.

The results indicated that parental emphasis on competition is associated with low empathy in boys. Empathy in girls appears to be related to maternal behaviors reflecting a positive and nonrestrictive relationship with their daughters. Thus, empathy in girls is

negatively correlated with maternal conflict and rejection and with maternal punitiveness and overcontrol but positively correlated with maternal tolerance and permissiveness.

In regard to correlates of aggression, a consistent pattern of parental antecedents is found for boys: a mother who is punitive, who is less prone to use induction, who tends to be low in nurturance, and a father who is relatively unaffectionate and controlling, who is authoritarian and rejecting, and who is likely not to trust his son. The one exception to this pattern is the positive correlation of aggression and maternal child-centeredness, a result which Feshbach interpreted in terms of the maternal reinforcement of the child's expressiveness, including anger and other feelings.

A seemingly inconsistent finding was the correlation of aggression in girls to maternal trust which, according to Feshbach, may function psychologically in a manner similar to child-centeredness. The other correlates of aggression in girls formed a more coherent set of relationships, reflecting a mother who is lower in tolerance and permissiveness and a father who manifests anxiety over sexual matters and who is less likely to use induction in child training. When the aggression antecedents and the empathy antecedents were compared, it appeared that there is some overlap for girls, while these behaviors in boys seem to arise from very different antecedent conditions.

The relationship of the other antecedents of the positive and negative social behaviors to the antecedents found for empathy and aggression provided further evidence of separate roots. Empathy appeared on only one factor in conjunction with the other social-moral behaviors. However, for boys in particular, there was considerable

overlap in parental antecedents for aggression with those obtained for cheating, lack of resistance to temptation, a less mature level of cognitive moral judgment, and low generosity. Aggression in girls was less clearly related to the parental factors which influence these other social-moral behaviors.

In terms of which parental factors that had the strongest relationship with the children's behaviors, the strongest factors for mothers are child-centeredness, use of induction, positive reinforcement, degree of conflict, and child rejection. For the fathers, the single most important childrearing dimension appeared to be authoritarian-restrictiveness and criticalness. Fathers who are high on this factor have daughters who were more likely to cheat and who had difficulty in resisting temptation and sons who were more aggressive, more likely to cheat, and were less generous. Other important paternal factors, particularly for boys, are the father's affection and his fostering of the child's autonomy.

Feshbach concluded that the hypothesis stating that there would be an inverse relationship between empathy and aggression in children was supported. Further, the data suggested that aggression is influenced by parental socialization practices similar to those associated with social immaturity and deviancy in other areas of development. The findings, according to Feshbach, had relevance for issues regarding optimal socialization practices. Punitive and attitude values were associated with deficits in social development, a finding that was consistent with other work in the area (Hoffman, 1970). These results suggest that parental warmth and affection, use of reasoning, positive reinforcement, permissiveness, and autonomy-fostering are

much more likely to facilitate the development of a child who is effectively socialized.

Cooperation. Levine and Hoffman (1975) examined the relationship between empathy and cooperation in four-year-old children. They expected a positive relationship based on the rationale that a person's ability to experience the feelings of another person with whom they interact should make them more sensitive to the other's needs; hence, more likely to modify their own behavior so as to promote success and satisfaction in the other.

The subjects were 38 female and 42 male, four-year-old, white, mainly upper middle-class children. The empathy measure used was devised by Feshbach and Roe (1968). Two cooperation measures were used. The first was the cooperation board developed by Kagen and Madsen (1971); the second was the amount of time spent in cooperative behavior--defined as spontaneous or self-initiated work or play activity, coordinated with the work or play of one or more peers--as a percentage of the total time observed.

The results indicated that girls obtained higher empathy scores than did boys. For both boys and girls, no differences in total empathy or in the individual emotions (happy, angry, sad, fear) were obtained between the cooperative and noncooperative children using either cooperation measure. The cooperation measures were found to be unrelated to each other. In essence, the hypothesis was not supported.

However, in a more recent study, Marcus, Tellen, and Roke (1979) also studied the relationship between cooperation and empathy in preschool age children. In contrast to Levine and Hoffman (1975), they found a positive relationship between empathy and cooperation.

Thirty-two preschool children (11 girls and 21 boys), who ranged in age from 37 to 61 months, participated in the study. Marcus et al. (1979) used the Feshbach and Roe (1968) empathy measure. However, in contrast to Levine and Hoffman (1975), Marcus et al. used coded observations and a seven-point rating scale to measure cooperation.

Males were found to be more cooperative than females and gender differences in empathy were not statistically significant. Coded data on cooperation failed to reveal a relationship to the measurement of empathy; however, all rated measures of cooperation correlated positively and significantly to the empathy measure.

Barnett, Mathews, and Howard (1979) investigated the relationship between competitiveness and empathy in six- and seven-year olds. This study tested the hypothesis that a competitive disposition or competitiveness induced situationally may engender self-concern and subsequently, suppress the expression of empathy. The subjects were 84 Caucasian children (42 males and 42 females) enrolled in four first-grade classes in a middle-class community. The Feshbach and Roe (1968) empathy measure was administered while the subjects were preparing either to compete or to cooperate with another child on a game. Boys rated by teachers as highly competitive were found to be less empathic than less competitive boys; no difference was found for girls. There was no evidence that the children's empathy was influenced by the manipulation of the instructional set.

The pattern of findings paralleled previous studies that reported gender differences in the relationship between empathy and aggressiveness in a first-grade sample (Feshbach & Feshbach, 1969). Both aggressive and competitive dispositions in six- and seven-year old boys

appeared to be associated with heightened self-concern, which may serve to make the feelings of other individuals less salient. Barnett et al. (1979) suggested that since no support was found for the proposition that a competitive instructional set would suppress the expression of empathy relative to a cooperative or neutral set condition, perhaps a competitive, instructional set is not sufficiently powerful to inhibit empathy of six- to seven-year-olds. However, it may influence somewhat older children (Barnett & Bryan, 1974).

Altruistic Behavior. Yarrow et al. (1973) examined the development of altruistic behavior in young children. They noted that altruism is, first of all, not a specific form of behavior. It includes a variety of responses--helping, sharing, defending, rescuing, sympathizing--and more. The processes that underlie altruism are explained differently depending on which psychological theory one ascribes to. In "pure" psychoanalytic theory, it is assumed that guilts and anxieties which the individual is seeking to control are the substructure of his/her altruism. In social learning theories, "identification" processes have been emphasized as factors in the young child's acquisition of the adult's prosocial and other moral behaviors. In other learning approaches, it is assumed that acts of helping and sharing, like other responses, are acquired as the result of specific reinforcements.

The kinds of altruism to which different theories address themselves range in meaning and motivation from benevolence to well-planned self-benefit. One could conclude that there is a very thin line between selfish and unselfish altruism. For the purpose of their

study, Yarrow et al. (1973) focused on the development of behaviors defined as unselfish, based on the reward of having contributed to the well-being of the other. Explicit in the design of the study was the assumption that parent behavior, in the form of childrearing conditions, very forcefully impact the regard children have for others and their active care of others.

In the study, 104 preschool children (3.5 to 5.5 years of age) were given training in helping behavior. They were assigned to a control group or to play groups in which an adult caretaker, over a period of several weeks, provided either high-nurturant or nurturant conditions. In a series of training sessions, the nurturant and nonnurturant adult modeled sympathetic helping. For a part of the sample, a symbolic medium (pictures of children in distress situations and dioramas); for the rest of the sample, symbolic and behavioral situations of distress were used. Training effects were measured two days later and two weeks later. Children's recall of the experiment and their concept of helping were measured six months later.

The results indicated that symbolic altruism was significantly increased in all experimental groups and was unaffected by the nurturance variations in the adult. Altruistic behavior measured in non-pressured and realistic encounters with distress was increased by the model's nurturance. Children with nurturant caretakers who had modeled helping in both symbolic and live distress gave more help, verbalized more sympathy, and were found to be more consistent in their altruism.

In a more recent study, Zahn-Waxler et al. (1979) investigated childrearing patterns and children's prosocial behavior toward victims

of distress. Maternal childrearing behavior was examined in relation to children's amends for transgressions and altruism as bystanders to distress in others. Sixteen children (seven males and nine females) from intact homes were studied over a nine-month period. The ages of the children ranged from 1.5 to 2.5 years old. Mothers were trained in techniques of observing and coding their children's reactions and their own behaviors in everyday encounters with expressions of distress in others. Distress was also simulated by mothers and the researchers. The empathic caregiving of the mothers was rated during home visits.

The results indicated that the mothers' affectively delivered explanations regarding the distress that their children had caused others were associated with children's reparations for transgressions. Such explanations were also associated with children's altruism when they were bystanders to another's distress. Empathic caregiving by mothers was positively associated with children's reparation and altruism. Zahn-Waxler et al. (1979) concluded that early disciplinary practices may lay the basis not only for children's responsibility for their own acts but for general responsiveness to the feelings of others as well.

In a recent study, Zahn-Waxler et al. (1983) reported the results of two longitudinal studies on the development of such prosocial behaviors as altruism, guilt, and empathy in young children. Specifically: (a) the role that caregivers' disciplinary and childrearing practices may play in instilling these characteristics in children, as well as (b) the general influence on prosocial development of the background collective environment (parental depression, conflict, etc.).

Children were studied initially from the ages of 1 to 2.5 years of age. This age category was chosen on the basis of research (Hoffman, 1975; Murphy, 1937; Yarrow et al., 1973) that has suggested that the capacity for sympathy and prosocial intervention emerges during this time period. Both naturalistic observations and experimental procedures were used to study the young children's concern for others in distress. Mothers were trained to become daily observers of their own children's behavior. They tape-recorded their children's responses to the distress emotions of others (family, relatives, friends, strangers). This included those emotions that: (a) children witnessed as bystanders and (b) that children caused. Simulations of emotions were performed in the home to provide standardized assessments of children's responses to distress.

In the first study, 24 male and female infants and toddlers were studied: Cohort A (N=8) began at 10 months, Cohort B (N=9) at 15 months, and Cohort C (N=7) at 20 months of age. Each child was followed for nine months and then studied again for a three-month period five years later. In terms of the naturalistic observations, approximately 2,000 incidents were reported by the 24 mothers. In addition, mothers and investigators visited the home and collected experimental data every two to three weeks. In seven-week cycles, the mothers simulated one of seven emotions according to a script and observed the child's response. The emotions were: laughter, affection, fatigue, pain, coughing, sadness, and anger (on the telephone). Details of the methodology, along with reliability and validity reports of the mothers' observations, are cited in Zahn-Waxler et al. (1982).

Results of the study indicated that the distress of another person is a remarkably compelling stimulus for children in the first years of life. Children showed some response on over 90% of occasions. The children's responses took the form of: (1) the children's own distress reactions to the distress of another person; (2) their efforts to intervene on behalf of the injured person; and (3) their seeking out of the caregiver, which may be an intermediary reaction between self-distress and concern for another person. Between the ages of one and two there was a significant decrease in frequency of children's crying or self-distress, a peaking of dependency bids in the middle-age cohort (Cohort B), and a significant increase in prosocial or altruistic behaviors. These are the predominant developmental trends in response to naturally occurring distresses observed by children. For simulated distresses, children's seeking out of the caregiver showed a curvilinear relationship with age. And again, there was a significant increase with age in children's prosocial interventions.

Zahn-Waxler et al. (1982) suggested that this rapid transition in the second year of life from self-distress to active concern for the other, possibly mediated by dependency bids to the caregiver, can be viewed as a landmark in social development. The fact that children are likely to seek out help from their caregiver at the transition point (about 18 months of age) where overt distress is decreasing and altruism is increasing, is quite interesting. The researchers reported that children either may be seeking reassurance or information about the nature of the distress and possibly how to intervene. Or, children could actually be trying to get the caregiver to help the

victim. This suggests a close connection between patterns of self-distress, help-seeking, and help-giving early in life. The parents' behavior here could help to influence the child's basic orientation in distress situations.

The contents of children's prosocial responses changed with age as well. Between 12 and 15 months of age, when altruism is emerging, children make simple, positive physical contacts with a distress victim (touching, patting, or presenting of objects). However, between 18 months and 20 years of age, different forms of altruism begin to emerge and with different frequencies. Children are seen to help, share, protect, defend, comfort, console, give simple advice, and mediate fights.

Also during the second year of life, early signs of conscience and guilt are emerging in a parallel pattern to the development of altruism. For example, children begin to attempt to make reparations when they have caused someone to be distressed. In terms of children's responses to distresses caused, there was a significant increase in prosocial interventions (reparations) with age. Further, these children who frequently made reparation for distresses caused, were also the most altruistic when bystanders to another's distress (Zahn-Waxler et al., 1979), suggesting a link between early development of altruism and conscience.

Affective States. Zahn-Waxler et al. (1979) also examined the impact on children of parents' childrearing and disciplinary practices and affective states. Mothers' teaching and disciplinary practices based on their reports of the interventions they used (when the child

was the cause of the distress and when the child was a bystander to another's distress) was scored. Also, mothers' nurturance or empathic caregiving when their children experienced distress was observed and rated during home visits. Empathic mothers were significantly more likely to have children who were both highly reparative and altruistic. These empathic mothers, however, were also more likely to reason emphatically and to use strong discipline when their children caused distress. Strong discipline consisted of a strong configuration of techniques, the most prominent being: (a) (high) expectations of absolute adherence to rules about never hurting others, (b) love withdrawal, (c) moralizing, and (d) strong verbal prohibitions against hurting. Perhaps strong discipline may simultaneously represent strong empathy for the victim. Zahn-Waxler et al. asserted that parental disciplinary practices may be helping to lay the foundation, not only for the child's responsibility for his/her own acts, but also for a more general sensitivity to the feelings of others.

In addition to the effects on children of specific childrearing practices, Zahn-Waxler et al. (1979) examined how children's prosocial orientation were influenced by the more general emotional climate of the home (parental moods and conflicts). Parental affective styles were in fact found to be related with children's early prosocial responding. Expressions of anger in the environment were found to be quite negatively emotionally arousing (Cummings, Zahn-Waxler & Radke-Yarrow, 1982). And repeated exposure to fights between parents resulted in still more negative emotional reactions (anger and distress) in children. Prosocial responses were found to be relatively infrequent in distress situations involving anger and hostility compared

with distress situations such as pain or sadness. However, the children who were frequently exposed to parental fighting also were the only ones who ever attempted to comfort, distract, or reconcile the angry parents. That is, frequent hostility between parents led to the development of a peacemaker or mediator role, even in toddler-aged children. Five years later, children showed little overt emotional distress while witnessing parental fights. However, there was a substantial increase with age in children's attempts to mediate others' fights and to comfort the loser.

The development of altruism in children with a depressed parent was examined in the second study. Beginning at age one, 27 children were studied longitudinally in home and laboratory settings. Methodology was similar to that of the first study, with the addition that mothers provided ratings of their predominant moods using the Differential Emotions Scale.

Seven of the children studied were from bipolar families and 20 were from control families. In four of the families, the mother was the depressed parent; in the remaining three families, it was the father. They had previously been inpatients at the National Institute of Mental Health's medical facilities and had been diagnosed as bipolar using the Schedule for Affective Disorders and Schizophrenia (SADS) (Spitzer & Endicott, 1978). They were in remission (lithium treated) at the time of the study. Control families were equated with bipolar families in terms of socioeconomic status, race, religion, ethnicity, and parental age.

Examination of children's responses to mothers' distress revealed that children from bipolar families did not differ from control

children on either prosocial acts per se or prosocial acts accompanied by concerned looks. However, analysis of mothers' mood ratings (bipolar and control groups combined) indicated that the more anhedonia reported by the mother, the less likely the child was to provide the mother with comforting that was accompanied by concerned facial or vocal expression.

Deficits in interpersonal and social skills were observed in children from bipolar families. These deficits were most pronounced in the children's prosocial interventions with peers. Children from bipolar families show significantly less altruism (help, sharing, cooperation, sympathy) and these differences between groups were most apparent with respect to sharing. Children from bipolar families also showed more aggression toward the unfamiliar adult in the laboratory situation, and more inability to share when the unfamiliar adult requested children to share with her. Children from bipolar families did show significantly more preoccupation with the distress of laboratory adults--they tended to remain riveted on the distress and were less able to turn away and re-engage in other activities. Children from bipolar families were also less likely to seek information, guidance, or reassurance from the mother in situations of other's distress. This finding was in contrast to the results of the first study.

Empathy. Research has contributed some tentative support that expressive traits and empathy are positively related (Carlozzi & Hurlburt, 1982). Other studies have found a positive relationship between perceptions of parent expressiveness and the development of

expressive qualities in their children (Balswick & Avertt, 1977; Slevin & Balswick, 1980). From this information it would be logical to assume that parent behavior can influence the development of empathy in their children.

In a crosscultural study, Roe (1977) examined the effects that different attitudes and childrearing practices had on the development of empathy in children. The sample consisted of 64 six- and seven-year-old Greek children. They were compared to the 46 American children previously tested by Feshbach and Roe (1968). Responses to the Affective Situational Test (Feshbach & Roe, 1968) of the 64 Athenian children were compared to those obtained earlier from 46 children in Los Angeles. Athenian girls were found to be more empathic than Athenian boys; however, no such sex differences were found in the Los Angeles sample. Children in both environments responded more empathically to stories depicting children of the same gender. Interestingly, American children obtained higher empathy scores than did the Greek children. Feshbach and Roe concluded that these differences could be attributed to the different patterns of discipline and sex role expectations in the two cultures.

Roe (1980) reported that earlier results (Roe, 1977) indicated that Greek children scored lower in empathy than American children, possible because of the power assertive disciplinary techniques employed by the Greek parents in comparison to the middle-class American parents. However, no subject-specific data on parental power assertion had been gathered in for the earlier reports.

In this study, data on children's perceptions of parental power assertion (focus was physical punishment) and children's empathy was

studied. Subjects for the study were 42 9- and 10-year-old Greek children (21 boys and 21 girls).

The results indicated that empathy level was found to be negatively related to fear of physical punishment from their parents, particularly their fathers. Low empathy subjects also reported more spanking from and more fear of their fathers than their mothers. Children whose fathers were away from home most of the year scored higher in empathy.

Roe (1980) maintained that, while the results did not imply causality, a tentative formulation of a contingency model of empathy development with respect to parental antecedents is suggested. That is, if a child has a strong prior positive relationship (bonding) with a parent, the effect of the occasional use of physical punishment or power assertion by that parent will not be a major impediment to the child's empathic development. On the other hand, if a child has a negative or ambivalent relationship with a parent, then the effect of the use of even occasional physical punishment will be detrimental. This should hold true independent of the gender of the child or parent. Roe suggested that the results of this study are quite tentative and this contingency hypothesis bears further research.

Barnett, King, Howard, and Dino (1980) explored the relationship between the young child's empathy and the parent's self-reported empathy, affection, and emphasis on another's feelings in discipline and nondiscipline situations. Fifty-four children (26 boys and 28 girls, median age = 5.2 years) enrolled in preschool and kindergarten classes took part in the study.

Heightened empathy in four- to six-year-old girls was associated, not with an individual parent's level of empathy, but with a particular, stereotyped pattern of mother-father empathy. Barnett et al. (1980) suggested that when the mother is markedly more empathic than the father, empathy may be identified as distinctly gender-appropriate for females, thereby enhancing its internalization in young girls. No relationship between the son's empathy scores and the various parent indexes was found. Mothers reported being more affectionate with their children and emphasizing other individuals' feelings in discipline and nondiscipline situations to a greater extent than did fathers. Barnett et al. concluded from these results that the factors believed to enhance the development of empathy may be more a product of the mother's interaction with the child than the father's.

Abraham, Kuehl, and Christopherson (1983) explored the potential effect of the child's age on the relationship between parental behaviors and the development of empathy in children. The subjects for the study were 122 families with preschool children, aged three to five. Of these families, 78 were two-parent families; 37 were single-parent, mother-headed families; and 7 were single-parent, father-headed families. All families had only one child. Parents were asked to complete two measures: (1) the author-designed environmental history questionnaire and (2) the requisite form (Mother Form or Father Form) of the Iowa Parent Behavior Inventory (IPBI) (Cruse, Clark, & Pease, 1978). The IPBI is comprised of six subscales: parental involvement, limit setting, responsiveness, reasoning guidance, free expression, and intimacy. Children's empathy was assessed by the Borke Interpersonal Awareness Test (BIAT) (Borke, 1971).

The results indicated that three maternal behaviors (limit setting, free expression, and intimacy) and two paternal behaviors (limit setting and reasoning guidance) were differentially affected by child's age in their association with empathy. Reasoning guidance behaviors for fathers were positively associated with BIAT scores for three-year-old children but not for four- and five-year-old children. The association between BIAT scores and maternal reasoning guidance behaviors were positively related for all age groups. The findings with regard to limit setting indicated that five-year-olds were apparently highly receptive to empathy-related aspects of fathers' limit settings, but highly nonreceptive to mothers' limit settings associated with empathy. With respect to intimacy, the results indicated that the mothers' uses of intimacy with three-year-old children was negatively related to empathy. Data also revealed that with three-year-old children, mothers' free expression behaviors were positively related to empathy.

Abraham et al. (1983) concluded that, on the basis of these findings, empathy-related aspects of both maternal and paternal behaviors are affected by the child's age. Furthermore, it may no longer be appropriate to say that parental behaviors, in and of themselves, either impede or facilitate children's capacity to empathize children's capacities to empathize. Children's age may come to be viewed as a crucial contingency in the relationship between parent behavior and development of empathy.

Summary

It is evident, based upon this review, that empathy, as a

therapeutic construct, has been a persistent topic in the professional literature over the last eight years. Despite the fact that numerous researchers have attempted to define empathy and isolate its components, it remains a construct that is not fully understood. Empathy has been identified as a mediating variable in several prosocial behaviors such as altruism, cooperation, and caregiving. In addition, research supports the notion that a relationship does exist between empathy and parent behavior. This investigation focused upon adults' empathy and their perceptions of their parents' behavior.

CHAPTER III

METHODOLOGY

Introduction

This chapter consists of a presentation and description of the methods and procedures that were utilized in this investigation. The selection of subjects is detailed along with a description of the instruments used. The procedures for data collection and analysis are also described.

Subject Selection

The subjects for this study were 192 graduate students enrolled in master's level counseling courses and doctoral level counseling psychology courses at two major universities. One hundred and twenty subjects were taken from University 1, a large, southwestern, land-grant institution with an agricultural emphasis located in a town of approximately 40,000 people. Seventy-two subjects were taken from University 2, a large, southeastern, state-supported, nonresidential institution located in an urban area of approximately 2,000,000 people.

Of the 192 persons who served as subjects for this study, 140 were female and 52 were male. The subjects were taken from intact classrooms and had to meet the following criteria: (a) at least a bachelor's degree, (b) current enrollment in a course in the

counseling area, and (c) completion of all instruments used in this study.

Sixty-one of the subjects for this study were between the ages of 21 and 25, 50 subjects were between 26 and 30 years old, 34 subjects were between 31 and 35 years, 28 subjects were between 36 and 40 years, 10 subjects were between the ages of 41 and 45, 6 subjects were between 46 and 50 years, and 3 subjects were older than 51 years. The mean age was 30.71. Five of the subjects held bachelor's degrees, 143 master's degrees, 36 doctoral degrees, and 8 identified themselves as special students. All credit hours were converted to quarter hour equivalents. Number of quarter hours ranged from 156 to 450, with a mean of 233.79. Of the 192 subjects, 173 identified themselves as Caucasian, 7 as Black, 12 as either Hispanic, Native American, or Other.

One hundred seventy-three of the subjects were raised in intact homes, 19 in single-parent homes, and no subjects indicated that they were raised in foster homes. Number of siblings ranged from 0 to 9, with a median of 2.0. Eighty-three of the subjects were first born children, 58 were second born, 26 third born, 12 were fourth born, and 13 subjects indicated that they were either fifth, sixth, eighth, or ninth born.

Instrumentation

The Hogan Empathy Scale

The Hogan Empathy Scale (HES) was designed by Hogan (1969) to assess a subject's trait empathy or the ability to be affectively

sensitive to the affective state of another person. The HES was used in this study to measure the empathy of the subjects. The HES is an empirically keyed, 64-item empathy scale which can be used as an operational definition of empathy and provides a convenient means for investigating the role of empathy in interpersonal behavior (Hogan, 1975). Of the 64 items that constitute the HES, 31 are from the California Personality Inventory (CPI) (Gough, 1964), 25 are from the Minnesota Multiphasic Personality Inventory (MMPI) (Hathaway & McKinley, 1943), and the remaining eight items come from the various experimental testing forms used in studies at the Institute for Personality Assessment and Research (IPAR), University of California, Berkeley. Subjects are asked to read each of the 64 statements and decide whether it is "true as applied to you" or "false as applied to you." Subjects thus mark the appropriate true or false box on a computer scorable answer sheet. Items are assigned one point each if marked in the positively keyed direction. A final score is computed by totaling the scores for the 64 items. Scores ranged from 0 to 64. A higher score indicates a greater degree of empathy; a lower score indicates a lower degree of empathy. The HES was obtained by writing its developer, Robert Hogan, Ph.D., Department of Psychology, University of Tulsa, Tulsa, Oklahoma, 74102.

Reliability. The development of the HES began with operationalizing the concept of empathy in order to develop a common behavioral referent for the concept. Fourteen nonpsychologists were provided with the definition of empathy: "Empathy refers only to the act of constructing for oneself another person's mental state. . . ." (Hogan,

1969, p. 308). They were then asked to describe, using this definition, their conceptions of a highly empathic man with 50 items selected from the 100-item California Q-sort (Block, 1965); these items were chosen for content directly related to empathy. The 14 individual Q-sort descriptions were intercorrelated and the mean interjudge correlation was .53; the estimated reliability of the total composite from the Spearman-Brown correction was .94. The findings suggested that the group shared a common behavioral referent for the concept of empathy. A second analysis was conducted to check agreement among psychologists; nine graduate students in psychology were also asked to contribute to a 50-item Q-sort description of an empathic man. The intercorrelations had a mean of .51; the estimate composite reliability was .90.

To determine the amount of agreement between laymen and psychologists, the two Q-sort composites were correlated, yielding a coefficient of .86. When corrected for attenuation, this becomes .93.

These findings suggested that people hold a common conception of the behavioral connotations of empathy. Hogan (1969) also examined the uniqueness of this conception of empathy by correlating the composite Q-sort for an "empathic man" with a correlate of a similarly derived description of a "good man" or a "mentally healthy man."

Using the same 50 items, 10 undergraduate psychology majors were asked to contribute Q-sort descriptions of a "good man," where "good" was to be taken in a general moral or ethical sense. The 45 correlations between their descriptions had a mean of .62, the estimate reliability of the composite description of a "good man" was .94. The correlation between this composite and the psychology graduate students'

"empathy" composite was .29. When corrected for attenuation, the correlation was .32.

Next, 10 graduate students and faculty members in psychology were asked to describe a "mentally healthy man" using the same Q-sort as before. The average correlation of these descriptions was .65 and the reliability of the composite was estimated to be .95. The correlation the composite description of the empathic and mentally healthy man was .47. When corrected for attenuation, the correlation was .51.

From these analyses, Hogan (1969) concluded that empathy refers to a discrete social phenomenon recognizable in the experience of both laymen and psychologists. In addition, these findings served as the basis for the construction of the HES.

The empathy criterion was constructed as follows: four faculty and research psychologists and three advanced graduate students in psychology at the University of California, Berkeley, were asked to describe their conceptions of a highly empathic man. They used the definition of empathy previously cited and the full California Q-sort (100 items). The seven Q-sort descriptions were intercorrelated. The coefficients ranged from .59 to .78, with a mean of .71; the estimated reliability of this composite was .94. This composite served as the empathy criterion.

Two groups of subjects from the University of California's IPAR were used in the development of the HES. The first group consisted of 100 military officers; the second group contained 45 research scientists and 66 student engineers. Each of these subjects was studied by 8 to 10 skilled observers who recorded their impressions on the

Q-sort. These impressions were formed during weekend live-in assessments.

The composite Q-sort description of each individual in the two samples was correlated with the empathy criterion described above. The resulting correlation coefficient was considered the empathy rating for that person. The ratings ranged from $-.58$ and $.68$ in the two samples.

Hogan (1969) then sought (given the *á priori* nature of the empathy ratings) to examine their behavioral and interpersonal implications. The sample of military officers' scores on the Total Social Acuity Index (TSAI) (Gough, 1955) were correlated with the military officers' empathy ratings. This correlation yielded a coefficient of $.26$ ($p < .01$). For the 45 research scientists and 40 student engineers, scores on overall charades performance (Barron, 1954) correlated $.61$ and $.58$ with empathy ratings.

Finally, empathy ratings were correlated in each sample with the standard scales of the CPI, MMPI, and the Chapin Social Insight Test (CSIT) (Chapin, 1942). Empathy ratings were only modestly related to these standard measures. In general, the correlations were positive for the CPI and the CSIT (which stress effective social functioning) and negative for the MMPI (which has the opposite orientation). Hogan (1969) argued that these correlations suggest that empathy ratings define a dimensions which includes social competence, intellectual promise, and feelings of self-worth.

The HES was developed by the standard technique of an item analysis of the responses of high-rated versus low-rated empathy groups. Subjects in the military officer sample ($N=100$) and the sample of

research scientists (N=45) and student engineers (N=66) were placed in high (27%), middle (46%), and low (27%) subgroups. Studying each sample separately, the responses of the high and low subgroups were compared for the 957 true-false items in the CPI, the MMPI, and an IPAR pool of items, using the chi square or Fisher's exact statistic to evaluate differences. From these two analyses, 64 items (32 scored true, 32 false) were selected for the final scale.

Items for the final scale were retained on the basis of four considerations. The first was that differences in endorsement frequencies between the high- and low-rated groups be in the same direction in both samples (61 items). Second, McClelland (1951) performed an analysis of the MMPI item pool against a criterion of rated role-playing ability, and Gough (1955) item-analyzed the CPI-MMPI pool against his TSAI. Fifteen items which appeared in these two earlier analyses also attained significance in Hogan's (1969) research and were retained. Third, 17 of the items finally selected failed to attain statistical significance but were retained on the basis of relevant content. Finally, items were chosen with balancing the scale's true-false keying in mind. Of the 64 items that constitute the HES, 31 are from the CPI, 25 from the MMPI, and the remaining eight items come from various experimental testing forms used at IPAR in Berkeley. (For a list of specific items see Hogan, 1969.)

In the samples used in its development (N=211), the average correlation of the HES with empathy ratings was .62; in an independent sample of medical school applicants (N=70), the correlation between empathy ratings and the HES was .39. Grief and Hogan (1973) reported that the HES is a psychometrically sound instrument; a test-retest

reliability coefficient of .84 was found over a three-month interval and internal consistency estimates were reported to be .71. Cross and Sharpley (1982) reported that for a sample of adult subjects (N=95), the alpha reliability was .61. Hogan (1969) reported that, with a sample of 50 college undergraduates, the reliability of the HES estimated by a test-retest correlation after a two-month interval, was .84. Applying the KR-21 formula to the scores of 110 military officers yielded a coefficient of .71. In view of the information provided by these studies, one could conclude that the reasonable, moderate reliability has been established for the HES.

Validity. Hogan (1969) contended that the HES is a good measure of an individual's "empathic disposition," but also encompasses elements of social acuity and sensitivity to nuances in interpersonal behavior. To check the construct validity of the HES, five groups of subjects studied at the IPAR were rated by the assessment staff for "social acuity," defined as: "The ability to respond intuitively and empathically to others and to group situations." The initial reliability ratings for these samples ranged from .52 to .77, average .69. Applying the Spearman-Brown formula to estimate the reliability of the composite ratings, the coefficients varied between .68 and .86, average .80. The mean correlation between HES scores and rated social acuity in the samples used to develop the scale were .58. Hogan reported that when used with a younger sample there is evidence for the construct validity of the scale. The HES was administered to 121 junior high school students (51 boys and 70 girls) in the 13-15 year old range. Two teachers were given the definition of social acuity

previously cited, then asked to rate the five most and five least socially acute boys and girls in their classes. Combining boys and girls separately, the empathy scale mean and standard deviation for the 10 "socially acute" boys defined in this manner were 33.0 and 4.1. Compared values for the "nonsocially acute" boys were 27.2 and 4.3 ($t = 2.93$, $df = 18$, $p < .01$). For the 10 most and 10 least "socially acute" girls, the means and standard deviations were 36.2 and 5.3, 30.6 and 5.5, respectively ($t = 2.20$, $p = .05$).

Hogan and Mankin (1970) maintained that if the assumption that empathy facilitates social interaction is correct, then empathic persons should be more socially adroit than those who are less empathic. One index of social competence is attractive interpersonal style; consequently, it should be pleasant to interact with those who are socially competent. Hogan and Mankin asked 32 evening college students who had been forced to interact to rate, at the end of the semester together, the degree to which they liked the other members of the class. On the basis of these ratings, each person was assigned a likeability score and the correlation between likeability and empathy was .60.

A second index of social competence that may be related to empathy is the ability to communicate; that is, relative to nonempathic people, those who are empathic may anticipate the information requirements of their listeners and guide their remarks accordingly. Hogan and Henley (1970) asked 39 men and women in a social psychology course to write brief descriptions or encodings of 10 abstract designs in such a way that another person could match the design with the encoding. Each person was assigned a score for communication competence

based on the number of his/her encodings correctly decoded by others. The correlation between these scores and the empathy scale was .60.

Hogan (1973) has suggested that moral development and moral conduct can be conceptualized in terms of five dimensions (moral knowledge, socialization, empathy, autonomy, and a dimension of moral judgment). Hogan stated that it is necessary to assess all five dimensions in order to obtain an accurate appraisal of an individual's character structure, but that empathy and socialization can give an index of moral maturity. That is, moral maturity is defined by both socialization and empathy (both of which can be scored from the CPI). In a sample of college men, Hogan, Mankin, Conway, and Fox (1970) found that professed marijuana smokers closely matched the type defined by high empathy and low socialization (person-oriented individual who is careless about conventional rules and procedures), while students who said they had not and never would smoke marijuana received low scores for empathy and high scores for socialization (relentless rule-follower). Kurtines, Weiss, Hogan, and Athansiou (1972) subsequently matched 59 heroin users to the preceding sample in terms of age, education, and race. They found that heroin users obtained low scores on both scales.

Hogan's (1973) theory stated that the emergence of socialization, empathy, and autonomy represents separate stages of moral development and that failure at one point can be compensated for by successful transition of the next stage. Kurtines and Hogan (1972) matched 130 college students with 199 incarcerated delinquents in terms of socialization scores. The empathy scale significantly discriminated

between the two groups ($r = .44$), suggesting that empathy may, in fact, compensate for poor socialization.

Hogan and Dickstein (1972) developed a projective measure of moral values that is scored for mature moral judgment on the basis of four criteria: (a) ability to see both sides of an issue, (b) concern for the sanity of the individual, (c) judgments based on spirit rather than the letter of law, and (d) concern for the welfare of society as a whole. In two samples (total $N=71$), the correlations between empathy and mature moral judgment were .48 and .51. These studies lend considerable support for the construct validity of the HES.

Concurrent validity is supported by several studies correlating scores on the HES with scores on several personality scales, such as the CPI (Grief & Hogan, 1973; Hogan, 1969), the MMPI (Hogan, 1969), the Myers-Briggs Type Indicator (Hogan, 1969), and the Manifest Anxiety Scale (Hogan, 1969).

Predictive validity is supported by several studies (Hogan, 1969; Hogan & Dickstein, 1972; Hogan & Henley, 1970; Hogan & Mankin, 1970; Hogan et al., 1970; Kurtine et al., 1972). The details of these studies are reported elsewhere in this section.

Grief and Hogan (1973), in order to determine the internal structure of the scale itself, administered the full 64 items of the scale to 260 male and 99 female undergraduate students. Item responses were intercorrelated separately by sex and then in a combined group. Each of the three resulting correlation matrices was factor analyzed using a Minres solution (Hartman, 1967). To simplify interpretation, the factors were rotated using Kaiser's (1958) varimax procedure.

The relationship between the empathy scale and the other 18 CPI scales was estimated in a similar fashion. Scale scores for 148 male undergraduates, 79 men from the Oakland, California, police force and 183 officers from the Maryland State Police (total N=410) were inter-correlated separately by group and then combined and the four correlation matrices were analyzed, again using a Minres solution and a subsequent varimax rotation.

Sex differences were small in the analysis of empathy scale items; consequently, the combined sample was used (359). From the matrix of item intercorrelations, three factors emerged that had loadings from more than one item greater than .40. These three factors accounted for 12.2% of the variance in the correlation matrix. The first factor was defined by those items suggesting that a tolerant, even-tempered disposition is a major component of empathy. The cluster of items that comprised the second factor suggested that the empathic person is also self-possessed, outgoing, and socially ascendant. The third factor was defined by those items that indicated a relationship between an empathic disposition and a humanistic and tolerant set of sociopolitical attitudes.

In terms of the CPI as a whole, the empathy scale is most closely related to measures of interpersonal effectiveness and social adequacy. It is also moderately related to measures of flexibility and independence. Grief and Hogan (1973) concluded that the results of this study support the primary, or predictive validity, of the scale and the conceptual validity of the scale. They also argued that these results attest to the scale's usefulness as a research instrument in the areas of empathy and counseling effectiveness.

The Parent Behavior Form

The Parent Behavior Form (PBF) (Worrell & Worrell, 1975) was used to assess parent behavior as it relates to perceived parent attitudes and childrearing practices. The PBF consists of two sets of 117 items that describe the parents' behavior from the perspective of the respondent. The respondent is asked to rate each descriptive statement as being "like," "somewhat like," or "not like" the parent at the time the respondent was 16 years old. For each parent, PBF scales, consisting of nine items each, assess Warmth (W), Active Involvement (AI), Equalitarianism (E), Cognitive Independence (CI), Curiosity (CU), Cognitive Competence (CC), Lax Control (LC), Conformity (CO), Achievement (AC), Strict Control (SC), Punitive Control (PC), Hostile Control (HC), and Rejection (R). The PBF was obtained by writing its developers, Drs. Judith and Leonard Worrell, Department of Psychology, University of Kentucky, Lexington, Kentucky, 40506.

The order of the scales is determined by the correlation of each scale with the lead scale Warmth. Therefore, the scales range roughly on a warmth-rejection dimension. Scales high on the list have a closer correlation with Warmth. Scales lower on the list have a negative relationship with Warmth and scales near the middle have low or variable relationships, depending upon the parent being considered. Each scale consists of nine items of parent behavior. Each item in a scale can receive a score of 1, 2, or 3, indicating "not like," "somewhat like," or "like" the parent being considered. The range of scores for any one scale extends from a low of 9 to a high of 27.

Reliability. Worrell and Worrell (1975) reported that the PBF is an empirically-derived inventory that was developed by collation of items from existing scales of perceived parent behavior and from clinical literature. An additional 100 items were constructed for the following scales: E, CI, CU, CC, CO, and LC. All items were revised in behavioral terms to describe what the parent actually does. All items were administered to 490 undergraduate students at the University of Kentucky. All items were correlated on all PBF scales and were correlated with all items and scales of the Jackson Personality Research Form (PRF) (Jackson, 1967). A criterion was established, stating that all items that did not correlate with at least two scales of the PRF, setting the criterion level at $r = +.35$, would be eliminated. The rationale was that scale items that were predictive of major personality dispositions would be the most desirable. The remaining 265 items were submitted to a cluster analysis. Scales were selected according to the resulting clusters, keeping nine items for each cluster that loaded the highest (all loadings exceeded $+0.35$). Clusters were arranged according to their correlation with the criterion cluster W. Each cluster then became a scale, with nine items and decreasing correlation scales with the lead scale W. Names for scales were selected on the basis of inspection of the items.

The scales were then resubmitted for norming and establishing reliability and validity. Reliability was assessed by means of Cronbach's coefficient alpha ($N=535$). Worrell and Worrell (1975) reported that the reliabilities do vary according to the gender of the respondent and gender of the parents. The most reliable scale is W, with alpha coefficients ranging from $.822$ to $.937$. The least reliable

scale is C0 with alpha coefficients ranging from .367 to .634. Worrell and Worrell recommended that scale C0 be used judiciously.

Worrell and Worrell (1975) reported that test-retest correlations for PBF scales, using a sample of University of Kentucky undergraduates (N=212) (males = 102, females = 110), have been established. Kelly and Worrell (1978) reported that Hasak (1974), using undergraduate college students (N=312) (males = 202, females = 110) found reliable scores for both males and females and perceived parent behavior. Subjects were retested after a two-week interval. Kelly and Worrell (1978) suggested that, in view of the information provided, the PBF is a reliable instrument for the assessment of perceived parent behavior.

Validity. Kelly and Worrell (1976) administered the Berzins-Welling ANDRO Scale, a measure of psychological androgyny, and the PBF in a counterbalanced design to 180 male and 300 female undergraduates. Subjects of each gender were classified into one of four sex-role categories: masculine, feminine, androgynous, and undifferentiated. Parent scale differences indicated that reported parental affection principally differentiates male groups, whereas parental cognitive or achievement encouragement and permissiveness differentiate female sex-role categories. Undifferentiated categories consistently reported the least parental warm and cognitive involvement, whereas androgynous subjects generally reported the highest.

Kelly and Worrell (1977) explored the role of parental cognitive stimulation in the development of intellectual functioning in young adults. Male and female college students were administered the PRF

and the PBF. American College Testing Program (ACT) scores were also obtained. Analysis revealed that PRF scales indicative of intellectual orientation and approach to tasks (understanding, achievement, and endurance), as well as ACT scores, were related principally to parental cognitive behaviors (PBF scales of Cognitive Independence, Cognitive Competence, and Cognitive Curiosity) for both males and females. In addition, differential and joint effects of parents were obtained, depending on the gender of the child.

Kelly and Worrell (1978) examined the relationship between personality characteristics, parent behaviors, and sex of subject in relation to cheating. A total of 259 male and 370 female undergraduates were administered the PBF and PRF; in addition, ACT scores were obtained for all students. The subjects were then given the opportunity to falsify self-reported scores on a task to gain course credit. Male cheaters were significantly higher in Aggression, Exhibition, Social Recognition, and Harmavoidance but lower in Autonomy (PRF) scales and ACT scores. Female cheaters were reliably lower in Harmavoidance and higher in Impulsivity than noncheaters. Among males, no parent scales (PBF) differentiated cheaters from noncheaters. Among females, parent scales reflecting reports of lower father warmth and fewer maternal equalitarian actions but higher Hostile Control significantly differentiated cheaters from noncheaters.

Kelly and Worrell (1978) reported that PBF scales have been successfully and differentially related to: characteristics of inpatient alcoholics (Tulmity, 1973), locus of control (Hasak, 1974; Tulmity, 1973), and support or opposition of women's liberation (Kelly, 1973).

Kelly (1975) factor analyzed the data from the Kelly and Worrell (1976). Three factors emerged across gender of respondent and gender of parent. Factor 1 is a warmth rejection dimension, Factor 2 represents parental control, and Factor 3 reflects parental cognitive involvement. Together, these principle components form 72.3% to 74.3% of the total variance. These studies lend considerable support for the validity of the PBF as a measure of perceived parent behaviors.

Procedures

Data were collected for this study in the fall, 1983 and spring and fall, 1984 academic semesters during regularly scheduled graduate counseling classes. One hundred and ninety-two master's and doctoral counselor candidates participated in this study. Before data was collected, participants were informed verbally that: (a) this study was dissertation research; (b) their anonymity would be protected; (c) the nature of the study would be described to them after the collection of the data; (d) their participation was completely voluntary, they were free to decline to participate and their grade in the course was not tied to participation; and (e) feedback on any or all of the instruments, as well as results of the study, would be available to them after the study was completed.

Collection of data began with the investigator asking the participants to complete a "Respondent Information Sheet" used to gather demographic data about the participants (Appendix A). The participants were asked to indicate their social security number, gender, age, level of degree program in which they were currently enrolled, major area, number of credit hours accumulated to date, ethnic group, type

of home, number of siblings, and birth order. After participants completed the "Respondent Information Sheet," copies of the HES and accompanying computer scoreable answer sheets were distributed. The participants were instructed to try to not anticipate the instrument's intent but to respond to the items in this and all of the instruments as honestly and as closely to how they most typically would. They were instructed to begin responding to the items after they had read the directions on the first page of the HES.

The PBF was administered next. It included directions for completion, and computer scoreable answer sheets were also used. All instruments were hand-scored using pre-existing keys. A score on each scale was then derived for each participant.

Analysis of Data

A factor analysis of the PBF subscale was conducted in order to obtain factor scores for both fathers and mothers. When obtained, the factors were labelled appropriately.

A multiple regression analysis was performed in order to determine the amount of variance contributed by the independent variables (the six PFB factor scores). Prior to conducting the multiple regression analysis, a series of Pearson correlations were performed to examine the covariates of gender, age, level of degree program, major area, number of credit hours, ethnic group, type of home, number of siblings, and birth order as possible control variables.

Summary

Subjects for this study were 140 female and 52 male graduate

counseling students from a large, southwestern, land-grant university and a large, southeastern, urban university. Procedures for the administration of the instruments and collection of data were discussed. The instruments used in this study were discussed, including: the Hogan Empathy Scale and the Parent Behavior Form. A description of the statistical procedure which was used to analyze the data was provided. Details of the findings resulting from the application of statistical techniques to the data obtained are presented in Chapter IV.

CHAPTER IV

RESULTS

Introduction

The findings of the present investigation are presented in this chapter. This study was designed to examine the relationship between empathy of adults and their perceptions of their parents' childrearing behavior. A factor analysis was used to determine whether the factors derived from the subscales of the PBF corresponded to those factors found in previous factor analyses. A multiple regression analysis was conducted with empathy as the dependent variable (three for fathers and three for mothers) and the PBF factor scores as the independent variables. Prior to performing the multiple regression analysis, a series of Pearson correlations were conducted to examine the covariates of gender, age, level of degree program, major area, number of credit hours, ethnic group, type of home, number of siblings, and birth order as possible control variables. Means and standard deviations on the empathy and parent behavior measures are presented in Table I.

The research hypotheses for this study were as follows:

H1. Factors derived from the subscales of the PBF will correspond to those found with previous factor analyses.

H2. There will be significant relationships between empathy and

Table 1

Means and Standard Deviations of Subjects
on Empathy and Parent Behavior Measures

Measure	Males (N=52)		Females (N=140)		Total (N=192)	
	M	SD	M	SD	M	SD
Empathy	40.96	5.57	40.80	5.26	40.84	5.33
Parent Behavior Form						
Warmth						
Fathers	17.67	5.55	19.53	5.77	19.03	5.76
Mothers	20.67	4.43	21.62	5.48	21.36	5.23
Active Involvement						
Fathers	16.06	5.20	18.35	5.55	17.93	5.54
Mothers	20.50	4.64	20.96	5.14	20.83	5.01
Equalitarianism						
Fathers	18.69	5.19	19.60	4.99	19.35	5.04
Mothers	19.40	4.20	20.89	5.10	20.49	4.91
Cognitive Independence						
Fathers	18.44	4.83	20.17	5.32	19.70	5.24
Mothers	18.92	3.88	20.48	4.67	20.06	4.52
Curiosity						
Fathers	15.98	4.91	18.51	5.69	17.83	5.59
Mothers	16.60	4.11	18.26	4.67	17.81	4.57
Cognitive Competence						
Fathers	15.35	3.67	17.23	4.38	16.72	4.27
Mothers	16.98	4.31	19.12	3.84	18.53	4.07
Lax Control						
Fathers	15.27	4.31	15.29	4.04	15.28	4.10
Mothers	16.98	4.31	19.11	3.84	18.53	4.07
Conformity						
Fathers	18.02	3.57	17.91	3.85	17.94	3.76
Mothers	20.21	3.43	19.98	3.59	20.04	3.54
Achievement						
Fathers	15.19	4.18	15.35	4.18	15.30	4.17
Mothers	15.87	3.54	14.95	3.91	15.20	3.83

Table 1 (Continued)

Measure	Males (N=52)		Females (N=140)		Total (N=192)	
	M	SD	M	SD	M	SD
Strict Control						
Fathers	14.29	4.68	14.99	4.62	14.80	4.64
Mothers	16.23	4.47	15.90	4.86	15.99	4.75
Punitive Control						
Fathers	16.98	4.63	16.84	4.92	16.88	4.83
Mothers	17.14	4.70	16.55	4.72	16.72	4.71
Hostile Control						
Fathers	14.29	4.84	13.56	4.47	13.76	4.57
Mothers	14.77	5.03	14.70	5.45	14.72	5.33
Rejection						
Fathers	14.02	4.42	13.31	4.16	13.50	4.23
Mothers	12.83	3.20	12.74	4.10	12.77	3.87

childrearing behavior when subject gender, age, level of degree program, major area, number of credit hours, ethnic group, type of home, number of siblings, and birth order are controlled.

To determine whether the factors derived from the subscales of the PBF corresponded to those found previously, a factor analysis of subscale scores for the present sample was conducted. Results of this factor analysis are presented in Table 2 for fathers and in Table 3 for mothers.

Kelly (1975) factor-analyzed the PBF scores of University of Kentucky sophomores (N=480) obtained from an earlier study (Kelly & Worrell, 1976). In his study, three factors emerged. Factor 1 was a

Warmth dimension, Factor 2 represented Parental Control, and Factor 3 reflected Parental Cognitive Involvement. Together, these principle components accounted for 72.3% to 74.3% of the total variance. In the present study, three factors emerged for fathers. Factor 1 was best described as Nurturing Independence, Factor 2 represented a Control dimension, and Factor 3 reflected Permissiveness. These three factors accounted for 78.8% of the original variance attributable to father childrearing behavior.

Table 2

PBF Factor Scores for Fathers (N=192)

Subscale Name	Factor 1 Nurturant Independence	Factor 2 Control	Factor 3 Permissiveness
Warmth	.855		
Active Involvement	.846		
Equalitarianism	.809		
Cognitive Independence	.914		
Curiosity	.827		
Cognitive Competence	.817		
Lax Control			.914
Conformity		.564	
Achievement		.734	
Strict Control		.855	
Punitive Control		.805	
Hostile Control		.855	
Rejection		.766	

Table 3

PBF Factor Scores for Mothers (N=192)

Subscale Name	Factor 1 Nurturant Independence	Factor 2 Demanding Control	Factor 3 Conforming Control
Warmth	.806		
Active Involvement	.764		
Equalitarianism	.731		
Cognitive Independence	.873		
Curiosity	.826		
Cognitive Competence	.729		
Lax Control			
Conformity			.664
Achievement		.737	
Strict Control		.664	.584
Punitive Control		.658	.592
Hostile Control		.818	
Rejection		.825	

These factors were similar to those obtained by Kelly (1975). However, there were some notable differences. In the earlier factor analyses, the factors reflected rather discrete dimensions of Warmth (tapping PBF subscales of Warmth, Active Involvement, Equalitarianism, and Cognitive Independence), Control (tapping PBF subscales of Lax Control, Conformity, Strict Control, and Punitive Control), and Cognitive Involvement (tapping PBF scales of Cognitive Competence, Curiosity, and Achievement). The present factors, which best described fathers and were most representative of parent behavior in general, reflected dimensions of Nurturant Independence (tapping PBF subscales of Warmth, Active Involvement, Equalitarianism, Cognitive Independence,

Curiosity, and Cognitive Competence), Control (tapping PBF subscales of Conformity, Achievement, Strict Control, Punitive Control, Hostile Control, and Rejection), and Permissiveness (tapping PBF subscale of Lax Control). The most salient differences between the two sets of factor scores involved the dimensions of control and cognitive involvement. Both sets of factors tapped the dimensions of Warmth, Control, and Cognitive Involvement. However, in the present sample, the dimensions of Warmth and Cognitive Involvement tended to group together. Phrases that best describe the subscales that comprise Factor 1 for the present sample would be that the parent is seen as warm, loving, and accepting; actively nurturant; treats child as an equal; encourages child to think for him/herself; wants child to express his/her individuality; wants child to ask questions about life; and encourages child to develop skills to be competent at a variety of tasks. Factor 1 appeared to reflect nurturant parent behaviors as well as parent behaviors that would facilitate competency and autonomy/independence. Therefore, father Factor 1 for the present sample was labeled "Nurturant Independence." The dimension of Control tended to group in terms of restrictive control and permissiveness. Father Factor 2 for the present sample is best described by phrases such as: wants child to adopt values of hard work, religious involvement, and obedience to rules and orderliness; has high goals for achievement for child and communicates those expectations to child; has many rules that are communicated and enforced; insistent and coercive about conformity to all rules; and communicates dissatisfaction with everything child does. Factor 2 for the present sample was labeled "Control." Father Factor 3 for the present sample was best described by phrases such as:

provides a wide latitude of freedom for child's activities, does not set down many specific rules for child to follow, and is never coercive or demanding. Father Factor 3 was labeled "Permissiveness."

For mothers, the most salient differences when compared to fathers appeared to be in the area of control (see Table 3). A mother Factor 1 emerged with similar loadings as father Factor 1--Nurturant Independence--and was so labeled. However, in contrast to fathers, where control tended to group in terms of its restrictive or permissive elements, control for mothers grouped in terms of demanding or conforming elements. For the present sample, mother Factor 2 (tapping PBF subscales of Achievement, Strict Control, Punitive Control, Hostile Control, and Rejection) was best described by phrases such as: has high goals for achievement for child and communicates these expectations to child, has many rules and communicates these to child, is restrictive about free movement, is coercive about conformity to all rules, gives blanket criticisms, controls child through guilt induction and psychological withdrawal, and is intrusive into child's private life. Mother Factor 2 was labeled "Demanding Control." Mother Factor 3 (tapping PBF subscales of Conformity, Strict Control, and Punitive Control) was best described by phrases such as: wants child to adopt certain values, sees child as extension of self and feels hurt when child does not conform, fears losing control over child, has many rules, supervises child's activities and is restrictive, constantly reminds about rules, monitors behavior closely, is coercive about conformity to rules, and punishes all misbehavior. Mother Factor 3 was labeled "Conforming Control." Two PBF subscales, "Strict Control" and "Punitive Control," loaded on both Factor 2--

"Demanding Control" and Factor 3--"Conforming Control." These two subscales represented two related dimensions of control. Both subscales represented elements of parent behavior that are perceived as demanding, restrictive, intrusive, and conforming. Each subscale contributes its unique control elements to Factors 2 and 3.

In order to determine whether a significant relationship exists between empathy and childrearing behavior, a multiple regression analysis was conducted with empathy as the dependent variable and the PBF factor scores for fathers and mothers as independent variables. Prior to performing the multiple regression analysis, a series of Pearson correlations were conducted to examine the covariates of gender, age, level of degree program, major area, number of credit hours, ethnic group, type of home, number of siblings, and birth order as possible control variables. Results of the Pearson correlations indicated that the covariates were not significantly correlated with empathy and therefore were eliminated as control variables. Results of the multiple regression analysis indicated that no PBF factor scores for either fathers or mothers were significant predictors of empathy.

A secondary analysis was conducted to test the incidental hypothesis that extreme scorers on empathy might actually differ on the parent behavior factor scores. The upper 10% of scorers on empathy (N=20) and the lower 10% of scorers on empathy (N=20) were selected and placed in two groups. A multivariate analysis of variance was conducted, using the two empathy groups and the father and mother PBF factor scores as dependent variables, to determine whether there were

significant differences between the groups. The results of the MANOVA indicated that there were no significant differences between the two empathy groups.

However, a univariate test of differences indicated that empathy groups differed significantly on mother Factor 1--Nurturant Independence. A univariate test was appropriate evidence for differences in this particular analysis because the factors, which served as dependent variables in this secondary analysis, are proven to be orthogonal in the population. Therefore, the multivariate procedure of correcting each factor score by the remaining variance related to the other factors is inappropriate. The nature of the empathy group differences in mother Factor 1--Nurturant Independence--was such that the mean standard score (.298) of the high empathy group was significantly greater ($p < .05$) than the mean standard score (-.352) for the low empathy group.

Summary

There were two hypotheses for this study. The first stated that the factors derived from the subscales of the PBF would correspond to those found in previous factor analyses. The second stated that there would be a significant relationship among empathy and childrearing behavior when subject gender, age, level of degree program, major area, number of credit hours, ethnic group, type of home, number of siblings, and birth order were controlled. The results of the factor analysis performed for this study supported the earlier factor analysis by Kelly (1975). In the earlier factor analysis, three factors

emerged which represented parental dimensions of Warmth, Control, and Cognitive Involvement. The same basic dimensions of parent behavior were represented in the factor analysis performed for this study. However, there were differences in the way that PBF subscales grouped to form the second set of factors. In other words, the results of both factor analyses indicated that the PBF tends to measure aspects of parent behavior that have to do with Warmth/Nurturance, Control, and Cognitive Involvement. However, depending on the sample, the PBF subscales may load differently and different aspects of parent behavior may be emphasized within the three dimensions of Warmth, Control, and Cognitive Involvement. For example, the three factors for a sample of University of Kentucky sophomores taped directly into those scales that are representative of Warmth, Control, and Cognitive Involvement. However, for the present sample of graduate students (N=192), elements of Warmth/Nurturance and Cognitive Involvement combined to form Factor 1--Nurturing Independence--for both fathers and mothers. The dimension of Control was the other important dimension of parent behavior for this sample of graduate students. This sample perceived fathers and mothers differently in terms of control elements. For fathers, control was divided into two apparently opposite categories: restrictive control and permissiveness. However, for mothers, the control elements were consistent but the categories dealt more with type distinctions: demanding control and conforming control. Subjects did not perceive permissiveness as a perceived element of mother behavior. Consequently, the same basic elements of parent behavior (Warmth, Control, and Cognition) are being tapped by both the the University of Kentucky sample and the graduate sample. Depending

on the sample, different aspects of parent behavior will apparently be perceived differently and this produces factors unique to that sample within the primary dimensions of Warmth, Control, and Cognitive Involvement.

Results of the multiple regression analysis indicated that there was not a significant relationship between empathy and childrearing behavior. The secondary analysis of the high and low empathy groups was conducted. Results indicated that the high empathy group perceived their mothers to be significantly more nurturing and facilitative of independence than the low empathy group. These findings will be discussed along with conclusions and recommendations derived from the investigation in Chapter V.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to examine the relationship between adults' empathy and perceptions of their parents' childrearing behavior. The study was designed to investigate the relationship between the empathy scores of graduate students in counseling and their perceptions of their parents' childrearing behaviors. The role of gender, age, level of degree program, major area, number of credit hours, ethnic group, type of home, number of siblings, and birth order were considered to determine their relationships to these major variables of interest.

The subjects in this study were 52 male and 140 female counseling graduate students from a large, land-grant university in the southwest and a large, urban, southeastern university. Each subject completed all the instruments used in the study, as well as a "Respondent Information Sheet."

Test data consisted of the subjects' scores on the Hogan Empathy Scale (HES) and the subjects' scores on the 13 subscales of the Parent Behavior Form (PBF).

There were two hypotheses for this study. Hypothesis 1 stated that factors derived from the subscales of the PBF would correspond to those found with previous analyses. A factor analysis of the subjects'

Results indicated that three factors emerged across gender of subject and gender of parent. For fathers, Factor 1 was a Nurturing Independence dimension, Factor 2 represented Control, and Factor 3 reflected Permissiveness. For mothers, Factor 1 was similar to father Factor 1 and reflected Nurturing Independence, Factor 2 represented Demanding Control, and Factor 3 represented the dimension of Conforming Control. Kelly (1975) reported that in a factor analysis of the PBF with a sample of University Kentucky sophomores, three factors emerged which represented parental behavior dimensions of Warmth, Control, and Cognitive Involvement. In the present sample of graduate counseling students, the same three underlying dimensions of parent behavior emerged. However, there were differences. The dimensions of Warmth/Nurturance and Cognitive Involvement combined to form one factor--Nurturant Independence, and the control dimension was isolated into distinct classifications of control or the lack of it. For fathers, the control dimension divided into Control and Permissiveness. In contrast, permissiveness was not perceived as a quality of mothers. Mothers were perceived as more controlling, as evidenced by the control dimensions of Demanding Control and Conforming Control. From the finding that the factor analysis of PBF subscale scores for the present sample reflected the same underlying dimensions of the PBF as did the earlier factor analysis by Kelly (1975), it was concluded that there was support for Hypothesis 1.

Hypothesis 2 stated that there would be a significant relationship between empathy and childrearing behavior when subject gender, age, level of degree program, major area, number of credit hours, ethnic group, type of home, number of siblings, and birth order were

controlled. A multiple regression analysis was conducted, with empathy as the dependent variable and PBF factor scores for fathers and mothers as independent variables. Prior to performing the multiple regression analysis, a series of Pearson correlations were conducted to examine the covariates as possible control variables. The results indicated that the covariates offered no predictive value and were therefore eliminated. The multiple regression analysis revealed that no PBF factor scores appeared to be significant predictors of empathy. The null hypothesis could not be rejected. Consequently, Hypothesis 2 was not supported.

However, a secondary analysis was conducted to determine whether groups scoring at the extremes on empathy would differ significantly from each other in terms of their scores on the PBF factors. An overall MANOVA was conducted using PBF factors as a set of six dependent variables. The upper 10% of scorers on empathy (N=20) and lower 10% of scorers on empathy (N=20) were placed in two groups. None of the overall tests were statistically significant at the .05 level. However, one of the univariate tests showed statistically significant group differences. Because it is appropriate to assume the PBF factors are orthogonal, it is appropriate to consider the significant differences revealed by the univariate tests. The nature of the differences found indicates that the high empathy group perceived their mothers to be significantly more nurturing of independence than the low empathy group.

Conclusions

The finding that the factors derived from the subscales of the

PBF with the present sample corresponded to those found with previous factor analyses is best explained in terms of the internal consistency of the PBF itself. Worrell and Worrell (1975) reported that the scales of the PBF are arranged on a warmth-rejection dimension. Scales lower on the list have a positive correlation with warmth. Scales lower on the list have a negative correlation with warmth, and scales in the middle have low or variable relationships, depending on the parent being considered. In previous factor analyses (Kelly, 1975), three factors emerged. Factor 1 was a warmth-rejection dimension, Factor 2 represented parental control, and Factor 3 reflected parental cognitive involvement. In the present investigation, essentially the same dimensions of parent behavior were tapped. Factors derived for this study tapped nurturance and independence, control and permissiveness. These findings are consistent with the previous factor analyses. It would appear that how the PBF subscales group under factor analysis will vary, depending on population used. However, the same underlying dimensions (warmth, control, cognitive involvement) will remain consistent.

The finding that there was not a significant relationship between empathy of adults and their perceptions of their parents' behavior was inconsistent with previous research. Numerous studies have indicated that a relationship does indeed exist between certain parent behaviors and children's behaviors. In terms of parent behaviors and the development of empathy, Zahn-Waxler et al. (1979) concluded that early disciplinary practices provide the basis, not only for children's responsibility for their own acts, but for general responsiveness to the feelings of others as well. In view of the demonstrated links

between parent behavior and behaviors in children, and specifically between parent behaviors and the development of empathy, it would have been logical to assume that a positive relationship would have been found in this study. However, a significant relationship was not found.

A plausible explanation for these results might be provided by an examination of the instruments used in this study. Hogan (1975) stated that the foundation of the HES is a role-theoretical model which depends heavily on the concept of empathy. The major underlying assumption of a role theoretical perspective is ". . . that in order to interact effectively with others, people must take into account the view that others hold regarding them and the situation in which they are located" (Hogan, 1975, pp. 14-15). According to this perspective, empathy refers to the process of representing to oneself the expectations that others hold with regard to one's behavior. Nothing is said about the accuracy, the willingness, or the ability to act in accordance with one's understanding of what others expect. From this perspective, the HES may be a measure of social acuity or social competency. In fact, Hogan (1969) stated that the HES has been correlated with various indices of social competency. Several studies (Hogan, 1973; Hogan & Dickstein, 1972; Hogan & Henley, 1970; Hogan & Mankin, 1970) indicated that scores on the HES were more predictive of indices of socialization (likeability, ability to communicate, social competence, and moral judgment) than empathic disposition. Consequently, perhaps scores on the HES reflect the underlying dimensions of the construct of socialization. It could easily be argued that a

highly socialized individual is more likely to be empathic and interpersonally competent than an undersocialized individual. This assumption has been supported by several studies (Kurtines & Hogan, 1972; Kurtines, Weiss, & Hogan, 1975).

It would appear that the HES is more accurately a measure of the elements of social comprehension that comprise the empathic process rather than the affective elements. Grief and Hogan (1973) reported that a factor analysis of the intercorrelations of the scale items revealed three themes underlying scale scores that were called: tolerance and considerateness, social self-confidence, and humanistic values. Clearly, these factors would be descriptive of an empathic individual; however, the focus of the role-theoretical perspective is on social competency or successful role performance. This perspective with regard to the empathic process lends itself more appropriately to the aspects of performance rather than affective aspects of the empathic process.

If, in fact, the HES is more a measure of the social aspects of empathy rather than the affective elements of empathy, it would be important to ascertain how it interacts with other research instruments; in this specific case, the PBF. The descriptions (Appendix B) of the first six subscales of the PBF (Warmth, Active Involvement, Equalitarianism, Cognitive Independence, Curiosity, and Cognitive Competence) appear to describe parenting behavior that would be facilitative of the cognitive and affective elements of empathy. The following are samples of items from each of the aforementioned subscales:

1. Warmth: Comforts me when I'm afraid

2. Active Involvement: Believes in showing his/her love for me
3. Equalitarianism: Doesn't get angry if I disagree with one of his/her ideas
4. Cognitive Independence: Really wants me to tell him/her how I feel about things
5. Curiosity: Talks with me about philosophical ideas
6. Cognitive Competence: Wants me to find out answers for myself

Not only do these subscales appear to deal with the affective and cognitive elements of empathy, but so do the factors (Nurturant Independence, Control, Permissiveness) derived for this study.

It would seem that the HES and the empathy-related subscales of the PBF tap into different elements of the empathic process. Consequently, it would be logical to assume there would be little relationship when the scales are used in conjunction with one another. This might be one explanation for the finding that no relationship was found between perceptions of parent behavior and empathy.

The PBF is a measure of parent behavior as it relates to perceived parent attitudes and childrearing practices. The respondent is asked to rate each descriptive statement as being "like," "somewhat like," or "not like" the parent at the time the respondent was 16 years old. Studies (Kelly, 1973, 1975; Kelly & Worrell, 1976, 1977a, 1977b, 1978; Worrell & Worrell, 1975) using the PBF to measure perceptions of parent behavior have employed primarily undergraduate student populations. For the present study, the subjects' mean age was 30.71. It is difficult to ascertain precisely how an individual might perceive his/her parents' differently from 21 years old to 31 years old.

However, it is logical to assume that differences in perceptions would occur. Consequently, it would be expected that there might be some alteration in the perceptions of an undergraduate who is asked to respond as if he/she were 16 years old and a 31 year old graduate student who is asked to respond as if he/she were 16 years old. Perceptions of parent behavior would be modified by education, maturation, quality of the parent/child relationship, and by therapy and other life experiences. Clearly, these processes and their influence on perceptions of parent behavior would have had an impact on the responses provided by the subjects used in this study. It is difficult to determine exactly how age effects responses of subjects on the PBF. No studies using older, similar populations are available for comparison.

Of interest was the finding that subjects perceived their fathers and mothers differently in terms of parent behavior. The salient aspects of father behavior appeared to be nurturing independence, control, and permissiveness, while mother behavior was best described by nurturing independence and two dimensions of control (demanding control and conforming control). Permissiveness did not appear to be perceived as an important dimension of mother behavior. This finding might be best explained by a stereotyped pattern of mother-father behavior where the mother is more nurturant and active in limit-setting and the father is viewed as mediator and ultimate authority. These findings indirectly support those of Barnett et al. (1980), who found that heightened empathy was associated, not with an individual parent's level of empathy, but with a particular, stereotyped pattern of mother-father empathy. Barnett et al. concluded that the factors

believed to enhance the development of empathy may be more a product of the mother's interaction with the child than the father's.

The results of the secondary analysis are particularly interesting in light of these conclusions. The results of the univariate analyses of the high and low scoring empathy groups revealed that the high empathy group perceived their mothers to be significantly more nurturing of independence than the low empathy group. The following would be behaviors descriptive of the parent who would be nurturing of independence: the parent is seen as warm, loving, and accepting; listens to problems, is concerned about feelings, takes an active role in communicating feelings; allows open expression of child's feelings; and encourages child to consider the feelings of others. From this perspective, it would be logical to expect that a parent (in this case mothers), who is perceived as nurturing of independence, might be more facilitative of empathic ability in their children.

The purpose of this study was to examine the relationship between adults' perceptions of their parents' behavior and empathy. This study was predicated on research (Bronfenbrenner, 1979; Michaels et al., 1977; Walters & Stinnett, 1971) that suggested that children's perceptions of their parents' behavior are more relevant determinants of children's behavior and adjustment than the objective reality to which those perceptions refer. Also suggested was that measuring parenting behavior by observational methods neglected potentially important perception variables.

In view of the fact that no relationship was found between adult perceptions of parent behavior and empathy, it might be important to consider other aspects of the parent-child relationship as variables

in the development of empathy. However, in spite of the fact that no relationship was found between the variables under consideration in this study, it would not be appropriate to assume that none exists.

Other aspects of the parent-child relationship to be considered might be the differential effects of the age of the child, parent behaviors, and empathy. Abraham et al. (1983) concluded that empathy-related aspects of both maternal and paternal behaviors are affected by the child's age. They argued that it may no longer be appropriate to say that parent behaviors, in and of themselves, either impede or facilitate the development of empathy in children. The child's age may be a crucial contingency in the relationship between parent behavior and empathy. Roe (1980) argued that a strong prior positive relationship (bonding) may be a critical mediating variable between power assertive disciplinary practices and empathy development. Zahn-Waxler et al. (1983) argued that it is not parent behavior per se that is critical in empathy development but the overall emotional climate of the home.

Another area to be considered is parenting style. A majority of the research on parent behavior focuses on specific behaviors with a specific age child and with a specific outcome or behavior in mind. Perhaps specific parent behaviors are not as important as a graduated, flexible style of parenting based on the child's age, needs, capabilities for self-support, etc.

Recommendations

The following are recommendations resulting from this study:

1. Further research is needed to clarify if an interaction of

parent behavior and child development variables are facilitative of empathy.

2. Further research is needed to explore and clarify the role of perception of early experiences and behavior.

3. Future research should consider examining other variables such as agreement of parents' perceptions and their children's perceptions of their parents' behavior and empathy. Other relationships worthy of investigation might be the relationship between parents' empathy, children's empathy, perceptions of parent behavior, and perceptions of parents' empathy.

4. A replication of this study is suggested using a sampling procedure that would provide a sample more representative of the general population. In addition, it would be important to use an empathy instrument, such as the Affective Sensitivity Scale (Kagan & Schneider, 1977) that taps the affective elements of the empathic process, together with the HES and the PBF.

It is hoped that this study, by examining the relationship between adults' perceptions of parent behavior and adults' empathy, may have contributed some new understanding to the previous knowledge about how parent behavior effects empathy development. Perhaps it will serve as a stimulus to researchers to further examine the relationship between parent behavior and behavioral outcomes in adults.

REFERENCES

- Abraham, K. G., Kuehl, R. O., & Christopherson, V. A. (1983). Age-specific influence of parental behaviors on the development of empathy in preschool children. Child Study Journal, 13(3), 175-185.
- Adler, A. (1956). The psychology of Alfred Adler. New York: Basic Books.
- Allport, G. W. (1937). Personality: A psychological interpretation. New York: Holt.
- Alvy, K. T. (1968). Relation of age to children's egocentric and cooperative communication. Journal of Genetic Psychology, 112, 275-286.
- Aronfreed, J. (1968). Conduct and conscience. New York: Academic Press.
- Aspy, D. N. (1975). Empathy: Let's get the hell on with it! Counseling Psychologist, 5(2), 10-14.
- Aspy, D. N., & Roebuck, F. N. (1975). From humane technology and back again many times. Education, 95(2), 163-171.
- Ausubel, D. D., Balthazar, E. E., Rosenthal, J., Blackman, L. S., Schpoont, S. N., & Welkowitz, J. (1954). Perceived parent attitudes as determinants of children's ego structure. Child Development, 25, 173-183.
- Avgar, A., Bronfenbrenner, U., & Henderson, C. R., Jr. (1977). Socialization practices of parents, teachers, and peers in Israel: Kibbutz, Moshav, and city. Child Development, 48, 1219-1227.
- Bandura, A., & McDonald, F. (1963). Influences of social reinforcement and the behavior of models in shaping children's moral judgements. Journal of Abnormal and Social Psychology, 67, 274-281.
- Bandura, A., & Walters, R. (1963). Social learning and personality development. New York: Holt, Rinehart, & Winston.
- Barnett, M. A., & Bryan, J. H. (1974). Effects of competition with feedback on children's helping behavior. Developmental Psychology, 10, 838-842.

- Barnett, M. A., King, L. M., Howard, J. A., & Dino, G. A. (1980). Empathy in young children: Relation to parent's empathy, affection, and emphasis on the feelings of others. Developmental Psychology, 16(3), 243-244.
- Barnett, M. A., Mathews, K. A., & Howard, J. A. (1979). Relationship between competitiveness and empathy in 6- and 7-year olds. Developmental Psychology, 15, 221-222.
- Barrett-Leonard, G. T. (1981). The empathy cycle: Refinement of a nuclear concept. Journal of Counseling Psychology, 28(2), 91-100.
- Barron, F. (1954, November). Charades as an assessment device. (Technical memorandum, project #7730, contract #AF(600)-8, Officer Education Research Laboratory.) Air Force Personnel and Training Research Center, Maxwell Air Force Base, Alabama.
- Bayley, N. (1965). Research in child development: A longitudinal perspective. Merrill-Palmer Quarterly of Development and Behavior, 11, 183, 208.
- Berger, S. (1962). Conditioning through vicarious instigation. Psychological Review, 69, 450-466.
- Biller, H. B. (1969). Father dominance and sex-role development in kindergarten age boys. Developmental Psychology, 1, 87-94.
- Block, J. (1965). The Q-sort method in personality assessment and psychiatric research. Springfield, Illinois: Charles C. Thomas.
- Block, J. (1969). Q-sort: Childrearing attitudes. Berkeley: University of California, Department of Psychology.
- Boring, E. G. (1929). A history of experimental psychology. New York: Appleton-Century.
- Borke, H. (1971). Interpersonal perception of young children: Ego-centrism or empathy? Developmental Psychology, 5, 263, 269.
- Borke, H. (1973). The development of empathy in Chinese and American children between three and six years of age: A crosscultural study. Developmental Psychology, 9, 102-108.
- Bronfenbrenner, U. (1961a). The changing American child--A speculative analysis. Journal of Social Issues, 17, 6-18.
- Bronfenbrenner, U. (1961b). Some familial antecedents of responsibility and leadership in adolescents. In: Leadership and interpersonal behavior, L. Petrullo and B. M. Buss, Eds. New York: Holt, Rinehart, & Winston, 239-272.

- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. American Psychologist, 32, 513-531.
- Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge: Harvard University Press.
- Brook, J., Whiteman, M., Gordon, A., Brenden, C., & Jinishian, A. (1980). Relationship of maternal and adolescent perceptions of maternal childrearing practices. Perceptual and Motor Skills, 51(3), 1043-1046.
- Brown, J. A. (1967). Freud and the post-freudians. Baltimore: Penguin.
- Bruner, J. S., & Taguiri, R. L. (1954). The perception of people. In: Handbook of social psychology, C. Lindzey, Ed. Cambridge: Addison-Wesley, 310-347.
- Buchheimer, A. (1963). The development of ideas about empathy. Journal of Counseling Psychology, 10, 61-70.
- Buckley, N., Siegal, L. S., & Ness, S. (1979). Egocentrism, empathy, and altruistic behavior in young children. Developmental Psychology, 15(3), 329-330.
- Burns, N., & Cavey, L. (1957). Age differences in empathy ability in young children. Canadian Journal of Psychology, 11, 227-230.
- Carlozzi, A. F., Gaa, J. P., & Liberman, D. V. (1983). Empathy and ego development. Journal of Counseling Psychology, 30(1), 113-116.
- Carlozzi, A. F., & Hurlburt, J. D. (1982). Empathy, expressiveness, and instrumentality. The Humanist Educator, 20(4), 154-160.
- Chandler, M. J., & Greenspan, S. (1972). Ersatz egocentrism: A reply to H. Borke. Developmental Psychology, 7, 104-106.
- Chapin, F. S. (1942). Preliminary standardization of a social insight scale. American Sociological Review, 7, 214-225.
- Christopher, S. A. (1967). Parental relationship and value orientation as factors in academic achievement. Personnel and Guidance Journal, 45, 921-925.
- Cicchetti, E. V. (1967). Reported family dynamics and psychopathology: The reactions of schizophrenics and normals to parental dialogues. Journal of Abnormal Psychology, 72, 282-289.
- Clark, K. B. (1980). Empathy: A neglected topic in psychological research. American Psychologist, 35(2), 187-190.

- Cohen, B. D., & Kline, J. F. (1968). Referent communication in school age children. Child Development, 39, 597-609.
- Cowan, P., Langer, J., Heavenrich, J., & Nathanson, M. (1969). Social learning and Piaget's theory of cognitive development. Journal of Personality and Social Psychology, 11, 261-275.
- Craig, J. E. (1966). Perceived parental attitudes and the effects of maternal versus paternal census and approval in good and poor premorbid hospitalized female schizophrenics. Dissertation Abstracts, 27, 1288.
- Craig, K. D., & Wienstein, M. S. (1965). Conditioning vicarious affective arousal. Psychological Reports, 17, 955-963.
- Cruse, S.; Clark, S., & Pease, D. (1978). Iowa parent behavior inventory manual. Ames, Iowa: Iowa State University Research Foundation.
- Cronbach, L. J. (1955). Processes affecting scores or "understanding of others" and "assumed similarity." Psychological Bulletin, 52, 177-193.
- Cross, D. G., & Sharpley, C. F. (1982). Measurement of empathy with the Hogan empathy scale. Psychological Reports, 50(1), 62.
- Cross, H. J. (1969). College students' memories of their parents: A factor analysis of the CRPBI. Journal of Consulting and Clinical Psychology, 33, 275-278.
- Cross, H. J., & Allen, J. G. (1969). Relationship between memories of parental behavior and academic achievement in college. Proceedings of the 77th Annual Convention of the American Psychological Association, 4, 285-286.
- Cummings, E. M., Zahn-Waxler, C., & Radke-Yarrow, M. (1981). Young children's responses to anger and affection by others in the family. Child Development, 52, 1274-1281.
- Darley, J. M., & Latané, B. (1968). Bystander intervention in emergencies: Diffusion of responsibility. Journal of Personality and Social Psychology, 8, 377-383.
- Deutsch, F. (1974). Female preschoolers' perceptions of affective responses and interpersonal behavior in videotaped episodes. Developmental Psychology, 10, 733-740.
- Deutsch, F. (1975a). The effects of sex of subject and story character of preschoolers' perceptions of affective responses and interpersonal behavior in story sequences. Developmental Psychology, 11, 112-113.

- Deutsch, F. (1975b). Observational and sociometric measures of peer popularity and their relationship to egocentric communication in female preschoolers. Developmental Psychology, 10(4), 745-747.
- Deutsch, F., & Madle, R. A. (1975). Empathy: Historic and current conceptualizations, measurement, and a cognitive theoretical perspective. Human Development, 18(4), 267-287.
- Droppleman, L. F., & Schaefer, E. S. (1963). Boys' and girls' reports of maternal and paternal behavior. Journal of Abnormal and Social Psychology, 67(6), 648-654.
- Dymond, F. F. (1948). A preliminary investigation of the relation of insight and empathy. Journal of Consulting Psychology, 12, 228-233.
- Dymond, R. F. (1949). A scale for the measurement of empathic ability. Journal of Consulting Psychology, 13, 127-133.
- Dymond, R. F. (1950). Personality and empathy. Journal of Consulting Psychology, 14, 343-350.
- Dymond, R. F., Hughes, A. S., & Raabe, V. L. (1952). Measuring changes in empathy with age. Journal of Consulting Psychology, 16, 202-206.
- Eisenberg-Berg, N., & Mussen, P. (1978). Empathy and moral development in adolescence. Developmental Psychology, 14(2), 185-186.
- Elkind, D., & Scott, L. (1962). Studies in perceptual development: The decentering of perception. Child Development, 33, 619-630.
- Escalona, S. K. (1945). Feeding disturbances in very young children. American Journal of Orthopsychiatry, 15, 76-80.
- Ferreira, A. J. (1961). Empathy and the bridge function of the ego. Journal of American Psychoanalytic Assessment, 9, 91-105.
- Feshbach, N. D. (1973, August). Empathy: An interpersonal process. (Paper presented at the American Psychological Association Symposium on Social Understanding in Children and Adults: Perspectives on Social Cognition, Montreal, Canada.)
- Feshbach, N. D. (1974). The relationship of childrearing factors to children's aggression, empathy, and related positive and negative and social behaviors. In: Determinants and origins of aggressive behaviors, J. DeWit and W. W. Hartup, Eds. The Hague, Netherlands: Mouton & Co., 427-436.
- Feshbach, N. D. (1975). Empathy in children: Some theoretical and empirical considerations. Counseling Psychologist, 5, 25-30.

- Feshbach, N. D., & Feshbach, S. (1969). The relationship between empathy and aggression in two age groups. Developmental Psychology, 1, 102-107.
- Feshbach, N. D., & Kuchenbecker, S. (1974, September). A three component model of empathy. (Paper presented at the American Psychological Association Symposium on The Concept of Empathy: Bond Between Cognition and Social Behavior, New Orleans, Louisiana.)
- Feshbach, N. D., & Roe, K. (1968). Empathy in six- and seven-year-olds. Child Development, 39, 133-145.
- Flapan, D. (1968). Children's understanding of social interaction. New York: Teacher's College, Columbia University Press.
- Flavell, J. H. (1963). The developmental psychology of Jean Piaget. New York: Van Nostrand Reinhold.
- Flavell, J., Botkin, P., Fry, C., Wright, J., & Jarvis, P. (1968). The development of role taking and communication skills in children. New York: Wiley.
- Freeman, E. B. (1984). The development of empathy in young children: In search of a definition. Child Study Journal, 13(4), 235-245.
- Freedman, M. B., Leary, T. F., Ossorio, A. G., & Coffey, H. S. (1951). The interpersonal dimension of personality. Journal of Personality, 20, 143-161.
- Freud, S. (1961). Female sexuality. London: Hogarth.
- Fromm-Reichman, F. (1950). Principles of intensive psychotherapy. Chicago: University of Chicago Press.
- Funkenstein, D. H., King, S. H., & Drolette, M. E. (1955, June). Perceptions of parents and social attitudes. (Paper presented at the American Psychopathological Society, Los Angeles, California.)
- Gaertner, S. L., & Dovidio, J. F. (1977). The subtlety of white racism, arousal, and helping behavior. Journal of Personality and Social Psychology, 35, 691-707.
- Gates, G. H. (1923). An experimental study of the growth of perception. Journal of Educational Psychology, 14, 449-461.
- Gates, G. S. (1927). The role of the auditory element in the interpretation of emotions. Psychological Bulletin, 24, 175.
- Geer, J. H., & Jarnecky, L. (1973). The effect of being responsible for reducing another's pain on subject's response and arousal. Journal of Personality and Social Psychology, 26(2), 232-237.

- Goodenough, E. W. (1957). Interest in persons as an aspect of sex difference in the early years. Genetic Psychology Monographs, 55, 287-323.
- Gordon, K. (1934). Device for demonstrating empathy. Journal of Experimental Psychology, 14, 892-893.
- Gough, H. G. (1955, March). The assessment of social acuity. (Research report, project #7730, contract #AF 18(600)-8, Officer Education Research Laboratory.) Air Force Personnel and Training Research Center, Maxwell Air Force Base, Alabama.
- Gough, H. G. (1964). The California personality inventory. Palo Alto, California: Consulting Psychology Press.
- Gough, H. G., & Heilbrun, A. B. (1965). The adjective checklist manual. Palo Alto, California: Consulting Psychology Press.
- Gould, R. L. (1978). Transformations. New York: Simon & Schuster.
- Grief, E. D., & Hogan, R. (1973). The theory and measurement of empathy. Journal of Counseling Psychology, 20, 280-284.
- Grim, P., White, S., & Kohlberg, L. (1968). Some relationships between conscience and attentional processes. Journal of Personality and Social Psychology, 8, 239-252.
- Grinder, R. E. (1964). Relations between behavioral and cognitive dimensions of conscience in middle childhood. Child Development, 35, 881-891.
- Hackney, H. (1978). The evolution of empathy. Personnel and Guidance Journal, 57(1), 35-38.
- Handlow, B., & Gross, P. (1959). The development of sharing behavior. Journal of Abnormal and Social Psychology, 59, 425-428.
- Hartman, H. H. (1967). Modern factor analysis, 2nd ed. Chicago: University of Chicago Press.
- Hartshorne, H., & May, M. A. (1928). Studies in the nature of character. Studies in deceit, vol. 1. New York: McMillan.
- Hasak, P. (1974). Relationship between locus of control, parental antecedents, and personality dimensions. (Unpub. master's thesis, University of Kentucky.)
- Hathaway, S. R., & McKinley, J. C. (1943). Manual for the Minnesota multiphasic personality inventory. New York: Psychological Corp.
- Heilbrun, A. B., & Tiemeyer, E. B. (1968). Relationships between perceived maternal childrearing experiences and projective

- responses to censure-control cues in normal males. Journal of Genetic Psychology, 112, 3-14.
- Hoffman, M. L. (1963). Parent discipline and the child's consideration of others. Child Development, 34, 573-588.
- Hoffman, M. L. (1970). Conscience, personality, and socialization techniques. Human Development, 13, 90-126.
- Hoffman, M. L. (1975). Development synthesis of affect and cognition and its implications for altruistic motivation. Developmental Psychology, 11, 607-622.
- Hoffman, M. L. (1976). Empathy, role-taking, guilt, and development of altruistic motives. In: Moral development and behavior, T. Lickona, Ed. New York: Holt, Rinehart, & Winston, 124-143.
- Hoffman, M. L. (1977a). Empathy, its development and prosocial implications. In: Nebraska Symposium on Motivation, 25, C. B. Keasey, Ed. Lincoln, Nebraska: University of Nebraska Press.
- Hoffman, M. L. (1977b). Sex differences in empathy and related behaviors. Psychological Bulletin, 84, 712-722.
- Hoffman, M. L. (1979). Development of moral thought, feeling, and behavior. American Psychologist, 34(10), 958-966.
- Hoffman, M. L., & Levine, L. E. (1976). Early sex differences in empathy. Developmental Psychology, 12(6), 557-558.
- Hoffman, M. L., & Saltzstein, H. D. (1967). Parent discipline and the child's moral development. Journal of Personality and Social Psychology, 5, 45-57.
- Hogan, R. (1969). Development of an empathy scale. Journal of Consulting and Clinical Psychology, 33, 307-316.
- Hogan, R. (1973). Moral conduct and moral character; A psychological perspective. Psychological Bulletin, 79(4), 217-232.
- Hogan, R. (1975). Empathy: A conceptual and psychometric analysis. The Counseling Psychologist, 5(2), 14-18.
- Hogan, R., & Dickstein, E. (1972). A measure of moral values. Journal of Consulting and Clinical Psychology, 39, 210-214.
- Hogan, R., & Henley, N. (1970). Nomotics: The science of human rule systems. Law and Society Review, 5, 135-146.
- Hogan, R., & Mankin, D. (1970). Determinants of interpersonal attraction: A clarification. Psychological Reports, 26, 235-238.

- Hogan, R., Mankin, D., Conway, J., & Fox, S. (1970). Personality correlates of undergraduate marijuana use. Journal of Consulting and Clinical Psychology, 35, 58-63.
- Holmes, T. H., & Rahe, R. H. (1969). The social readjustment rating scale. Journal of Psychometric Research, 11, 213-218.
- Horner, R. L. (1961). A search for important stimulus variables in the early family relationship of schizophrenic patients. Dissertation Abstracts, 22, 2070.
- Hughes, R., Jr., Tingle, B. A., and Sawin, D. B. (1981). Development of empathic understanding in children. Child Development, 52, 122-128.
- Hurlburt, J. D., & Carlozzi, A. F. (1981, January). Affective sensitivity as related to instrumentality and expressiveness. (Paper presented at the Southwest Educational Research Association, Dallas, Texas.)
- Jackson, D. N. (1967). Personality research form manual. Goshen, New York: Research Psychologists Press.
- Jenkins, R. (1968). The varieties of children's behavioral problems and family dynamics. American Journal of Psychiatry, 10, 134-139.
- Kagan, J. (1965). The child's perception of the parent. Journal of Abnormal and Social Psychology, 53, 257-258.
- Kagan, J., & Schneider, J. (1977). Affective Sensitivity Scale, Form E-A-2. Ann Arbor, Michigan: Mason Media.
- Kagen, S., & Madsen, M. C. (1971). Cooperation and competition of Mexican, Mexican-American, and Anglo-American children of two ages under four instructional sets. Developmental Psychology, 5, 32-39.
- Kaiser, H. F. (1958). The varimax criterion for analytic rotation in factor analysis. Psychometrika, 23, 187-200.
- Kameya, L. I. (1976). The effect of empathy and role-taking training upon prosocial behavior. (Unpub. doctoral dissertation, University of Michigan.)
- Kalisch, B. (1973). What is empathy? American Journal of Nursing, 73, 1548, 1552.
- Karon, B. P. (1963). The resolution of acute schizophrenic reaction: A contribution to the development of nonclassical nontherapeutic techniques. Psychotherapy, 1, 27-43.

- Kelly, J. A. (1973). An investigation of several personality and parental correlates to the support or opposition of women's liberation. (Unpub. master's thesis, University of Kentucky.)
- Kelly, J. A. (1975). Parent behavior, personality and cheating. (Unpub. doctoral dissertation, University of Kentucky.)
- Kelly, J. A., & Worrell, L. (1976). Parent behaviors related to masculine, feminine, and androgynous sex-role orientations. Journal of Consulting and Clinical Psychology, 44(5), 843-851.
- Kelly, J. A., & Worrell, L. (1977a). The joint and differential perceived contribution of parents to adolescent's cognitive functioning. Developmental Psychology, 13, 282-283.
- Kelly, J. A., & Worrell, L. (1977b). New formulations of sex roles and androgyny: A critical review. Journal of Consulting and Clinical Psychology, 45, 1101-1115.
- Kelly, J. A., & Worrell, L. (1978). Personality characteristics, parent behaviors, and sex of subject in relation to cheating. Journal of Research in Personality, 12, 179-188.
- Klien, R. (1970). Some factors influencing empathy in six- and seven-year-old children varying in ethnic background. (Unpub. doctoral dissertation, University of California, Los Angeles.)
- Kohlberg, L. (1969). State and sequences: The Cognitive development approach to socialization. In: Handbook of socialization theory and research, D. Goslin, Ed. Chicago: Rand McNally, 347-480.
- Köhler, W. (1929). Gestalt psychology. New York: Liveright.
- Köhler, W. (1947). Gestalt psychology. New York: New American Library of World Literature.
- Krebs, D. (1975). Empathy and altruism. Journal of Personality and Social Psychology, 32, 1134-1146.
- Kuchenbecker, S., Feshbach, N. D., & Pletcher, G. (1974, April). The effects of age, sex, and morality upon social comprehension and empathy. (Paper presented at the Annual Meeting of the Western Psychological Association, San Francisco, California.)
- Kurtines, W., & Hogan, R. (1972). Sources of conformity in unsocialized college students. Journal of Abnormal Psychology, 80, 49-51.
- Kurtines, W., Weiss, D., Hogan, R., & Athansiou, R. (1972). Socio-psychological determinants of drug use. (Unub. manuscript, Johns Hopkins University.)

- Kysar, J. E. (1968). Reactions of professionals to disturbed children and their parents. Archives of General Psychiatry, 19, 562-570.
- Leiman, B. (1978, September). Affective empathy and subsequent altruism in kindergarten and first graders. (Paper presented at the meeting of the American Psychological Association, Toronto, Canada.)
- Letourneau, C. (1981). Empathy and stress: How they effect parental aggression. Social Work, 26(5), 383-389.
- Levine, L. E., & Hoffman, M. L. (1975). Empathy and cooperation in four-year-olds. Developmental Psychology, 11, 533-534.
- Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. H. & McKee, B. (1978). The seasons of a man's life. New York: Ballantine.
- Lipps, T. (1909). Das Wissen von fremden ichen. Psychologie Untersuch, 1, 694-722.
- Lipps, T. (1926). Psychological studies. Baltimore: Williams & Wilkins.
- Lipps, T. (1935). Empathy, inner imitation of sense feelings. In: Radar: A modern book of esthetics. New York: Holt.
- Livesley, W. J., & Bromley, D. B. (1973). Person perception in childhood and adolescence. London: Wiley and Sons.
- Long, T. J., & Schultz, E. W. (1973). Empathy: A quality of an effective group leader. Psychological Reports, 32, 699-705.
- Marcus, R. F. (1980). Empathy and popularity of preschool children. Child Study Journal, 10(3), 133-145.
- Marcus, R. F., Tellen, S., & Roke, E. J. (1979.) Relation between cooperation and empathy in young children. Developmental Psychology, 15, 346-347.
- Margolin, G., & Patterson, G. R. (1975). Differential consequences provided by mothers and fathers for their sons and daughters. Developmental Psychology, 11(4), 537-538.
- McClelland, W. A. (1951). A preliminary test of role-playing ability. Journal of Consulting Psychology, 15, 102-108.
- Mead, G. H. (1934). Mind, self, and society. Chicago: University of Chicago Press.
- Medinnus, G. R. (1967). Readings in the psychology of parent-child relations. New York: John Wiley.

- Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. Journal of Personality, 40, 525-543.
- Michaels, G. Y., Messé, L. A., & Stollack, G. E. (1977, May). Relationships among children's perceptions of parent behavior, parents' influences of their children's perceptions, and parents' self-perceptions. (Paper presented at the Annual Meeting of the Midwestern Psychological Association.) ERIC Document Reproduction Service #ED 145 306, Chicago, Illinois.
- Mickelson, D. J., & Stevic, R. R. (1971). Differential effects of facilitative and nonfacilitative behavioral counselors. Journal of Counseling Psychology, 18, 314-319.
- Milgrim, S. (1963). A behavioral study of obedience. Journal of Abnormal and Social Psychology, 67, 371-378.
- Mitchell, K. M. (1969). Concept of "pathogenesis" in parents of schizophrenic and normal children. Journal of Abnormal Psychology, 74, 423-424.
- Mood, D., Johnson, J., & Shantz, C. U. (1973). Young children's understanding of the affective states of others. (Paper presented at the Southeast Regional Meeting of the Society for Research in Child Development, New Orleans, Louisiana.)
- Moss, H. A., & Kagan, J. (1961). Stability of achievement and recognition-seeking behavior from early childhood through adulthood. Journal of Abnormal and Social Psychology, 62, 504-513.
- Murphy, L. B. (1937). Social behavior and child personality. New York: Columbia University Press.
- Noller, P. (1978). Sex differences in the socialization of affectionate expression. Developmental Psychology, 14(3), 317-319.
- Norris, N. P. (1968). Parental understanding, parental satisfaction, and desirable personality characteristics in preadolescent boys. Dissertation Abstracts, 28, 4709-4710.
- Novak, A. L., and Vanderveen, F. (1968). Differences in the family perceptions of disturbed adolescents, their normal siblings, and normal controls. Proceedings of the 76th Annual Convention of the American Psychological Association, 3, 481-482.
- Olden, C. (1954). On adult empathy with children. Psychoanalytic Studies of Children, 8, 111-126.
- Piaget, J. (1932). The moral judgement of the child. New York: Harcourt, Brace, & World.
- Piaget, J. (1950). The psychology of intelligence. New York: Harcourt Brace.

- Piaget, J. (1967). Six psychological studies. New York: Random House.
- Piaget, J., & Inhelder, B. (1969). The psychology of the child. New York: Basic Books.
- Reuter, M. W., & Biller, H. B. (1973). Perceived paternal nurturance--availability and personality and adjustment among college males. Journal of Consulting and Clinical Psychology, 40, 339-342.
- Ribot, T. (1897). The psychology of emotions. London: Scott.
- Roe, K. V. (1977). A study of empathy in young Greek and U.S. children. Journal of Cross-Cultural Psychology, 8(4), 493-502.
- Roe, K. V. (1980). Toward a contingency hypothesis of empathy development. Journal of Personality and Social Psychology, 39(5), 991-994.
- Rogers, C. R. (1951). Client-centered therapy. Cambridge, New Jersey: Riverside Press.
- Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic change. Journal of Consulting Psychology, 22, 95-103.
- Rogers, C. R. (1975). Empathic: An unappreciated way of being. Counseling Psychologist, 5(2), 2-10.
- Rogers, C. R., Gendlin, E. T., Kiesler, D. J., & Truax, C. B. (1967). The therapeutic relationship and its impact: A study of psychotherapy with schizophrenics. Madison, Wisconsin: University of Wisconsin Press.
- Rose, G., Frankel, N., & Kerr, W. (1956). Empathy and sociometric status among teenagers. Journal of Genetic Psychology, 89, 277-278.
- Rothbart, M. K., & Maccoby, E. E. (1966). Parent's differential reactions to sons and daughters. Journal of Personality and Social Psychology, 4, 237-243.
- Rothenberg, C. (1970). Children's social sensitivity and their relationship to interpersonal competence, intrapersonal comfort, and intellectual level. Developmental Psychology, 2, 335-350.
- Rubin, K. H. (1972). Relationship between egocentric communication and popularity among peers. Developmental Psychology, 7, 364.
- Rutherford, E., & Mussen, P. (1968). Generosity in nursery school boys. Child Development, 39, 755-765.

- Sawin, D. B. (1979, March). Assessing empathy in children: A search for an elusive construct. (Paper presented at the meeting for the Society for Research in Child Development, San Francisco, California.)
- Schaefer, C. (1965). Children's reports of parental behavior. Child Development, 36, 413-424.
- Sears, R. R., Rau, L., & Alpert, R. (1965). Identification and childrearing. Stanford, California: Stanford University Press.
- Serot, N. M., & Teevan, R. C. (1961). Perception of the parent-child relationship and its relation to child adjustment. Child Development, 32, 373-378.
- Shantz, C. U. (1975a). The development of social cognition. In: Review of child development research, M. Hetherington, Ed. Chicago: University of Chicago Press, 261-297.
- Shantz, C. U. (1975b). Empathy in relation to social cognitive development. Counseling Psychologist, 5(2), 18-21.
- Sheehy, G. (1976). Passages. New York: E. P. Dutton.
- Siegalman, M. (1965). College student personality correlates of early parent-child relationship. Journal of Consulting Psychology, 29, 558-564.
- Slevin, K. F., & Balswick, J. (1980). Children's perceptions of parental expressiveness. Sex Roles: A Journal of Research, 6(2), 293-299.
- Spitzer, R. L., & Endicott, J. (1978). Schedule for affective disorders and schizophrenia (lifetime version) in biometrics research. New York: State Psychiatric Institute.
- Staub, E. (1972). Instigation to goodness: The role of social norms and interpersonal influence. Journal of Social Issues, 28, 131-150.
- Staub, E., & Sherk, L. (1970). Need for approval, children's sharing behavior, and reciprocity in sharing. Child Development, 41, 243-253.
- Stewart, D. A. (1954). Psychogenesis of empathy. Psychoanalytic Review, 41, 216-228.
- Stewart, D. A. (1955). Empathy, common ground of ethics and personality theory. Psychoanalytic Review, 43, 131-141.
- Stewart, D. A. (1956). Preface to empathy. New York: Philosophical Library.

- Stinnett, N., Farris, J. A., & Walters, J. (1974). Parent-child relationships; of male and female high school students. Journal of Genetic Psychology, 125(1), 99-106.
- Stotland, E. (1969). Exploratory investigations of empathy. In: Advances in experimental social psychology, 4, L. Berkowitz, Ed. New York: Academic Press, 271-314.
- Stuart, R. B. (1967). Decentration in the development of children's concepts of morals and causal judgement. Journal of Genetic Psychology, 111, 59-68.
- Sullivan, E. V., & Hunt, D. E. (1967). Interpersonal and objective decentering as a function of age and social class. Journal of Genetic Psychology, 110, 199-210.
- Sullivan, H. S. (1950). Conceptions of modern psychiatry. London: Tavistock.
- Sullivan, H. S. (1969). The interpersonal theory of psychiatry. New York: W. W. Norton.
- Swanson, G. E. (1950). The development of an instrument for rating child-parent relationships. Social Press, 29, 84-90.
- Thomas, D. L. (1968). Parental control and support in socialization and adolescent conformity: A cross national study. Dissertation Abstracts, 29, 3689-3690.
- Thomas, W. I., & Thomas, D. S. (1928). The child in America: Behavior problems and programs. New York: Knopf.
- Tilker, H. A. (1970). Socially responsible behavior as a function of observer responsibility and victim feedback. Journal of Personality and Social Psychology, 14, 95-100.
- Titchner, E. B. (1910). Textbook of psychology. New York: Macmillan.
- Truax, C. B., & Carkhuff, R. (1965). Client and therapist transparency in the psychotherapeutic encounter. Journal of Counseling Psychology, 12, 3-9.
- Truax, C. B., & Lister, J. L. (1970). The effects of counselor accurate empathy and nonpossessive warmth upon client vocational rehabilitation progress. Canadian Counselor, 4(4), 229-232.
- Truax, C. B., & Mitchell, K. M. (1971). Research on certain therapist interpersonal skills in relation to process and outcome. In: Handbook of psychotherapy and behavior change, A. E. Bergin and S. L. Garfield, Eds. New York: Wiley.

- Tulmity, T. (1973). Correlates of I-E, susceptibility to change in locus of control, and modification of I-E among inpatient alcoholics. (Unpub. doctoral dissertation, University of Kentucky.)
- Ugurel-Semin, R. (1952). Moral behavior and moral judgement of children. Journal of Abnormal and Social Psychology, 47, 463-473.
- Vogel, W., & Lauterbach, C. G. (1963). Relationships between normal and disturbed sons' precepts of their parents' behavior, and personality attributes of the parents and sons. Journal of Clinical Psychology, 19, 52-56.
- Walsh, R. P. (1968). Parental rejecting attitudes and control in children. Journal of Clinical Psychology, 24, 185-186.
- Walters, J., & Stinnett, N. (1971). Parent-child relationships: A decade review of research. Journal of Marriage and the Family, 33, 70-111.
- Walton, W. E. (1936). Empathic responses in children. Psychological Monographs, 48, serial #213.
- Weiss, R. F., Boyer, J. L., Lombardo, J. P., & Stich, M. H. (1973). Altruistic drive and altruistic reinforcement. Journal of Personality and Social Psychology, 25, 390-400.
- Weiss, R. F., Buchanan, W., Alstatt, L., & Lombardo, J. P. (1971). Altruism is rewarding. Science, 171, 1262-1263.
- Wiggins, J. D. (1978). A comparison of counselor interview responses and helpee behavioral changes. Counselor Education and Supervision, 18, 95-99.
- Worrell, L., & Worrell, J. (1975). The parent behavior form. (Department of Psychology, University of Kentucky, Lexington, Kentucky).
- Yarrow, M. R., Scott, P. M., & Zahn-Waxler, C. (1973). Learning concern for others. Developmental Psychology, 8, 240-260.
- Youniss, J. (1975). Another perspective on social cognition. In: Minnesota Symposia on Child Psychology, vol. 2, A. D. Pick, Ed. Minneapolis: University of Minnesota Press, 236-254.
- Zahn-Waxler, C., & Radke-Yarrow, M. (1982). The development of altruism: Alternative research strategies. In: The development of prosocial behavior, N. Eisenberg, Ed. New York: Academic Press, 175-192.
- Zahn-Waxler, C., Radke-Yarrow, M., & King, R. A. (1979). Childrearing and children's prosocial initiations toward victims of distress. Child Development, 50(2), 319-330.

Zahn-Waxler, C., Radke-Yarrow, M., & King, R. (1983). Early altruism and guilt. Academic Psychology Bulletin, 5(2), 247-259.

Zucker, R., & Barron, F. H. (1971, April). Toward a systematic family mythology: The relationship of parents' and adolescents' reports of parent behavior during childhood. (Paper presented at the meeting of the Eastern Psychological Association, New York, New York.)

APPENDIXES

APPENDIX A

RESPONDENT INFORMATION SHEET

RESPONDENT INFORMATION SHEET

In the spaces provided below, please indicate your:

1. Social Security number _____
2. Sex: Male _____ Female _____
3. Age _____
4. Level of degree program in which you are now enrolled:
 Bachelors _____
 Masters _____
 Doctoral _____
 Special or other _____
5. Major area:
 Undergraduate _____
 Graduate _____
6. Number of credit hours accumulated to date:
 (all credit hours, undergraduate and graduate combined,
 not including this semester)
 _____ semester hours _____ quarter hours
7. Race:
 Caucasian _____
 Black _____
 Hispanic _____
 Native American _____
 Other _____
8. At age 16, in what type of home were you living?
 Intact home (both parents present, either both birth
 parents or step parent and birth parent) _____
 Single parent home _____
 Foster parent home _____
9. Number of siblings _____
 (number of brothers and sisters, not including yourself)
10. Birth order _____
 (Were you 1st born, 2nd born, etc.)

Thank you for participating in this research study!!!

APPENDIX B

PBF SCALE DESCRIPTIONS

PBF Scale Descriptions

Warmth	W
Active Involvement	AI
Equalitarianism	E
Cognitive Independence	CI
Curiosity	CU
Cognitive Competence	CC
Lax Control	LC
Conformity	CO
Achievement	AC
Strict Control	SC
Punitive Control	PC
Hostile Control	HC
Rejection	R

The order of the scales is determined by the correlation of each cluster with the lead scale of warmth. Therefore, the scales range roughly on an warmth-rejection dimension. Scales high on the list have a closer correlation with Warmth. Scales on the lower end of the list have a negative relationship with warmth and scales near the middle have low or variable relationships depending upon the parent being considered.

Warmth: The parent is seen as warm, loving, accepting. Listens to problems, nurturant and caring, concerned about feelings, easy going, has a positive view of child and enjoys his companionship.

Active Involvement: The parent becomes actively nurturant and initiates open indications of positive feelings. Parent takes an active role in communicating his feelings and concern for the child. Wants child to know how parent feels about him. Becomes actively involved in child's activities.

Equalitarianism: Tries to treat the child as an equal. Allows open expression of child's feelings, even if negative. Accepts disagreements, listens to child's opinions. Accepts child's friends and ideas. Non-punitive and non-critical.

CI: Encourages child to think for himself, to come to his own conclusions. Wants child to express his individuality with parent and with others as well. Encourages critical thinking while keeping an open mind about his own and others' ideas. Encourages originality, analysis of ideas. Emphasis on child developing own sources of information rather than taking on parents' ideas.

CU: Wants the child to ask questions about life, the world and himself. Enjoys intellectual dialogue with child. Wants child to appreciate nature and how it evolved. Wants child to keep informed on current events and new ideas.

- CC: Wants child to develop skills and to be competent at a variety of tasks. Wants child to develop cultural and aesthetic interests. Provides wide exposure to cultural activities. Encourages individuality and competence at problem solving.
- LC: Provides a wide latitude of freedom for child's activities. Does not set down many specific rules for child to follow. Allows child to avoid obeying rules that do exist and ignores misbehavior that occurs. Is never coercive or demanding. Allows child freedom to develop his own rules.
- CO: . Wants child to adopt values of hard work, religious involvement, obedience to rules and orderliness. Takes an active role in teaching and enforcing these values. Tends to view the child as an extension of himself in these values and feels hurt when child does not conform. Fears losing control over child.
- AC: Has high goals for achievement for child. Feels child could do more to be meeting these goals. Communicates to child that he falls short of parent expectancies for him. Wants child to excel in an outstanding career involving professional or scientific areas. Would like child to be famous. Expects child to be academically superior and successful in all of his endeavors.
- SC: Has many rules that he communicates and enforces carefully. Supervises child's activities and is restrictive about free movement. Constantly reminds about rules, tries to monitor all behavior. Tells child what to do in his free time and with whom he may associate.
- PC: Insistent and coercive about conformity to all rules. Punishes all misbehavior. Punishes frequently for a variety of infringements. Has many rules. Loses temper when child does not comply and nags until he does.
- HC: Communicates his dissatisfaction with everything child does. Tells child he is a big problem. Gives blanket criticisms, loses his temper easily, becomes cold when child disagrees with him. Controls child through accusations, guilt induction and psychological withdrawal from the relationship.
- R: Communicates his active dislike and dissatisfaction with child. Never shows love or concern. Makes it clear that child is of little importance to him. At the same time, he is intrusive about child's activities and pries into his private life.

VITA 2

John David Hurlburt

Candidate for the Degree of

Doctor of Philosophy

Thesis: EMPATHY AND PERCEPTIONS OF PARENT BEHAVIOR

Major Field: Applied Behavioral Studies

Biographical:

Personal Data: Born in Tulsa, Oklahoma, June 26, 1954.

Education: Graduated from Edison High School, Tulsa, Oklahoma, in May, 1972; received Bachelor of Arts degree in Social Welfare from the University of Arkansas in May, 1976; received Master of Science degree in Student Personnel and Guidance from Oklahoma State University in December, 1980; completed requirements for the Doctor of Philosophy degree at Oklahoma State University in July, 1985.

Professional Experience: Social Worker, Native American Children's Center, Shawnee, Oklahoma, September, 1976-December, 1977; Education Counselor, Central Tribes of the Shawnee Area, Inc., Shawnee, Oklahoma, January, 1978-December, 1978; Program Supervisor, Central Tribes of the Shawnee Area, Inc., January, 1979-November, 1979; Teaching Assistant, Oklahoma State University, January, 1980-July, 1981; Counselor/Graduate Assistant, University Counseling Service, Oklahoma State University, September, 1982-June, 1983; Predoctoral Intern, Georgia State University, Atlanta, Georgia; Clinical Counselor, University Counseling Services, Oklahoma State University, September, 1984 to present.